INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

Western Trunk Line Project

PREPARED BY

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
AB	Assembly Bill
ADT	average daily traffic
ANSI	American National Standards Institute
APE	area of potential effect
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
BAT	Best Available Technologies
BCC	Bird of Conservation Concern
bgs	below the ground surface
BMP	best management practice
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CH_4	methane
CHRIS	California Historical Resources Information System
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CRPR	California Rare Plant Rank
CY	cubic yards
dB	decibels
DOC	California Department of Conservation
DTSC	Department of Toxic Substances Control
DWSRF	Drinking Water State Revolving Fund
EDR	Environmental Data Resources
EIA	United States Energy Information Administration
EIR	Environmental Impact Report
ERDIP	Earthquake Resistant Ductile Iron Pipe
FE	federally endangered
FEMA	Federal Emergency Management Agency

Acronym/Abbreviation	Definition
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
GHG	greenhouse gas
GWP	global warming potential
HFC	hydrofluorocarbon
HRI	City of Los Angeles Historic Inventory
I	Interstate
in/sec	inches per second
IS/MND	Initial Study for the project and the MND
kWh	kilowatt-hours
LA Metro	Los Angeles County Metropolitan Transportation Authority
LACM	Natural History Museum of Los Angeles County
LADBS	Los Angeles Department of Building and Safety
LADOT	City of Los Angeles Department of Transportation
LADPW	Los Angeles County Department of Public Works
LADWP	Los Angeles Department of Water and Power
LASAN	Los Angeles Sanitation and Environment
LAX	Los Angeles International Airport
L_{eq}	equivalent continuous sound level
LOS	Level of Service
LST	localized significance threshold
LUST	leaking underground storage tank
MND	Mitigated Negative Declaration
MT CO_2e	metric tons of carbon dioxide equivalent
MWD	Metropolitan Water District of Southern California
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NF_3	nitrogen trifluoride
NOx	oxides of nitrogen
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
OPR	Governor's Office of Planning and Research
PCE	passenger car equivalent
PEL	permissible exposure limit
PFC	perfluorocarbon
PM_{10}	particulate matter with a diameter less than or equal to 10 microns (coarse particulate matter)

Acronym/Abbreviation	Definition
$PM_{2.5}$	particulate matter with a diameter less than or equal to 2.5 microns (fine particulate matter)
PPV	Peak Particle Velocity
PRIMP	Paleontological Resources Impact Mitigation Program
RCNM	Roadway Construction Noise Model
ROW	right-of-way
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCAR	Sewer Capacity Availability Request
SE	State endangered
SEA	Significant Ecological Area
SF_6	sulfur hexafluoride
SLF	Sacred Lands File
SO_2	sulfur dioxide
SO_x	sulfur oxides
SRA	Source Receptor Area
SSC	Species of Special Concern
SVP	Society of Vertebrate Paleontology
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TBM	Tunnel Boring Machine
TCR	tribal cultural resources
UAIZ	Urban Agriculture Incentive Zone
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compound

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1 INTRODUCTION

1.1 Project Overview

The Los Angeles Department of Water and Power (LADWP) is proposing the Western Trunk Line Project (proposed project), a potable water trunk line project, in the City of Los Angeles and in unincorporated Los Angeles County. The proposed project would include the replacement of a 23,300-foot portion of the Harbor Trunk Line within Western Avenue, from 59th Place to 121st Street. The proposed project would be located in the City of Los Angeles between 59th Place and 108th Street, and in unincorporated Los Angeles County between 108th Street and 121st Street.

This segment of the Harbor Trunk Line is aging, deteriorating, and nearing the end of its service life; as such, LADWP is proposing to replace this segment to increase safety and reliability, to allow for greater operational flexibility, and to create the ability to transmit local water supplies in the future while decreasing dependence on imported water supplies.

In addition to the proposed trunk line replacement, the proposed project would also replace approximately 4,495 feet of 6-inch and 8-inch diameter water distribution mainline along Western Avenue. These improvements would include the following: the replacement of 3,750 feet of existing 6-inch mainline with 12-inch line from 77th Street to Manchester Avenue; the replacement of 625 feet of existing 8-inch mainline with 12-inch line from 106th Street to 108th Street; and the installation of approximately 120 feet of 8-inch line to reconnect the existing 8-inch mainline on Western Avenue to the existing 8-inch line on Manchester Avenue.

In order to maintain water pressures at specific intersections, the proposed project would also include the following minor improvements: the replacement of approximately 20 feet of existing 4-inch connection pipe with 6-inch line at the intersection of 65th Place and Western Avenue; the replacement of approximately 20 feet of existing 6-inch connection line to 12-inch line at the intersection of 84th Place and Western Avenue; the installation of approximately 20 feet of 6-inch mainline to reconnect to the existing 8-inch parallel main at the intersection of 89th Street and Western Avenue; and the replacement of approximately 40 feet of existing 6-inch connection line with 8-inch line at the intersection of 108th Street and Western Avenue. The proposed project would also replace an existing regulator station, located at the intersection of Manchester Avenue and Western Avenue.

1.2 California Environmental Quality Act

The California Environmental Quality Act (CEQA) applies to proposed projects initiated by, funded by, or requiring discretionary approvals from state or local government agencies. The proposed project constitutes a project as defined by CEQA (California Public Resources Code, Section 21065) and LADWP, as a municipal utility, would implement and operate the proposed project as the CEQA lead agency. LADWP would fund the proposed project but may seek funding from available sources, which may include the State Water Resources Control Board's Drinking Water State Revolving Fund (DWSRF). The State Water Resources Control Board uses the CEQA review process and compliance with federal

environmental laws and regulations to satisfy the environmental requirements for the DWSRF Program Operating Agreement between the United States Environmental Protection Agency and the State Water Resources Control Board. As a result, and in addition to the CEQA review process, federal crosscutting requirements are often a part of the environmental review for projects that are funded through the DWSRF Program. Therefore, applications for funding must include proof of CEQA compliance and of compliance with federal requirements. Collectively, the process is termed "CEQA+" due to the addition of federal crosscutting studies to CEQA requirements.

An Initial Study has been prepared by LADWP as the lead agency in accordance with the CEQA Guidelines to evaluate potential environmental effects and to determine whether an Environmental Impact Report (EIR) or a Negative Declaration or Mitigated Negative Declaration (MND) should be prepared for the proposed project. The Initial Study would also satisfy CEQA requirements for agencies that would provide sources of funding for the proposed project or that would otherwise have discretionary approval authority over the project. An MND is prepared for a project when an Initial Study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed Negative Declaration and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur; and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment.

The Initial Study determined that the implementation of the proposed project could cause some potentially significant impacts on the environment but, as shown in the environmental analysis contained in this document, all of the project's potentially significant impacts would be reduced to less than significant levels through the implementation of mitigation measures. Consequently, the analysis contained herein concludes that an MND shall be prepared for the proposed project.

This document consists of both the Initial Study for the project and the MND (IS/MND). This IS/MND is composed of four sections. Section 1 provides an introduction to the proposed project, general information about the contents of the IS/MND, information about the lead agency, the project location, and the environmental setting. Section 2 provides a description of the proposed project components and information about their construction and operation. Section 3 consists of the CEQA Initial Study checklist, which provides the assessment of potential environmental impacts and the applicability of mitigation measures to reduce potentially significant impacts to less than significant. Section 4 provides a list of the lead agency staff and consultants involved in preparing the environmental review documents for the proposed project. This document also includes several appendices that contain technical resource reports related to air quality and greenhouse gas (GHG) emissions, biological resources, cultural resources, noise, and traffic. A CEQA+ appendix is also included that provides documentation of compliance with federal environmental laws in the event federal funding is requested.

1.3 Project Location

The project alignment at its northern terminus is located approximately five miles southwest of downtown Los Angeles. The project alignment is primarily located in the South Los Angeles Community Plan Area of the City of Los Angeles (City). The southern portion of the trunk line (south of 108th Street) is located within the West Athens/Westmont Community Plan Area of unincorporated Los Angeles County. The project alignment extends along Western Avenue in South Los Angeles from 59th Place to 121st Street (Figure 1-1). Major freeways in the project vicinity include Interstate (I) 105, which extends through the southern portion of the project alignment and I-110 to the east.

1.4 Environmental Setting

The proposed pipeline replacement would occur within the public right-of-way (ROW) for Western Avenue. Western Avenue is mapped by the City of Los Angeles as an Avenue II on the South Los Angeles Circulation Map (City of Los Angeles 2017) and as a Major Highway in the County of Los Angeles General Plan (County of Los Angeles 2015). For the entirety of the project alignment, Western Avenue is four lanes in width with sidewalks on both sides of the street. On-street parking is provided along portions of the roadway.

As shown in Figure 1-2A through Figure 1-2C, Surrounding Land Uses and Figure 1-3A through Figure 1-3C, Zoning, Western Avenue supports commercial uses on both sides of the roadway for the majority of the alignment. Exceptions include residential uses extending from approximately 84th Street to 85th Street, fronting the eastern side of the roadway; residential uses extending from 92nd Street to 96th Street, fronting the western side of the roadway; residential uses extending from approximately 108th Street to 111th Street, fronting both sides of the roadway; and three public facilities (the Los Angeles Southwest College, Manhattan Place Elementary School, and Jesse Owens Park). Residential uses comprise a majority of the general vicinity surrounding the project, with some open space/recreational facilities. See Figures 1-2A through 1-2C for details on the land uses within a quarter-mile of the Western Trunk Line alignment. The alignment is located in the immediate vicinity of the Burlington Northern Santa Fe Railroad crossing, which lies approximately 500 feet to the north of the alignment's northern terminus. The alignment also runs beneath the I-105 and the Union Pacific Railroad to the south. Additionally, local utilities extend underneath the surface of Western Avenue, such as gas, sewer, and fiber optic lines.

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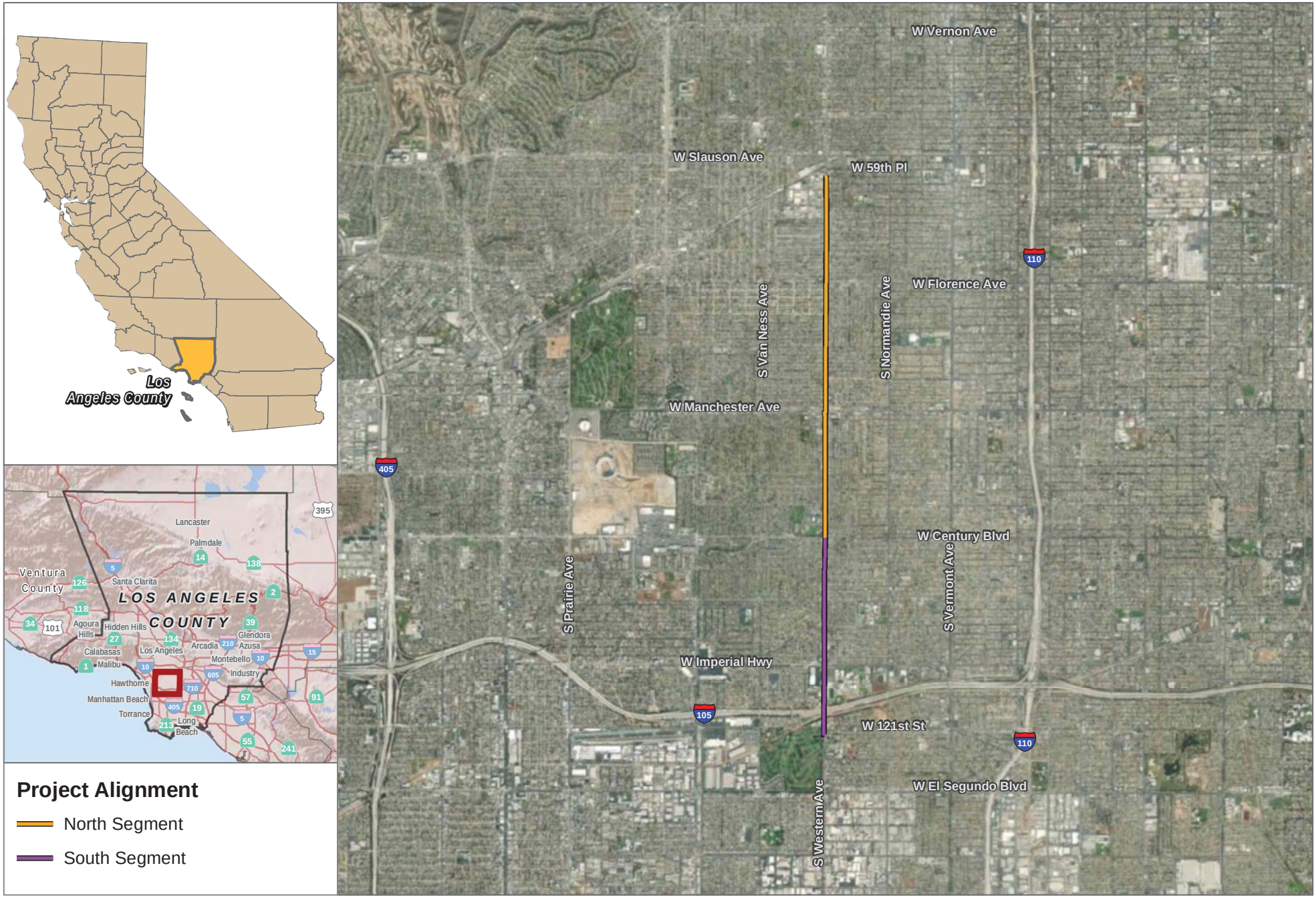

SOURCE: County of Los Angeles 2016, LADWP 2019, ESRI 2019, Digital Globe 2017

Los Angeles Department of Water & Power

0 0.5 1 Miles

FIGURE 1-1

Project Location

Western Trunk Line Project

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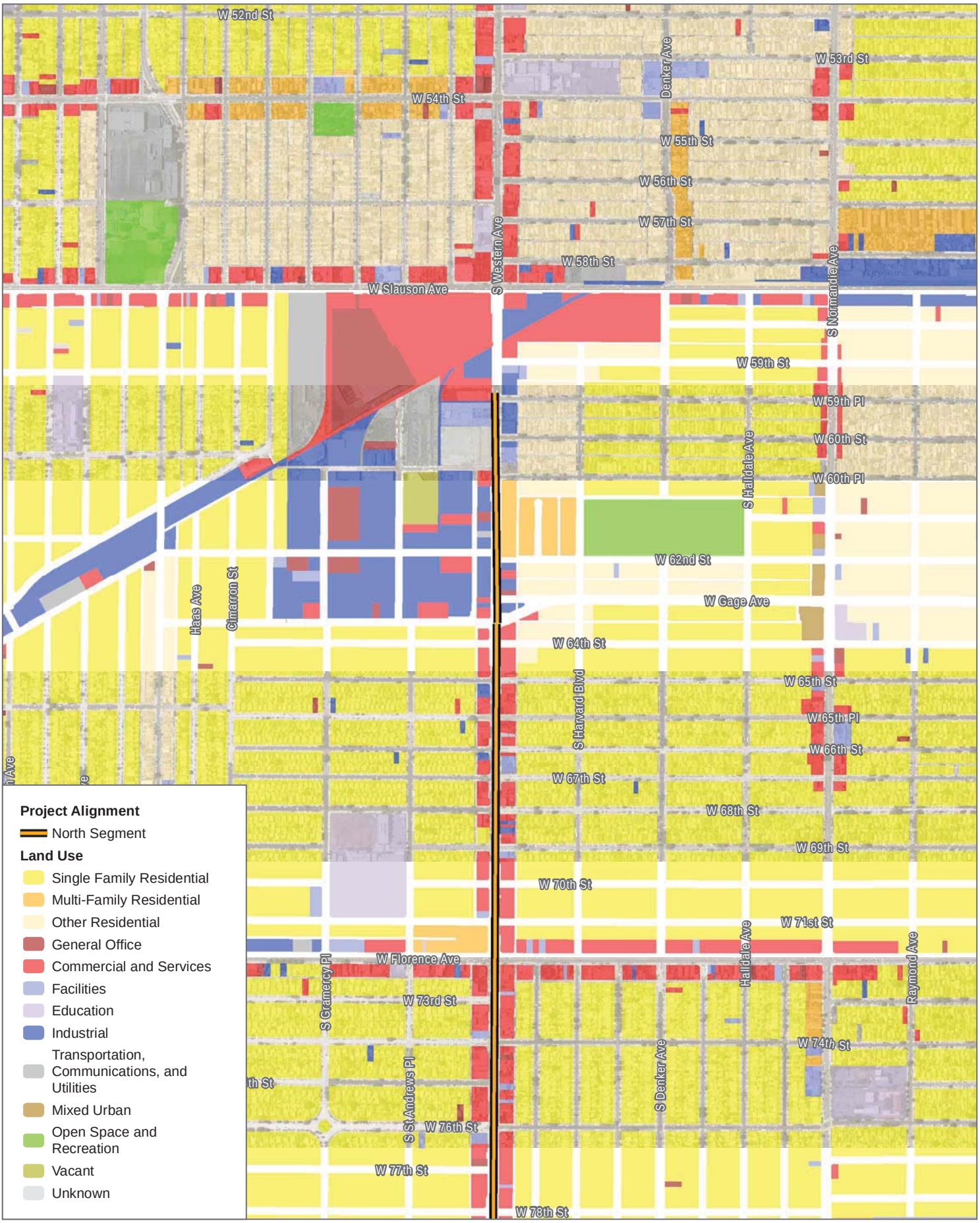

SOURCE: USDA 2016; County of Los Angeles 2016; SCAG 2008

Los Angeles Department of Water & Power

FIGURE 1-2a

Surrounding Land Use

Western Trunk Line Project

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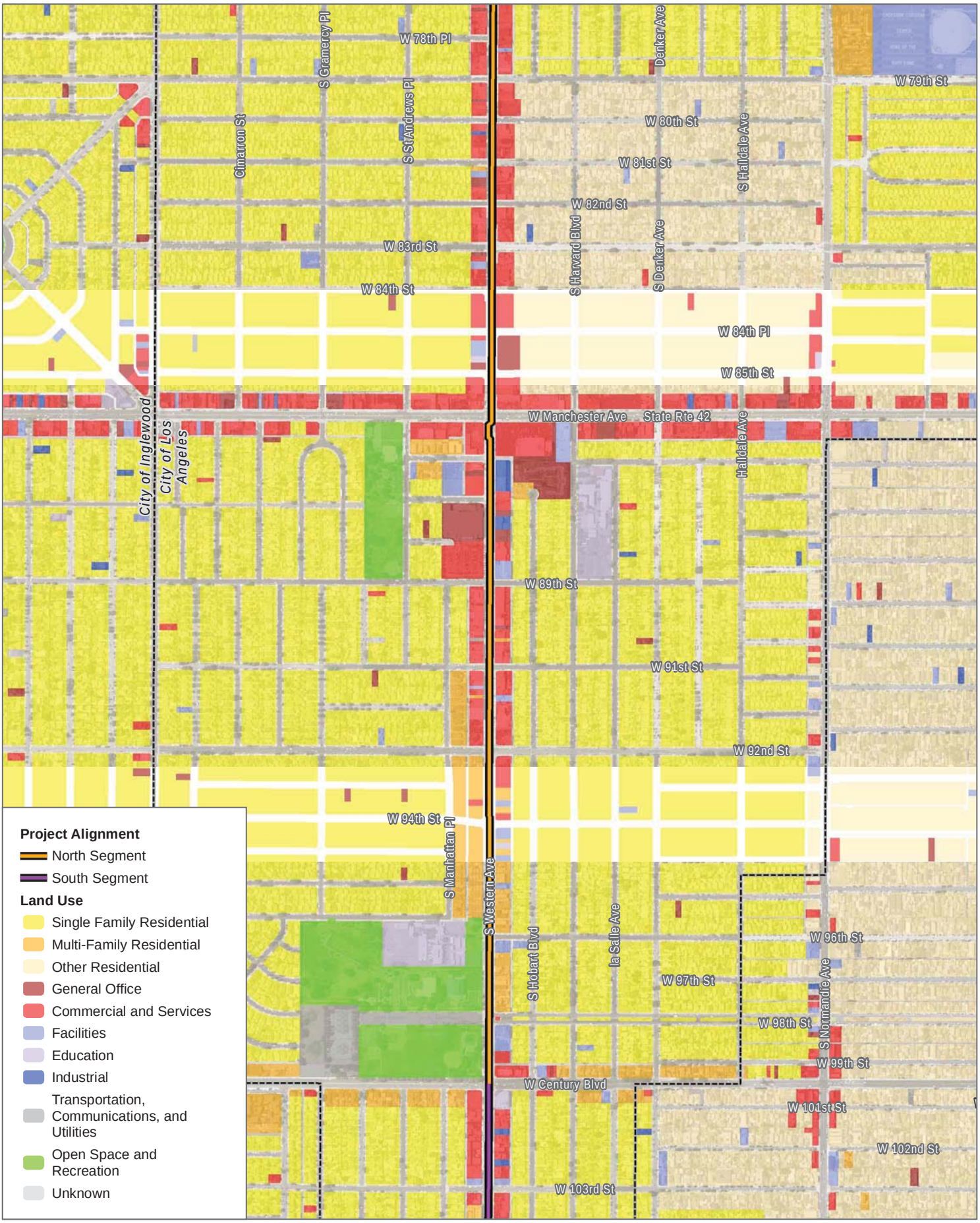

SOURCE: USDA 2016; County of Los Angeles 2016; SCAG 2008

Los Angeles Department of Water & Power

0 500 1,000 Feet

FIGURE 1-2b

Surrounding Land Use

Western Trunk Line Project

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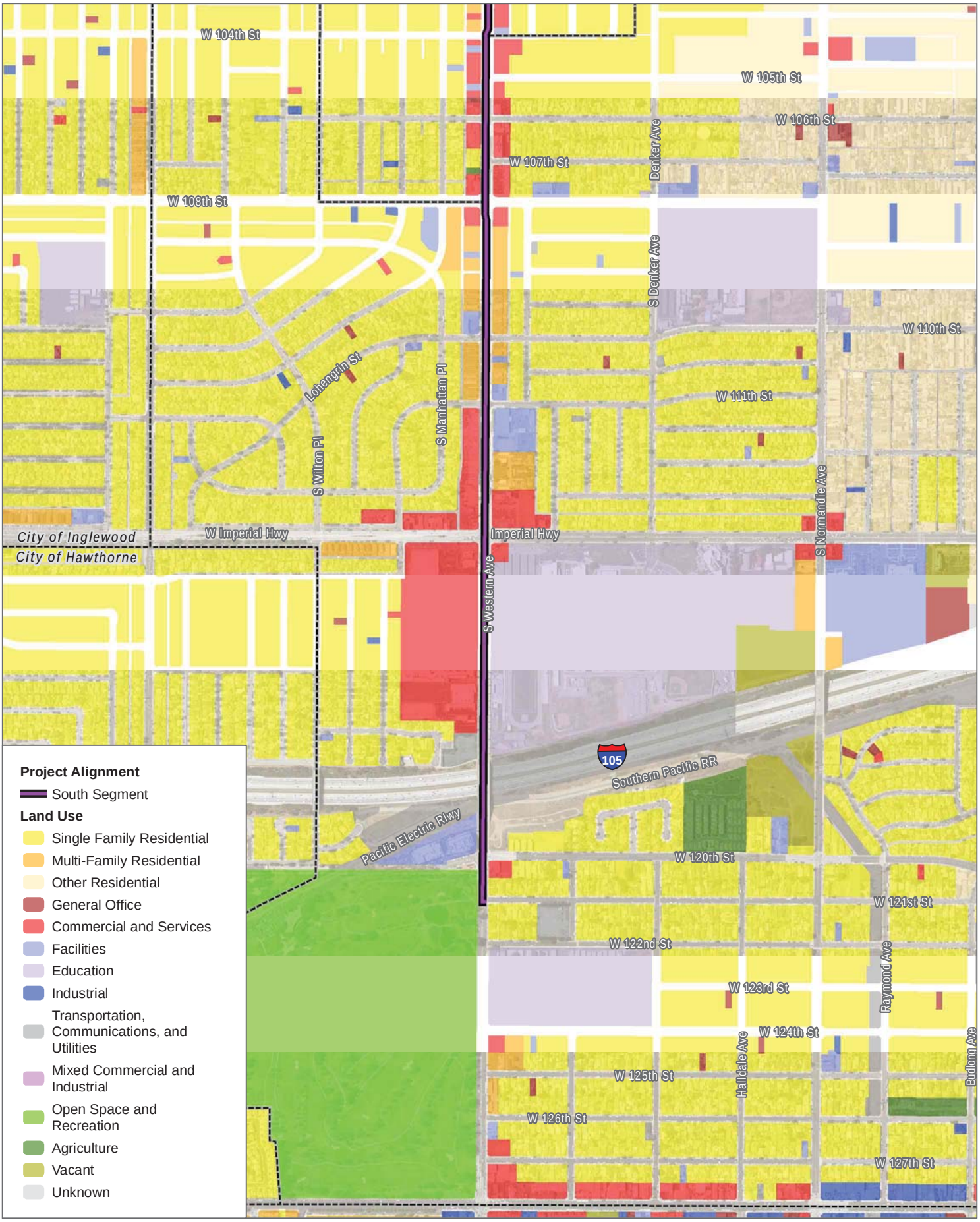

SOURCE: USDA 2016; County of Los Angeles 2016; SCAG 2008

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0 500 1,000 Feet

FIGURE 1-2c

Surrounding Land Use

Western Trunk Line Project

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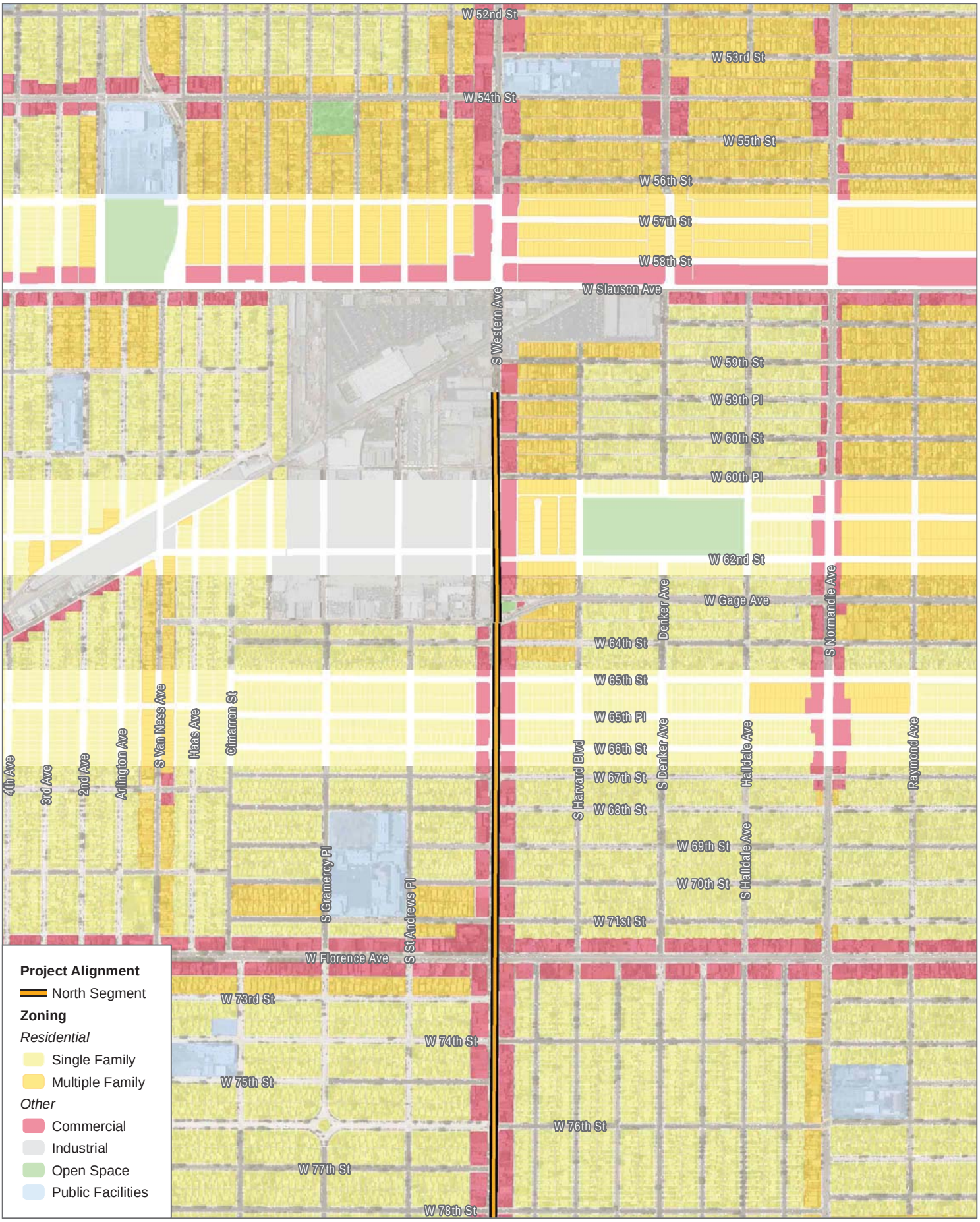

SOURCE: USDA 2016; County of Los Angeles 2016; SCAG 2012

LA DWP Los Angeles Department of Water & Power

FIGURE 1-3a

Zoning

Western Trunk Line Project

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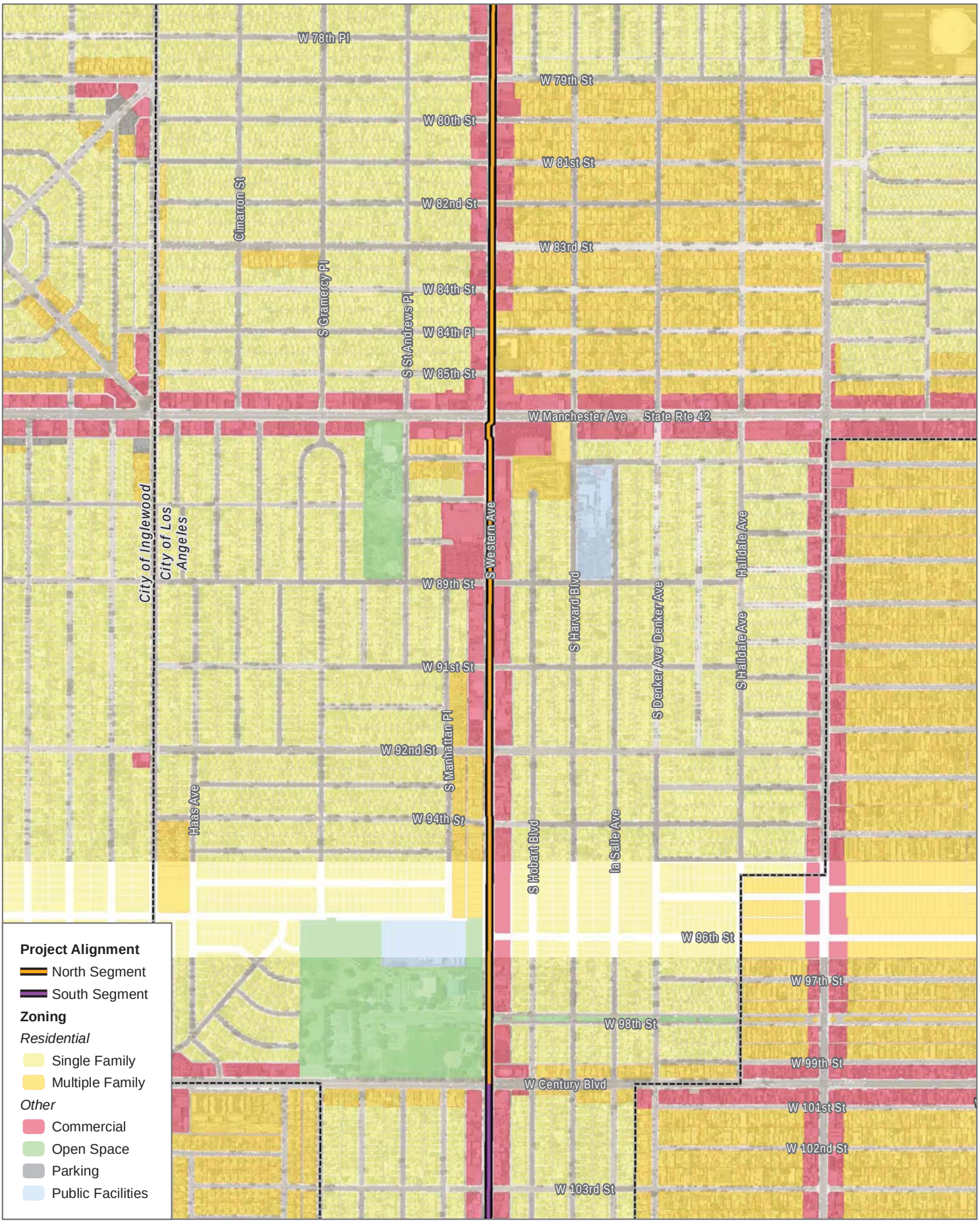

SOURCE: USDA 2016; County of Los Angeles 2016; SCAG 2012

Los Angeles Department of Water & Power

FIGURE 1-3b

Zoning

Western Trunk Line Project

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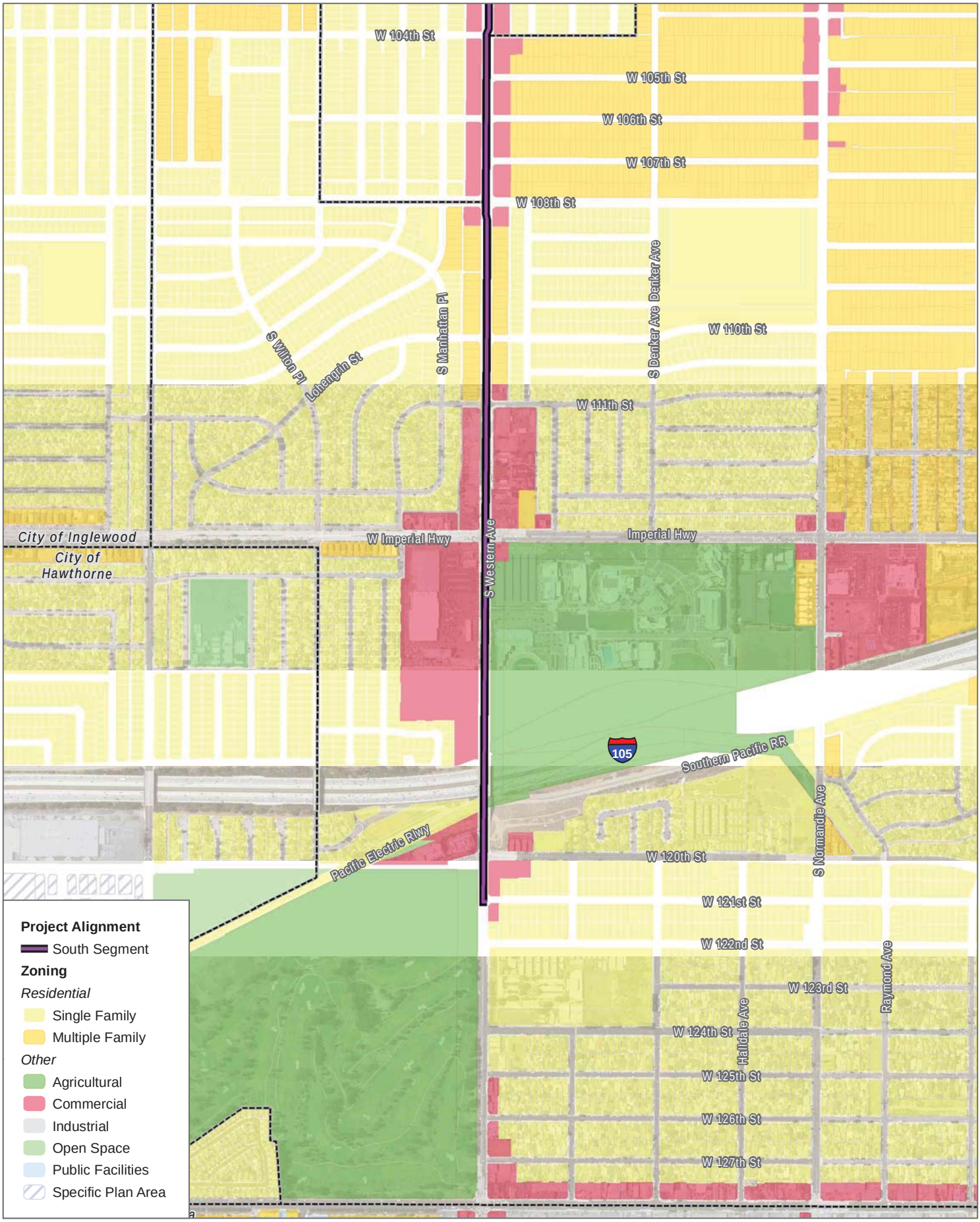

SOURCE: USDA 2016; County of Los Angeles 2016; SCAG 2012

LA DWP Los Angeles Department of Water & Power

0 500 1,000 Feet

FIGURE 1-3c

Zoning

Western Trunk Line Project

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2 PROJECT DESCRIPTION

2.1 Background

The existing Harbor Trunk Line consists of approximately 115,700 feet of concrete, riveted-steel, and welded-steel pipe that is 36 inches or 31.4 inches in diameter. The pipe was installed between 1916 and 1947. The Harbor Trunk Line begins at the intersection of 3rd Street and Western Avenue in the City of Los Angeles and terminates at the intersection of Gaffey Street and Channel Street in LADWP's Harbor District service area. The primary function of the Harbor Trunk Line is to transmit water from the Los Angeles Aqueduct Filtration Plant through Lower Franklin Reservoir No. 2 and Upper Stone Canyon Reservoir to LADWP's Central District service area. The Harbor Trunk Line also transmits water supplies purchased from the Metropolitan Water District of Southern California (MWD) to the Harbor District service area.

The Western Trunk Line Project will replace the Harbor Trunk Line between 59th Place and 121st Street. From 59th Place to Century Boulevard, the existing pipe is 36 inches in diameter. This segment (referred to hereafter as the "North Segment") is 15,000 feet in length. The segment extending from Century Boulevard to 121st Street (the "South Segment"), is 31.4 inches in diameter and 8,300 feet in length. These segments of the Harbor Trunk Line have been identified as a priority for replacement due to their aging and deteriorating condition. In the event of a breakage, damages, public safety issues, and service disruptions would result. The replacement pipeline between 59th Place and 121st Street will be referred to as Western Trunk Line.

To determine the appropriate size for the replacement pipe, LADWP analyzed the operating criteria for the Harbor Trunk Line and the demands of the areas that it serves. Two demand scenarios were used to size the pipe: the supply required for a day with maximum water use and the supply required for water use on a typical summer day within the service area. This analysis determined that future operations and demand supplied by the North Segment are not expected to change in the foreseeable future. As such, the North Segment would be replaced in kind with 36-inch diameter pipe. LADWP's analysis determined that the South Segment requires an expanded size to accommodate planned increases in local water supplies to serve its Harbor District service area. The South Segment would be upgraded in size from 31.4 inches to 54 inches in diameter. This larger pipeline would provide increased operational flexibility to supply the Harbor District service area, allowing the pipeline to meet the demands of current water consumption as well as projected future increases in water consumption consistent with regional growth projections and adopted land use plans. The larger pipeline is also needed for the purpose of increasing the amount of potable water storage that is available in LADWP's trunk lines. The upgraded South Segment of the proposed Western Trunk Line would improve operational capacity and flexibility, enabling LADWP to replace lost storage capacity.

2.2 Project Design

The proposed project would include the abandonment of 23,300 feet of existing pipe along Western Avenue and the installation of new Earthquake Resistant Ductile Iron Pipe (ERDIP) parallel to the existing pipe. The proposed replacement would occur along Western Avenue from 59th Place to 121st Street.

As part of the proposed project, LADWP would also replace approximately 4,495 feet of 6-inch and 8-inch diameter water distribution mainline with 12-inch diameter piping along Western Avenue. These improvements would include: replacing approximately 20 feet of existing 4-inch connection pipe to 6-inch line at the intersection of 65th Place and Western Avenue; replacing 3,750 feet of existing 6-inch mainline with 12-inch line from 77th Street to Manchester Avenue; replacing 625 feet of existing 8-inch mainline with 12-inch line from 106th Street to 108th Street; and, installing approximately 120 feet of 8-inch line to reconnect the existing 8-inch mainline on Western Avenue to the existing 8-inch line on Manchester Avenue. In order to maintain water pressures at specific intersections, the proposed project would also include the following minor improvements: the replacement of approximately 20 feet of existing 6-inch connection line to 12-inch line at the intersection of 84th Place and Western Avenue; the installation of approximately 20 feet of 6-inch mainline to reconnect to the existing 8-inch parallel main at the intersection of 89th Street and Western Avenue and the replacement of approximately 40 feet of existing 6-inch connection line with 8-inch line at the intersection of 108th Street and Western Avenue.

In addition to the proposed trunk line and mainline replacements and improvements, a new regulator station is proposed near the intersection of Western Avenue and Manchester Avenue. The proposed underground regulator station would replace the existing station; however, it would be installed in a new location to provide safer accessibility for maintenance and operation. The new regulator station would include a subsurface vault, access hatches, regulator valves, isolation valves, valve caps, standpipe vents, pipe, and related appurtenances. The existing regulator station would be taken out of service and abandoned.

Appurtenant structures would be installed along the pipeline that are required for pipeline operation and maintenance. The appurtenant structures required for the Western Trunk Line include isolation valves, air valves, maintenance holes, blow-offs, and cathodic protection systems.

2.3 Construction

The existing trunk line would remain in service during construction and interruptions in water service would not occur during the construction process. The replacement pipe would be installed within the existing ROW parallel to the existing trunk line, immediately east of its current alignment. The existing trunk line would be abandoned and left in place. Western Avenue is comprised of two lanes in each direction and construction would be limited to the roadway itself. Four potential off-site staging areas, shown in Figure 2-1, may be used during construction; however, staging areas

would be located adjacent or in close proximity to the proposed project alignment and would be utilized solely to store construction equipment and materials. The locations of these potential staging areas include:

- 5975 S. Western Avenue (between 59th Place and 60th Street)
- 8731 S. Western Avenue (between 87th Street and 88th Street)
- 1326 W. Imperial Highway (between Imperial Highway and 120th Street)
- 12610 S. Western Avenue (between 126th Street and 127th Street)

At its northern terminus, the proposed Western Trunk Line would tie into the existing 36-inch riveted steel pipe at the intersection of Western Avenue and 59th Place. At its southern terminus, the Western Trunk Line would tie into the existing 31.4-inch welded steel pipe at the intersection of Western Avenue and 121st Street. The proposed trunk line would be ERDIP.

Construction is anticipated to begin in February 2023 and would conclude in February 2027. Construction would generally involve two crews of approximately eight workers each. Approximately 300,000 square feet of roadway would be excavated and repaved along the entirety of the alignment. During construction, the total estimated amount of excavation would be approximately 75,000 cubic yards (CY) and total export would be approximately 100,000 CY. A total of approximately 75,000 CY of slurry would be imported throughout the construction process for use as backfill. Daily vehicular trips that are expected to occur throughout construction are as follows: maximum of 10 round trips per day for transportation of construction equipment to and from the work areas when necessary; approximately 25 round trips per day for transportation of construction workers to and from the work areas (2 crews); and 20 round trips per day for haul trucks (i.e. dump trucks) (includes import-cement slurry).

Partial block closures would be necessary for installing the new pipeline and its appurtenances.

The additional 4,495-foot water distribution mainline replacement and associated improvements along Western Avenue would occur concurrently to the trunk line replacement. Proposed construction activities would include the replacement of the existing 6-inch and 8-inch water distribution mainline along Western Avenue with new 12-inch diameter piping, specifically 3,750 feet of existing 6-inch mainline with 12-inch line from 77th Street to Manchester Avenue; replacing 625 feet of existing 8-inch mainline with 12-inch line from 106th Street to 108th Street; and, installing approximately 120 feet of 8-inch line to reconnect the existing 8-inch mainline on Western Avenue to the existing 8-inch line on Manchester Avenue.

Construction Methods

Construction of the proposed project would occur along the existing public ROW of Western Avenue using the open-trench and pipe-jacking/tunneling methods (see Figure 2-1, Construction Work Areas). Pipe jacking/tunneling installation would be used for approximately 2,926 lineal feet of pipe installation (60th Street, Florence Avenue,

Manchester Avenue, Imperial Highway and 105 Freeway), while open trenching would be utilized for the remaining 20,281 feet of pipe installation. Both open trench pipe installations and pipe jacking installations would occur over 48 months. Installations would occur concurrently. The existing trunk line would remain in service during construction activities.

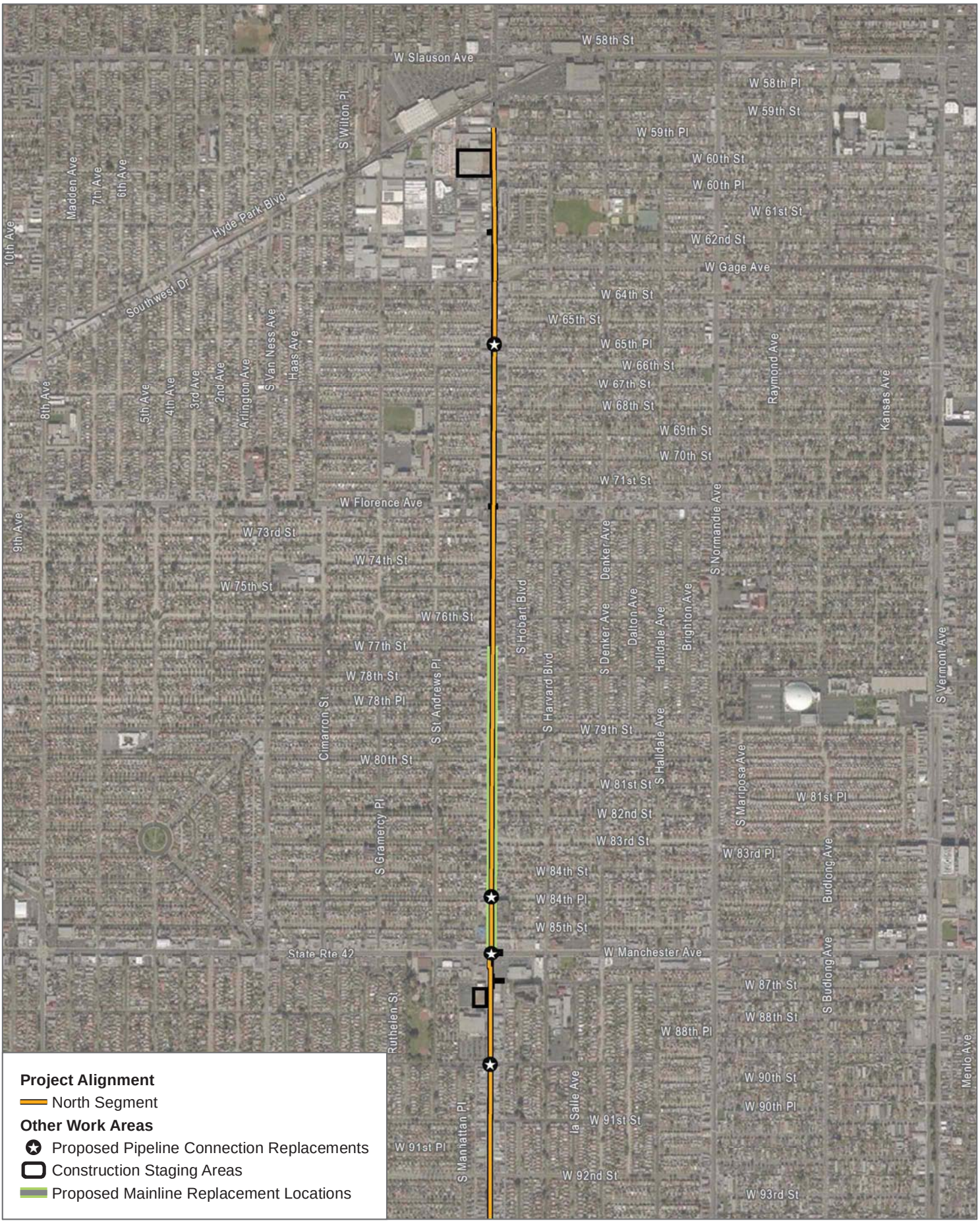
The general process for both open-trench construction and pipe jacking/tunneling consists of utility clearance, site preparation, excavation, shoring, pipe installation, backfilling, and work site street restoration. Construction would require on-site and off-site staging areas for temporary storage of supplies, materials and equipment. Approximately 300,000 square feet of roadway would be paved and restriped. Approximately 110 CY of soil would be excavated per day and hauled to offsite disposal areas.

Two crews of approximately eight workers each are assumed for the open-trench construction activities (one crew of which would be on-call) and one crew of approximately eight workers would be required for pipe jacking activities. One open-trench work crew would be active at any one time in addition to one pipe-jacking work crew. Under worst-case construction scenarios, a maximum of 24 construction workers would be required per day in the project area during construction.

Open-Trench Excavation

Open-trench excavation is a construction method typically used to install pipelines and their appurtenances. In general, the process consists of site preparation, excavation and shoring, pipe installation and backfilling, and work site restoration. Construction typically occurs within an approximately 800- to 1,000-foot work area, within traffic lanes. Two-way travel along the affected roadways would be maintained throughout construction. Construction would primarily occur along the center of the street and would progress along the alignment with the maximum length of open trench being 500 feet in length at any one time. The trenches would be temporarily barricaded with k-rail to minimize safety concerns. The following is a description of the phases of construction for open trench excavation.

Site Preparation. Traffic control plans would be prepared in coordination with the City of Los Angeles Department of Transportation (LADOT) and the Los Angeles County Department of Public Works (LADPW) to delineate traffic lanes around work areas. The existing pavement along the trunk line alignment would be cut with a concrete/asphalt saw cutter and then removed using equipment such as jackhammers, pavement breakers, excavators, and/or loaders. The pavement would be removed from the project site and recycled, reused as a backfill material, reused as pavement base material, or transported to an appropriate facility for recycling or disposal.



SOURCE: NAIP 2016; County of Los Angeles 2016; LADWP 2019

FIGURE 2-1A

Project Components and Construction Staging Areas

Western Trunk Line Project

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SOURCE: NAIP 2016; County of Los Angeles 2016; LADWP 2019

Los Angeles Department of Water & Power

0 750 1,500 Feet

FIGURE 2-1B

Project Components and Construction Staging Areas Continued

Western Trunk Line Project

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Excavation and Shoring. A trench would be excavated along the alignment using backhoes, excavators, or other types of excavation equipment. Portions of the trench adjacent to utilities may be manually excavated. The excavated soil would be immediately hauled off site. During this process, approximately 110 CY of excavated soils are expected to be removed per day.

The size of the trench required for this project would be approximately 6 to 7 feet wide for the 36-inch-diameter pipe installation and 7.5 to 8.5 feet wide for the 54-inch-diameter pipe installation. The depth of the trench would range from 8 to 15 feet below the ground surface. As the trench is excavated, the walls are typically supported with designed shoring systems. (Trenches greater than 5 feet in depth require shoring to prevent caving or collapse, per the requirements of the California Department of Industrial Relations, Division of Occupational Safety and Health [Cal/OSHA]). Steel or wood sheeting between H-beams (e.g., beam and plate) may also be used for shoring. Other similar shoring methods may be utilized. Utilities not relocated prior to trenching would be supported as excavation and shoring occurs.

If construction occurs in areas with high groundwater, either a watertight shoring system would be implemented, or the groundwater would be removed during the excavation of the trenches, usually by pumping it from the ground through dewatering wells that have been drilled along the alignment. The extracted groundwater would first be treated for any contaminants, if present, before being discharged to the storm drain system or to the sewer system under Regional Water Quality Control Board permit requirements.

Pipe Installation and Backfilling. Once the trench has been excavated and shored, pipe laying would commence. Pipe segments would be lowered into the trench, after which, bedding material (sand or cement slurry) would be poured over it. The segments would be connected to one another at the joints. The amount of pipe installed in a single day varies, but is expected to range from 40 to 100 feet per day for the proposed project (this production is acceptable once the trench is open, only for installing pipe). Prior to backfilling, appurtenant structures would be installed as necessitated by design. After laying the pipe, the trench would be backfilled with cement slurry backfill. No more than 500 feet of trench would be left unbackfilled at the end of each work day.

Work Site Restoration. Any portion of the roadway removed or damaged as a result of construction activities would be restored and repaved in accordance with all applicable standards. Once the pavement has been restored, traffic delineation (restriping) would also be restored.

Construction Equipment. Examples of equipment typically used for open trench construction are listed below:

- Excavator
- Crane
- Generator
- Backhoe
- Front end loader
- Welding equipment
- Dump/haul truck
- Flatbed truck
- Water truck
- Track or skid steer
- Street sweeper
- Service utility trucks

- Saw cutting equipment
- Plate compactor
- Roller compactor
- Forklift
- Trailer
- Grader
- Blower
- Power generators
- Small tools
- Broce broom
- Shoring equipment
- Air compressor
- Paving Equipment

Pipe Jacking/Tunneling Methods

Pipe jacking, which is a form of tunneling, would be used to reduce traffic disruptions at busy intersections and to extend underneath features along the alignment that are not suitable for open-trench construction. Tunneling would occur at 60th Street, Florence Avenue, Manchester Avenue, Imperial Highway and the 105 Freeway.

The installation of pipelines using pipe jacking avoids the continuous surface disruption that is required for open trench construction. However, some surface disruption would still occur, since "jacking" and "receiving" pits are used and would be excavated along the project alignment. Pipe jacking involves a horizontal auger boring machine that is advanced in a tunnel bore to remove material ahead of or inside the jacking pipe. Powerful hydraulic jacks are used to push a steel jacking pipe from a launch (jacking) pit to a receiving pit. As the tunneling machine is driven forward, a jacking pipe is added into the pipe string. The main phases for pipe jacking are site preparation, excavation, shoring, casing pipe installation, pipe installation, pressure testing, disinfection, and work site restoration.

Site Preparation. Traffic control plans would be prepared in coordination with LADOT and LADPW to delineate traffic lanes around work areas and to modify any turn lane pockets affected by the proposed project at major intersections. In preparation of excavating the jacking and receiving pits, the pavement would first be cut using a concrete/asphalt saw cutter or pavement breaker. As with open-trench excavation, the pavement is removed from the project site and recycled, reused as a backfill material, reused as pavement base material, or transported to an appropriate facility for recycling or disposal.

Excavation and Shoring. A jacking pit and a receiving pit are generally used for each jacking location, one at each end of the pipe segment. The distance between the pits typically ranges from 250 to 1,100 feet, but may be longer or shorter depending on soil or other site conditions.

The jacking pits would generally be 44 feet long by 12 feet wide (interior dimensions) and up to 40 feet deep with the exception of the pits to install pipe across the I-105 Freeway. Receiving pits would generally be 24 feet long by 12 feet wide (interior dimensions) and up to 40 feet in depth. The jacking and receiving pits to install the trunk line across the freeway would be up to 80 feet in depth. The pits would be excavated with backhoes and other excavation equipment. The excavated soil would be hauled to an off-site disposal facility. As excavation occurs, the pits would be shored using a beam-and-plate system or other appropriate shoring system.

Pipe Installation. Once the pits are constructed and shored, a horizontal hydraulic jack would be placed at the bottom of the jacking pit. A steel casing that measures 54 inches or 72 inches on its inner diameter would be lowered into the pit with a crane and placed on the jack. A simple cutting shield would be placed in front of the pipe segment to cut through the soil. As the jack pushes the steel casing and cutting shield into the soil, the soil is removed from within the leading casing with an auger or boring machine, either by hand or on a conveyor. Once a casing segment is pushed into the soil, a new segment is lowered, set in place, and welded to the casing that has been pushed. Installation of the steel casing is expected to progress at approximately 20 feet per day. Once the casing has been installed, a 36-inch or 54-inch diameter carrier pipe would be lowered and placed on the jacks, which push the pipe into the steel casing using casing spacers. Installation of the 36-inch or 54-inch diameter pipe is expected to progress at approximately 12 feet per day.

Work Site Restoration. After completion of the pipe installation at the jacking locations, the shoring system would be disassembled as the pits are backfilled, the soil would be compacted, and pavement would be restored. Once the pavement is complete, traffic delineation (restriping) would be restored.

Construction Equipment. The same equipment required for open-trench construction would be required to construct the jacking pits and receiving pits, since those construction activities are similar (see the list of equipment above under "Open-Trench Excavation"). The following additional equipment would generally be required for the pipe jacking/tunneling process:

- Tunnel Boring Machine (TBM)
- TBM control systems
- Power cables
- Cooling and cutting water truck
- Lubrication pump
- Pipe jacking frame
- High pressure water pump

Hydrostatic Testing and Pipeline Disinfection

Hydrostatic testing would be conducted periodically throughout construction. Hydrostatic testing would be conducted in eleven different segments as follows:

Segment 1: ~700 feet
Segment 2: ~3,400 feet
Segment 3: ~700 feet
Segment 4: ~4,600feet
Segment 5: ~800 feet
Segment 6: ~4,700 feet
Segment 7: ~500 feet
Segment 8: ~4,500 feet
Segment 9: ~700 feet
Segment 10: ~1,200 feet
Segment 11: ~1,400 feet

The total amount of water required for hydrostatic testing and disinfection would be approximately 5,200,000 gallons (2,500,000 gallons for hydrostatic testing and 2,700,000 gallons for disinfection). Hydrostatic test water would be discharged to the storm drain system in accordance with Los Angeles Regional Water Quality Control Board dewatering permit requirements or to the sewer system per SCAR Permit requirements. Once hydrostatic testing is completed, the new pipelines would be disinfected.

Construction Schedule

Construction of the proposed project is anticipated to commence in February 2023 and would end in February 2027 (see Section 3.3, Air Quality for detailed construction schedule). Construction would occur between the hours of 7:00 A.M. and 6:00 P.M., Monday through Friday. Nighttime work may be needed during construction that requires crossing a major street; however, in the event that construction is required to extend beyond regular daytime hours, extended hours permits would be required. As described above, open trench construction would progress along the alignment at a rate of approximately 40 to 100 linear feet of pipeline installation per day, with a maximum of 500 feet of open trench along the roadway at any one time. Pipe jacking would progress along the pipe jacking locations at a rate of approximately 12 linear feet per day after the pits are constructed.

2.4 Operations and Maintenance

The proposed replacement pipeline is anticipated to have an operational life of 100 years, and replacement valves are anticipated to have an operational life of 70 years. Operations along the North Segment would proceed consistent with existing conditions; operations along the South Segment would differ from existing conditions only in that this segment would begin supplying the Harbor District service area with local supplies, in replacement of imported supplies.

The entire trunk line would be underground and would not be visible from ground level during operation. Operational activities would be limited to scheduled maintenance and repair. Maintenance activities would be minimal and would be similar to those that occur under existing conditions. Maintenance includes exercising valves and replacing or repairing worn appurtenances to ensure proper performance over the life of the facilities. No permanent workers would be required to operate or maintain the Western Trunk Line. Activities associated with long-term operations and maintenance would, therefore, be minimal.

2.5 Best Practices

To minimize potential traffic and transportation impacts, the construction of the proposed project would be conducted in accordance with the Standard Specifications for Public Works Construction (Greenbook), traffic control plans designed, reviewed, and approved by LADOT and LADPW to allow acceptable levels of service, traffic safety, and emergency access to the site during construction. Equipment necessary for traffic control includes changeable message signs, delineators, arrow boards, and K-rail. The Traffic Control Plan for the proposed project would be coordinated

with LADOT for the area of the alignment within the City and the Los Angeles County Department of Public Works, for the area of the alignment occurring within the unincorporated County.

The new pipeline design would include seismic resiliency analysis for all applicable project components. All phases of the proposed project would be required to conform to safety regulations, including those from the State of California Division of Occupational Safety and Health.

2.6 Discretionary Approvals Required for the Project

Numerous approvals and/or permits would be required to implement the proposed project. These approvals and permits include, but may not be limited to, the items listed below.

State Permits

- California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA), Mining and Tunneling Unit:
    - Tunnel classifications for construction operations covered under Section 8400 through 8469, Tunnel Safety Orders, of the California Code of Regulations.
- California Department of Transportation (Caltrans): Encroachment Permit
- State Water Resources Control Board: Notice of Intent to comply with the General Construction Activity National Pollutant Discharge Elimination System (NPDES) Permit (Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ, NPDES No. CAS000002)

Local Permits

- Los Angeles Regional Water Quality Control Board:
    - Notice of Intent to comply with the General NPDES Permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters (Order No. R4-2013-0095, NPDES No. CAG994004)
    - Notice of Intent to comply with the General NPDES Permit for Discharges of Low Threat Hydrostatic Test Water to Surface Waters (Order No. R4-2009-0068, NPDES No. CAG674001)
- NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities:
- County of Los Angeles Department of Public Works: Encroachment Permit, Excavation Permit, Discharge Permit
- City of Los Angeles: Various ministerial permits from the Bureau of Street Services, Bureau of Engineering, Department of Transportation, and Bureau of Sanitation

2.7 References

City of Los Angeles. 2017. South Los Angeles Circulation. Department of City Planning, Information Technologies Division. February 1, 2017. Accessed April 25, 2017. https://planning.lacity.org/complan/central/sclpage.htm.

County of Los Angeles. 2016. "Figure 7.3 Highway Plan Policy Map" in Los Angeles County General Plan. Adopted October 6, 2016. Accessed April 25, 2017. http://planning.lacounty.gov/generalplan/generalplan.

LADWP (Los Angeles Department of Water and Power). 2015. 2015 Urban Water Management Plan.

3 INITIAL STUDY CHECKLIST

The following discussion of potential environmental effects was completed in accordance with Section 15063(d)(3) of the CEQA Guidelines (2019) to determine if the proposed project may have a significant effect on the environment.

1. Project title:

Western Trunk Line Project

2. Lead agency name and address:

Los Angeles Department of Water and Power
Environmental Affairs
111 North Hope Street, Room 1044
Los Angeles, California 90012

3. Contact person and phone number:

Christopher Lopez
Environmental Planning and Assessment
Los Angeles Department of Water and Power
213.367.3509

4. Project location:

The project alignment would be located along Western Avenue in its entirety, from 59th Place to 108th Street in the City and County of Los Angeles and from 108th Street to 121st Street in the West Athens/Westmont community of unincorporated Los Angeles County.

5. Project sponsor's name and address:

Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, California 90012

6. City Council Districts:

District 8

7. Neighborhood Council Districts:

Central Area Neighborhood Development Council and Southwest Area Neighborhood Development Council

8. General plan designation:

Refer to Section 1.3 of this Initial Study

9. Zoning:

Refer to Section 1.3 of this Initial Study

10. Description of project:

Refer to Chapter 2 of this Initial Study

11. Surrounding land uses and setting:

Refer to Section 1.3 of this Initial Study

12. Other public agencies whose approval is required:

- Division of Occupational Safety and Health (Cal/OSHA); Mining and Tunneling Unit.
- State Water Resources Control Board
- California Department of Transportation (Caltrans)
- Los Angeles Regional Water Quality Control Board
- City of Los Angeles
- Los Angeles County Department of Public Works

13. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Consultation notification letters were sent to five tribes affiliated with the project area in June 2017. To date, no requests for consultation have been received. Refer to Section 3.18 of this Initial Study for further details.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

DETERMINATION

On the basis of this initial evaluation:

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

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

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

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

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

Charles C. Holloway — Signature

1/23/2020 — Date

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any, to reduce the impact to less than significance.

3.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

a) Would the project have a substantial adverse effect on a scenic vista?

No Impact. The proposed project would be located in a developed urban area surrounded by commercial uses on both sides of the roadway for the majority of the alignment. Exceptions include residential, institutional and recreational uses. Residential uses are located between 84th Street to 85th Street, fronting the eastern side of the roadway and from 92nd Street to 96th Street, fronting the western side of the roadway. Residential uses are also located from 108th Street to 111th Street, fronting both sides of the roadway. Three public facilities, the Los Angeles Southwest College, Manhattan Place Elementary School, and Jesse Owens Park are located in the project vicinity. The Los Angeles Southwest College is located immediately east of the project alignment between Imperial Highway and 120th Street. Both Manhattan Place Elementary School and Jesse Owens Park are located immediately west of the project alignment between W. 96th Street and W. Century Boulevard. No scenic vistas exist within the project alignment or within the general vicinity of the project alignment that could be adversely affected by the project. Furthermore, the project would include the installation of new underground pipelines which would not be visible upon operation; therefore, the construction and operation of the proposed project would not have any effect on scenic vistas. No impacts would occur.

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. The proposed project alignment is located in an urbanized area. The proposed project would include the replacement of a trunk line and main line within a roadway. There are no designated State Scenic Highways in proximity to the proposed project. The nearest designated scenic highway is U.S. Highway 2, located approximately seven miles northwest of the project alignment (Caltrans 2011). Therefore, no impact on scenic resources within a state scenic highway would occur as a result of the proposed project.

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 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. The proposed project would be located within an urbanized area. During project construction, the proposed pipeline replacement and associated improvements would take place in the Western Avenue ROW. Given this, the visual character of a portion of Western Avenue would be temporarily affected. However, once installed in the street, the proposed project would have no impact on the visual character or quality of the area. As the installation of new underground pipelines would not be visible upon operation, no conflict with zoning regulations or regulations pertaining to scenic quality would occur. Minor appurtenant facilities such as isolation valves, blow-offs, and air/vacuum valves would be visible above ground. However, these structures would be low profile and would not substantially contrast with the surrounding urban built-up environment. For these reasons, no impact would occur relative to visual character/quality or due to conflicts with applicable zoning and other regulations governing scenic quality.

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 alignment would extend along Western Avenue, a local roadway that is surrounded by urban land uses. As such, external and internal night and day illumination is already in place within the project area and includes street lamps, lit windows, commercial signage, etc. The proposed project would involve the construction and operation of underground water pipelines. The construction phase may involve standard traffic control and safety measures, such as barriers, reflective signs, and flashing warnings that would be implemented by LADWP or the LADWP contractor as necessary. These traffic control and safety measures are common in urban environments and would not introduce a new source of light or glare that would adversely affect views in the project area. Furthermore, a majority of construction would take place during the day, so traffic control measures would not typically affect nighttime views. Construction activities at intersections may require night work in order to avoid peak commute hours, which would require localized construction lighting. Other situations may arise that require extended work hours and nighttime lighting, including hydrostatic testing and shutdowns to complete tie-ins. However, night work would be temporary and confined to these situations only.

Once construction is complete, the trunk line would be entirely underground with the exception of minor appurtenant facilities such as isolation valves, blow-offs, and air/vacuum valves, none of which would include light fixtures. Any minor light and glare-related impacts would therefore be confined to the construction phase and would be less than significant.

References

Caltrans (California Department of Transportation). 2011. California Scenic Highway Mapping System. Last updated August, 2018. Accessed March 27, 2019. http://www.dot.ca.gov/design/lap/livability/scenic-highways/index.html.

U.S. Department of Transportation. 2019. Federal Highway Administration [website]. Accessed, March 27, 2019. https://www.fhwa.dot.gov/byways/byways/10246/maps.

3.2 Agriculture and Forestry Resources

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

a) 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 use?

No Impact. The project alignment and surrounding areas are characterized by features typical of an urban landscape. As shown by the Los Angeles County Important Farmland map, the project alignment and surrounding properties are not mapped by the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP) as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (FMMP 2016). The proposed project would not convert farmland to non-agricultural uses, and no impact would occur.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project site is not under a DOC Williamson Act contract and would not conflict with existing zoning for agricultural use, or a Williamson Act contract (DOC 2017). The proposed project would be located within Western Avenue, a roadway extending through a highly urbanized community. The properties along the project alignment are generally zoned as follows:

- On Western Avenue between 59th Place and Gage Street – Industrial
- On Western Avenue between Gage Street and 84th Street – Commercial
- On Western Avenue between 84th Street and 96th Street – Low/medium Density Housing and Commercial
- On Western Avenue between 96th Street and 108th Street – Commercial
- On Western Avenue between 108th Street and 121st Street (unincorporated Los Angeles West Athens and Westmont) – Low/medium Density Housing and Commercial

The properties along either side of the alignment from approximately 59th Place to 108th Street are within an Urban Agriculture Incentive Zone (UAIZ), or zones established by the City to encourage agriculture in urban areas through reductions in property taxes for qualifying properties (Los Angeles County 2017). Per AB 465, any property under a UAIZ contract cannot contain any non-agricultural dwellings onsite (State of California Board of Equalization 2018). As such, most of the subject properties within the UAIZ would not qualify for UAIZ contracts under existing conditions. Additionally, the proposed project would occur within Western Avenue's ROW and would not affect the use of surrounding properties, including those within UAIZs. Given this, the project would not conflict with existing zoning for agricultural use, or a Williamson Act contract and no impact would occur.

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 proposed project would be located within a roadway that is surrounded by residential, commercial, and public facilities land uses. No forest land, timberland, or Timberland Production areas or areas zoned for those purposes are located within or adjacent to the project alignment. Therefore, the proposed project would not conflict with existing zoning for forest land, timberland, or Timberland Production areas, or result in the loss or conversion of forest lands to non-forest uses, as none exist. The project would be implemented within an existing roadway that is surrounded by fully developed areas. No impact to forest land or timberland would occur.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As stated above, no forest land is located within the project area or in the vicinity of the project area. The proposed project alignment is surrounded by urban land uses and is zoned Industrial, Commercial and Low Density Residential. No forest land would be converted or otherwise affected by the proposed project, and no impact would 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 non-forest use?

No Impact. As stated above, no farmland or forest land is located within the project area or in the vicinity of the project area. The proposed project alignment is surrounded by urban land uses and is primarily zoned Industrial, Commercial and Low Density Residential. No farmland or forest land would be converted or otherwise affected by the proposed project, and no impact would occur.

References

California Department of Conservation. 2016. Farmland Mapping and Monitoring Program. Accessed, March 27, 2019. https://www.conservation.ca.gov/dlrp/fmmp/Pages/LosAngeles.aspx.

California Department of Conservation. 2017. State of California Williamson Act Contract Land. Accessed, March 27, 2019. ftp://ftp.consrv.ca.gov/pub/dlrp/wa/2016%20Statewide%20Map/WA_2016_11X17.pdf.

City of Los Angeles Website. 2019. Zone/Property Info (ZIMAS). Accessed, March 27, 2019. http://cityplanning.lacity.org/.

Los Angeles County. 2013. Urban Agriculture Incentive Zone Program. Accessed, March 27, 2019. http://planning.lacounty.gov/uaiz.

State of California Board of Equalization. 2018. Urban Agricultural Incentive Zone Changes. Accessed, July 1, 2019. http://www.boe.ca.gov/proptaxes/pdf/lta18005.pdf.

3.3 Air Quality

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

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The project site is located within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County, and is within the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD).

The SCAQMD administers the Air Quality Management Plan (AQMP) for the SCAB, which is a comprehensive document outlining an air pollution control program for attaining all California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). The most recent adopted AQMP is the 2016 AQMP (SCAQMD 2017), which was adopted by the SCAQMD Governing Board in March 2017. The 2016 AQMP represents a new approach, focusing on available, proven, and cost-effective alternatives to traditional strategies while seeking to achieve multiple goals in partnership with other entities promoting reductions in GHGs and toxic risk, as well as efficiencies in energy use, transportation, and goods movement (SCAQMD 2017).

The purpose of a consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and, thus, if it would interfere with the region's ability to comply with federal and state air quality standards. The SCAQMD has established criteria for determining consistency

with the currently applicable AQMP in Chapter 12, Sections 12.2 and 12.3, in the SCAQMD CEQA Air Quality Handbook. The criteria are as follows (SCAQMD 1993):

- Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP.
- Whether the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

To address the first criterion regarding the project's potential to result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP, project-generated criteria air pollutant emissions were estimated and analyzed for significance and are addressed under Section 3.3(b). Detailed results of this analysis are included in Appendix A. As presented in Section 3.3(b), project construction would not generate criteria air pollutant emissions that would exceed the SCAQMD thresholds, and the project is not anticipated to generate operational criteria air pollutant emissions.

The second criterion regarding the project's potential to exceed the assumptions in the AQMP or increments based on the year of project buildout and phase is primarily assessed by determining consistency between the project's land use designations and potential to generate population growth. In general, projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook). The SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by the Southern California Association of Governments (SCAG) for its Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG 2016), which is based on general plans for cities and counties in the SCAB, for the development of the AQMP emissions inventory (SCAQMD 2017).[1] The SCAG 2016 RTP/SCS, and associated Regional Growth Forecast, are generally consistent with the local plans; therefore, the 2016 AQMP is generally consistent with local government plans.

[1] Information necessary to produce the emission inventory for the SCAB is obtained from the SCAQMD and other governmental agencies, including the California Air Resources Board (CARB), the Caltrans, and SCAG. Each of these agencies is responsible for collecting data (e.g., industry growth factors, socioeconomic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. SCAG incorporates these data into its Travel Demand Model for estimating/projecting vehicle miles traveled and driving speeds. SCAG's socioeconomic and transportation activities projections in their 2016 RTP/SCS are integrated in the 2016 AQMP (SCAQMD 2017).

As discussed in Section 2 of this IS/MND, the project would occur entirely within the existing ROW of Western Avenue. The proposed replacement of the trunk line would not change or affect the existing zoning or land use designations in the project area. Accordingly, the project is consistent with the SCAG RTP/SCS forecasts used in the SCAQMD AQMP development. Additionally, as discussed in Section 3.14, Population and Housing the project would be built to meet existing water demand and would not result in an increase in potable water in the project area causing direct or indirect increases in population in the area.

In summary, based on the considerations presented for the two criteria, impacts relating to the project's potential to conflict with or obstruct implementation of the applicable AQMP would be less than significant.

b) Would the project 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. Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulatively considerable contribution on air quality. If a project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant (SCAQMD 2003).

A quantitative analysis was conducted to determine whether proposed construction activities would result in a cumulatively considerable net increase in emissions of criteria air pollutants for which the SCAB is designated as nonattainment under the NAAQS or CAAQS. Criteria air pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$), and lead. Pollutants that are evaluated herein include volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), which are important because they are precursors to O_3, as well as CO, sulfur oxides (SO_x), PM_{10}, and $PM_{2.5}$.

Regarding NAAQS and CAAQS attainment status,[2] the SCAB is designated as a nonattainment area for national and California O_3 and $PM_{2.5}$ standards (CARB 2017; EPA 2017). The SCAB is designated as a nonattainment area for California PM_{10} standards; however, it is designated as an attainment area for national PM_{10} standards. The SCAB nonattainment status of O_3, $PM_{10,}$ and $PM_{2.5}$ standards is the result of cumulative emissions from various sources of air pollutants and their precursors within the SCAB, including motor vehicles, off-road equipment, and commercial and industrial facilities. The SCAB is designated as an attainment area for national and California NO_2, CO, and SO_2 standards. Although the SCAB has been designated as partial nonattainment (Los Angeles County) for the federal rolling 3-month average lead standard, it is designated attainment for the state lead standard.[3]

Appendix G of the CEQA Guidelines indicates that, where available, the significance criteria established by the applicable air district may be relied upon to determine whether a project would have a significant impact on air quality. The SCAQMD has established Air Quality Significance Thresholds, as revised in March 2015, which set forth quantitative emissions significance thresholds below which a project would not have a significant impact on ambient air quality (SCAQMD 2015). The quantitative air quality analysis provided herein applies the SCAQMD thresholds to determine the potential for the project to result in a significant impact under CEQA. The SCAQMD mass daily construction thresholds are as follows: 75 pounds per day for VOC, 100 pounds per day for NO_x, 550 pounds per day for CO, 150 pounds per day for SO_x, 150 pounds per day for PM_{10}, and 55 pounds per day for $PM_{2.5}$.

The following discussion quantitatively evaluates project-generated construction impacts and qualitatively evaluates operational impacts that would result from implementation of the proposed project.

Construction Emissions

Proposed construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment and soil disturbance) and off-site sources (i.e., on-road haul trucks, delivery trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity; the specific type of operation; and, for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

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[2] An area is designated as in attainment when it is in compliance with the NAAQS and/or the CAAQS. The NAAQS and CAAQS are set by the Environmental Protection Agency and CARB, respectively, for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. Attainment = meets the standards; attainment/maintenance = achieve the standards after a nonattainment designation; nonattainment = does not meet the standards.

[3] Re-designation of the lead NAAQS designation to attainment for the Los Angeles County portion of the SCAB is expected based on current monitoring data. The phase out of leaded gasoline started in 1976. Since gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate emissions for construction of the proposed project. CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant emissions associated with construction activities from a variety of land use projects, such as residential, commercial, and industrial facilities. CalEEMod input parameters, including the land use type used to represent the project and size, construction schedule, and anticipated construction equipment utilization, were based on information provided by LADWP and default model assumptions when project-specific data was not available.

For the purpose of conservatively estimating project emissions, it is assumed that construction of the project would start in February 2023[4] and would last approximately four years. The construction phasing schedule and duration, vehicle trip assumptions, and construction equipment mix used for estimating the project-generated emissions are shown in Table 3.3-1.

Table 3.3-1 Construction Details

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Workers	*Average Daily Vendor Trucks*	*Total Haul Trucks*	*Type*	*Quantity*	*Usage Hours*
Open Trench Pipe Installation (1-2 crews of 8 each) and Backfilling	32	10	21,876	Concrete/industrial saws	1	8
				Excavators	3	8
				Crane	1	8
				Dump Truck	1	8
				Generator	1	8
				Backhoe	1	8
				Front end loader	1	8
				Welder	1	8
				Paving Equipment	1	8
				Water Truck	1	8
				Street sweeper	1	8
				Plate Compactor	1	8
				Roller	1	8
				Forklift	1	8
				Air compressor	1	8
Pipe Jacking/Tunneling and Backfilling	16	0	0	*Construction of Jacking and Receiving Pits*		
				Concrete/industrial saws	1	8
				Excavators	3	8

[4] The analysis assumes a construction start date of February 2023, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

Table 3.3-1 Construction Details

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Workers	*Average Daily Vendor Trucks*	*Total Haul Trucks*	*Type*	*Quantity*	*Usage Hours*
(1 crew of 8)				Crane	1	8
				Dump Truck	1	8
				Generator	1	8
				Utility Truck	1	8
				Backhoe	1	8
				Front end loader	1	8
				Welder	1	8
				Paving Equipment	1	8
				Water Truck	1	8
				Street sweeper	1	8
				Plate Compactor	1	8
				Roller	1	8
				Forklift	1	8
				Air compressor	1	8
				Pipe Installation via Jacking		
				Excavator	1	8
				Dump truck	1	4
				Generator	1	8
				Colling/cutting water truck	1	8
				High pressure water Pump	1	2
				Utility truck	1	8
				Crane	1	3

Source: LADWP 2019.
Notes: See Appendix A for details**.**

Internal combustion engines used by construction equipment, trucks, and worker vehicles would result in emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$. PM_{10} and $PM_{2.5}$ emissions would also be generated by entrained dust, which results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil. Over the course of open trench activities, 20 round trips per day will be assumed for haul trucks (includes export of 100,000 CY of excavated material and import of 75,000 CY cement slurry for backfill). The project would be required to comply with SCAQMD Rule 403 to control dust emissions during any dust-generating activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active grading areas two times per day, with additional watering depending on weather conditions.

Estimated maximum daily construction criteria air pollutant emissions from all on-site and off-site emission sources is provided in Table 3.3-2.

Table 3.3-2 Estimated Maximum Daily Construction Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}[a]	$PM_{2.5}$[a]
	pounds per day					
2023	6.44	59.12	74.01	0.15	5.93	3.26
2024	6.10	55.51	73.46	0.15	5.44	2.93
2025	5.70	51.27	73.46	0.15	5.14	2.64
2026	5.69	51.16	73.36	0.15	5.14	2.64
2027	5.68	51.05	73.32	0.15	5.04	9.69
Maximum Daily Emissions	**6.44**	**59.12**	**74.01**	**0.15**	**5.93**	**3.26**
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: SCAQMD 2015.
Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
See Appendix A for detailed results.
[a] These estimates reflect control of fugitive dust (watering two times daily) required by SCAQMD Rule 403 (SCAQMD 2005).

As shown in Table 3.3-2, daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during project construction.

As discussed in previously, the SCAB has been designated as a federal nonattainment area for O_3 and $PM_{2.5}$ and a state nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. Proposed construction activities of the project would generate VOC and NO_x emissions (which are precursors to O_3) and emissions of PM_{10} and $PM_{2.5}$. However, as indicated in Table 3.3-2, project-generated construction emissions would not exceed the SCAQMD emission-based significance thresholds for VOC, NO_x, PM_{10}, or $PM_{2.5}$, and therefore the project would not cause a cumulatively significant impact.

Cumulative localized impacts would potentially occur if a construction project were to occur concurrently with another off-site project. Construction schedules for potential future projects near the project site are currently unknown; therefore, potential construction impacts associated with two or more simultaneous projects would be considered speculative.[5] However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM_{10} and $PM_{2.5}$ emissions would also be reduced because all future projects would be subject to SCAQMD Rule

[5] The CEQA Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145). This discussion is nonetheless provided in an effort to show good-faith analysis and comply with CEQA's information disclosure requirements.

403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD. Based on the previous considerations, the project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant.

Operational Emissions

Once project construction is complete, no operational activities associated with the proposed project would occur (no routine daily equipment operation or vehicle trips would be required). Because the project would not result in any long-term operational activities, there would be no potential air quality impacts associated with operational air pollutant emissions.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Localized project impacts associated with construction criteria air pollutants emissions are assessed as follows.

Sensitive Receptors

Sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). The closest sensitive receptor land uses are residences located approximately 30 feet to Western Avenue feet to the west of the project site.

Localized Significance Thresholds

The SCAQMD recommends a localized significance threshold (LST) analysis to evaluate localized air quality impacts to sensitive receptors in the immediate vicinity of the project site as a result of construction activities. The impacts were analyzed using methods consistent with those in the SCAQMD's Final Localized Significance Threshold Methodology (SCAQMD 2009). The project is located in Source Receptor Area (SRA) 3 (Southwest Coastal Los Angeles County). The project's construction activities would occur over a 6.89-acre over the course of construction period but no more than 1-acre would be under construction at one time; therefore, for the purposes of the LST analysis, emissions thresholds based on a one-acre site were utilized. This is a conservative approach, as LSTs increase with the size of project site. As mentioned previously, the closest sensitive receptors are residences located 30 feet to the west of the project site. The closest receptor distance available in the SCAQMD LST Methodology is 25 meters (82 feet) and is what was assumed for this analysis.

Project construction activities would result in temporary sources of on-site criteria air pollutant emissions associated with construction equipment exhaust and dust-generating activities. The maximum daily on-site construction emissions generated during construction of the proposed project is presented in Table 3.3-3, and

compared to the SCAQMD localized significance criteria for SRA 3 to determine whether project-generated on-site construction emissions would result in potential LST impacts.

Table 3.3-3 Construction Localized Significance Thresholds Analysis

Year	NO_2	CO	PM_{10}	$PM_{2.5}$
	pounds per day (on site)			
2023	26.12	35.17	1.35	1.23
2024	24.34	35.12	1.21	1.09
2025	22.28	34.98	1.05	0.94
2026	22.28	34.98	1.05	0.94
2027	22.28	34.98	0.99	0.94
Maximum Daily On Site Emissions	**28.51**	**35.28**	**1.60**	**1.40**
SCAQMD LST Criteria	*91*	*664*	*5*	*3*
Threshold Exceeded?	**No**	**No**	**No**	**No**

Source: SCAQMD 2009.
Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.
See Appendix A for detailed results.
Localized significance thresholds are shown for a 1-acre project site corresponding to a distance to a sensitive receptor of 25 meters.

As shown in Table 3.3-3, proposed construction activities would not generate emissions in excess of site-specific LSTs; therefore, localized project construction impacts would be less than significant.

CO Hotspots

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed CO "hotspots." CO transport is extremely limited, because CO disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors. Typically, high CO concentrations are associated with severely congested intersections. Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots. During construction of the project, construction traffic would affect the intersections near the project site. However, the proposed project would be temporary and would not be a source of daily, long-term mobile-source emissions. In addition, due to continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing. Finally, as discussed in Section 3.17 of this IS/MND, transportation impacts would be less than significant with mitigation. Furthermore, as discussed in Section 2.4 of this IS/MND, the project would not require operational staff because the project's operational

activities would be limited to scheduled maintenance and repair. Maintenance activities would be minimal and would be similar to those that occur under existing condition. Therefore, the project would not generate additional traffic volumes and impacts related to CO hot spots would be less than significant.

Toxic Air Contaminants

Toxic air contaminants (TACs) are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. As discussed under the LST analysis, the nearest sensitive receptors to the proposed project are residences located adjacent to the project as it passes through residential neighborhoods.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SCAQMD recommends an incremental cancer risk threshold of 10 in 1 million. "Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard Office of Environmental Health Hazard Assessment risk-assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects. The SCAQMD recommends a Hazard Index of 1 or more for acute (short-term) and chronic (long-term) non-carcinogenic effects.[6] TACs that would potentially be emitted during construction activities associated with the proposed project would be diesel particulate matter.

Diesel particulate matter emissions would be emitted from heavy equipment operations and heavy-duty trucks. Heavy-duty construction equipment is subject to a CARB Airborne Toxics Control Measure for in-use diesel construction equipment to reduce diesel particulate emissions. As described for the LST analysis, PM_{10} and $PM_{2.5}$ (representative of diesel particulate matter) exposure would be minimal. According to the Office of Environmental Health Hazard Assessment, health risk assessments (which determine the exposure of sensitive receptors to toxic emissions) should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should also be limited to the period/duration of activities associated with the project. The duration of the proposed construction activities would constitute a small percentage of the total 30-year exposure period. The construction period for the proposed project would be approximately 5 years, after which construction-related TAC emissions would cease. However, because of the linear nature of the proposed project, emissions would not be concentrated in any one work area for the entire construction duration. Proposed project construction would not generally remain in a single location for more than a few days. Due to this relatively short period of exposure and minimal particulate emissions on site, TACs generated during construction would not be expected to result in concentrations causing significant health risks.

[6] Non-cancer adverse health risks are measured against a hazard index, which is defined as the ratio of the predicted incremental exposure concentrations of the various non-carcinogens from the project to published reference exposure levels that can cause adverse health effects.

Following completion of on-site construction activities, the project would not involve routine operational activities that would generate TAC emissions. Operation of the proposed project would not result in any non-permitted direct emissions (e.g., those from a point source such as diesel generators). For the reasons previously described, the project would not result in substantial TAC exposure to sensitive receptors in the vicinity of the proposed project, and impacts would be less than significant.

Health Effects of Criteria Air Pollutants

Construction emissions of the project would not exceed the SCAQMD thresholds for any criteria air pollutants, including VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$.

Health effects associated with O_3 include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2019). VOCs and NO_x are precursors to O_3, for which the SCAB is designated as nonattainment with respect to the NAAQS and CAAQS. The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SCAB due to O_3 precursor emissions tend to be found downwind of the source location because of the time required for the photochemical reactions to occur. Further, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the O_3 NAAQS and CAAQS tend to occur between April and October when solar radiation is highest. Due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project's emissions of O_3 precursors is speculative. That being said, because the proposed project would not exceed the SCAQMD thresholds, the proposed project would not contribute to health effects associated with O_3.

Health effects associated with NO_x include lung irritation and enhanced allergic responses (CARB 2019). Because project-related NO_x emissions would not exceed the SCAQMD mass daily thresholds, and because the SCAB is a designated attainment area for NO_2 and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards, it is not anticipated that the proposed project would cause an exceedance of the NAAQS and CAAQS for NO_2 or result in potential health effects associated with NO_2 and NO_x.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (CARB 2019). CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots was discussed previously and determined to be less than significant. Thus, the project's CO emissions would not contribute to significant health effects associated with CO.

Health effects associated with PM_{10} include premature death and hospitalization, primarily for worsening of respiratory disease (CARB 2019). Construction of the project would not exceed thresholds for PM_{10} or $PM_{2.5}$, would not contribute to exceedances of the NAAQS and CAAQS for particulate matter, and would not obstruct the SCAB from coming into attainment for these pollutants. The project would also not result in substantial diesel

particulate matter emissions during construction. Additionally, the project would be required to comply with SCAQMD Rule 403, which limits the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction, the project is not anticipated to result in health effects associated with PM_{10} or $PM_{2.5}$.

In summary, construction and operation of the proposed project would not result in exceedances of the SCAQMD significance thresholds for certain criteria pollutants, and potential health effects associated with criteria air pollutants would be less than significant.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Odor Emissions

Less Than Significant Impact. The occurrence and severity of potential odor impacts depend on numerous factors. The nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying, cause distress among the public, and generate citizen complaints.

During project construction, exhaust from equipment may produce discernible odors typical of most construction sites. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. However, such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Additionally, equipment would be in one location along the trunk line path for a few days at a time. Accordingly, impacts associated with odors during construction would be less than significant.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). Operation of the proposed project would not entail any of these potentially odor-causing land uses. Thus, there would be no operational or activities associated with the project. Therefore, the proposed project would not create any new sources of odor during operation, and proposed project operations would result in an odor impact that is less than significant.

Asbestos Emissions

Less Than Significant Impact. Asbestos containing materials are not expected to be found during project construction; however, in the event that asbestos is encountered, these materials would be removed in accordance with regulatory requirements prior to demolition (pursuant to SCAQMD Rule 1403 [Asbestos Emissions]), which establishes survey, notification, and work practice requirements to prevent asbestos emissions during building demolition. Therefore, impacts related to asbestos emissions would be less than significant.

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3.4 Biological Resources

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

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

This section is based on a Biological Technical Report prepared by Dudek for the project (see Appendix B), which analyzed the proposed project alignment and staging areas (project site), as well as a 300-foot buffer surrounding the project site. The project site and buffer are called the "study area" for the purposes of the biological resources analysis.

The proposed project would be located within a heavily urbanized area dominated by residential, commercial, and industrial development, and crosses underneath (using the pipe jacking method) the I-105 freeway near the southern end of the alignment. The study area is easily accessible from heavily traversed thoroughfares, including US 105, Imperial Highway, Century Boulevard, Manchester Avenue, and Florence Avenue. Vegetation cover within the study area is predominantly composed of ornamental plantings and landscaping. The proposed alignment would occur within the existing public right-of-way, within existing paved roads and adjacent parking lanes.

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 Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact. Developed land dominated by residential and commercial development (including paved roadways and US 105) occurs throughout the proposed project site and surrounding study area. These areas support limited natural ecological processes, native vegetation, or habitat for wildlife species and, thus, are not considered sensitive by federal, state, or local agencies.

As described in Appendix B, no special-status plant or wildlife species were observed within the project site or surrounding study area during the site visit conducted in June 2019. The proposed project occurs within the *Inglewood, CA* United States Geological Survey (USGS) 7.5-minute quadrangle. A California Natural Diversity Database (CNDDB) and California Native Plant Society Inventory of Rare and Endangered Plants query was conducted for the *Inglewood, CA* USGS 7.5-minute quadrangle and surrounding eight quadrangles (*Beverly Hills*, *Hollywood*, *Los Angeles*, *Venice*, *South Gate*, *Redondo Beach*, *Torrance*, and *Long Beach*) (CDFW 2019a; CNPS 2019), and a 1-mile buffer around the project site was queried for United States Fish and Wildlife Service (USFWS) occurrence data (USFWS 2019). The results of these queries are provided in Appendix B. Additionally, CNDDB and USFWS occurrence data within this 1-mile buffer of the project site is illustrated in Appendix B (CDFW

2019a; USFWS 2019). Nine special-status species have been recorded within 1-mile of the project site based on the CNDDB and USFWS data query: coastal dunes milk-vetch (*Astragalus tener* var. *titi*, federally endangered (FE), State endangered (SE), California Rare Plant Rank (CRPR) 1B.1, City of Los Angeles locally recognized (locally recognized species)), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*, CRPR 1B.1, locally recognized species), prostrate vernal pool navarretia (*Navarretia prostrata*, CRPR 1B.1), California Orcutt grass (*Orcuttia californica*, FE, SE, CRPR 1B.1, locally recognized species), burrowing owl (*Athene cunicularia*; USFWS Bird of Conservation Concern (BCC), California Department of Fish and Wildlife Species of Special Concern (SSC), locally recognized species), southwestern willow flycatcher (*Empidonax traillii extimus*, FE, SE, locally recognized species), western mastiff bat (*Eumops perotis californicus,* SSC), and American badger (*Taxidea taxus*, SSC).

Although nine special-status species have been documented within one mile of the project site (CDFW 2019a, USFWS 2019), these species, with the exception of western mastiff bat, are not anticipated to occur within the study area based on the lack of suitable habitat or soils present to support these species, abundant urbanization in the area that has occurred since these species have been recorded, and/or the likely extirpation of the species as documented in the record (Appendix B). Based on the analysis of the nine-quadrangle CNDDB query search (CDFW 2019a), no species were determined to have a moderate or high potential to occur within the study area (Appendix B). Three bat species, pallid bat (*Antrozous pallidus*, SSC, locally recognized species), western mastiff bat, and big free-tailed bat (*Nyctinomops macrotis*, SSC) have a low potential to roost and forage in the study area due to local records of the species (CDFW 2019a) and marginal roosting habitat (i.e., buildings). No USFWS-designated critical habitat for listed wildlife or plant species exists within one-mile of the project site (USFWS 2019).

The study area occurs within a heavily urbanized commercial and residential development with minimal vegetation dominated by ornamental landscaping and lacks soils suitable to support special-status plant and wildlife species. Therefore, with the exception of pallid bat, western mastiff bat, and big free-tailed bat, which have a low potential to roost and forage throughout the study area, special-status species known to occur in the region would not be expected to occur. The project is proposed to occur within the existing paved roads and existing public rights-of-way, and no buildings that could be used for roosting would be disturbed. Construction would primarily occur during daylight hours, between 7:00 am and 6:00 pm Monday through Friday. Thus, foraging bats, if present over the study area, are not anticipated to be impacted by the proposed project activities. As such, direct and/or indirect impacts to special-status wildlife species would be less than significant.

Given the above, impacts to special-status plant and/or wildlife species would be less than significant.

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 Game or U.S. Fish and Wildlife Service?

No Impact. The study area is located within a heavily urbanized commercial and residential area dominated by urban/developed land use. No riparian habitat or other sensitive vegetation communities have been identified within the study area; therefore, the proposed project would not affect any such habitats (Appendix B). No impact would occur.

c) Would the project have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. No jurisdictional wetlands or non-wetland waters occur within the study area (Appendix B). Therefore, there would be no direct and/or indirect impacts to jurisdictional waters or wetlands. No impact would 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 wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact. The proposed project site and study area occur within an urban setting, and the project would neither interfere with or remove access to established native resident or migratory wildlife corridors nor impede with the use or native wildlife nursery sites. The study area does not reside within any designated wildlife corridors and/or habitat linkages identified in the South Coast Missing Linkages analysis project (South Coast Wildlands 2008), California Essential Habitat Connectivity project (Spencer et al. 2010), or as recognized by the City (City of Los Angeles 2006a). The study area is dominated by developed areas that support minimal vegetation (particularly native vegetation). In addition, the project alignment is isolated from designated wildlife corridors/habitat linkages and other open spaces by substantial developed areas and heavily traversed roadways. Although the study area may provide local movement for some urban-adapted wildlife species (i.e., coyote, striped skunk, raccoon, opossum), there are no corridors that readily provide connection between open spaces or undeveloped lands. Thus, the study area is unlikely to serve as a wildlife corridor or habitat linkage.

The majority of the study area provides limited habitat for nesting birds and raptors protected under the Migratory Bird Treaty Act (16 USC 703–712) and California Fish and Game Code Sections 3503.5, 3503, and 3513. Although some ornamental landscaping within the study area has the potential to support breeding and foraging habitat for urban-adapted birds and raptors, all of the proposed construction activities are proposed to occur within paved, heavily traversed City streets, and vegetation is not proposed to be trimmed and/or

removed along the alignment. Given the heavily urbanized setting and noise prevalent within the study area, the proposed project activities are not anticipated to result in direct and/or indirect impacts to nesting birds throughout the alignment.

In the event that birds or other wildlife are within or near the project site during construction, indirect impacts due to short-term construction noise could disrupt species use of the area during the day. However, short-term indirect impacts to wildlife resulting from construction noise are not anticipated to be significant given the existing noise levels in the area due to human activity and vehicle use within the study area, which would occur with or without the proposed project. Additionally, most wildlife species are active at night, when project construction activities would not generally occur.

Potential long-term indirect impacts from noise are not anticipated because there would be no substantial increases in noise due to operations, and long-term use of the study area would remain unchanged after construction. Thus, given the heavily urbanized residential and commercial development in the area and lack of suitable water sources or other habitat, no significant direct and/or indirect impacts to wildlife corridors and habitat linkages and/or native resident or migratory fish or wildlife are expected to occur. Impacts would be considered less than significant.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The City of Los Angeles Protected Tree Ordinance, as modified by Ordinance 177404, provides guidelines for the preservation of Southern California native tree species measuring 4 inches or more in cumulative diameter, as measured at 4.5 feet above the ground level at the base of the tree (City of Los Angeles 2006b). Trees protected under this ordinance include all oak trees indigenous to California (excluding the scrub oak, *Quercus dumosa*), Southern California black walnut (*Juglans californica* var. *californica*), California sycamore (*Platanus racemosa*), and California bay (*Umbellularia californica*). No City protected trees occur within the study area; therefore, the proposed project would not conflict with City's Protected Tree Ordinance. No impact would 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. Species or habitats covered within any Habitat Conservation Plan, Critical Habitat Designations, Natural Community Conservation Plans, Significant Ecological Areas, or other approved conservation plans have not been identified within the study area (CDFW 2019b). As such, the proposed project would not be located within an area affected by or subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

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USFWS (United States Fish and Wildlife Service). 2019. "Critical Habitat and Occurrence Data". Accessed June 2019. https://ecos.fws.gov/ecp/.

3.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐

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

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Less Than Significant Impact. A detailed Cultural Resources Report was prepared for the proposed project, which included a California Historical Resources Information System (CHRIS) records search. The CHRIS records search identified 10 previously recorded cultural resources within 0.5-mile of the project alignment, only one of which has been listed on the City of Los Angeles Historic Inventory (HRI) list. All 10 resources are historic built environment resources. No newly or previously recorded built environment resources were identified within the project area of potential effect (APE) (see Appendix C). The proposed project would not pose any potential visual indirect impacts to historic-age buildings.

In consideration of potential indirect impacts to historic buildings and structures, Caltrans has established thresholds related to groundbourne construction vibration that take into account the type of buildings or structures near the vibration source. For the age and condition of the historic-era buildings on parcels adjacent to the proposed alignment, a damage threshold of 0.2 Peak Particle Velocity (PPV) inches per second (in/sec) for transient sources and 0.1 PPV (in/sec) for continuous or frequent intermittent sources was deemed appropriate (Caltrans 2013). Based on an evaluation of the proposed construction methods, depth of excavation, and subsurface geology, the possibility of damage to nearby historic-era buildings from construction-related groundbourne vibration produced by the project would be negligible (Appendix C).

Additionally, all construction activities would be limited to previously disturbed portions of the public right-of-way. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5. Impacts would be less than significant.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant with Mitigation Incorporated. No newly or previously recorded cultural resources were identified as a result of the CHRIS records search or Native American Heritage Commission (NAHC) Sacred Lands

File (SLF) search (see Appendix C). Additionally, no archaeological resources were identified within the direct or indirect APE as a result of the survey. All excavation activities associated with the proposed project would be limited to previously disturbed portions of the public right-of-way. Additionally, four potential off-site staging areas may be used during construction; however, staging areas would be located adjacent or in close proximity to the proposed Project alignment and would be utilized solely to store construction equipment and materials. However, it is possible that previously undiscovered intact archaeological deposits are present at subsurface levels and could be uncovered during ground-disturbing activities. As such, mitigation measure MM-CUL-1 is provided to address inadvertent discoveries during construction. Impacts related to archaeological resources would be less than significant with mitigation incorporated.

MM-CUL-1 **Inadvertent Discovery of Archaeological Resources.** In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the California Environmental Quality Act (14 CCR 15064.5(f); California Public Resources Code Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant with Mitigation Incorporated. No prehistoric or historic burials were identified within the project area as a result of the records search. While no surface evidence of historic burials was identified as a result of this study, the possibility of encountering human remains within the proposed project area exists. The discovery of human remains would require handling in accordance with California Public Resources Code 5097.98, which states that in the event that human remains are discovered during construction, construction activity shall be halted and the area shall be protected until consultation and treatment can occur as prescribed by law. In the unexpected event that human remains are unearthed during construction activities, impacts would be potentially significant. However, upon implementation of MM-CUL-2, impacts would be reduced to below a level of significance. Impacts to human remains are therefore less than significant with mitigation incorporated.

MM-CUL-2 **Inadvertent Discovery of Human Remains.** In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be immediately notified of the discovery. No further excavation or disturbance of the project site

or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the Native American Heritage Commission in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the Native American Heritage Commission must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant shall complete their inspection within 48 hours of being granted access to the site. The most likely descendant would then determine, in consultation with the property owner, the disposition of the human remains.

References

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3.6 Energy

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

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The service providers, supply sources, and estimated consumption for electricity, natural gas, and petroleum is discussed below.

Energy Overview

Electricity

LADWP is the utility provider for the City. LADWP provides electric services to 1.5 million customers, located in the City and in the Owens Valley. In 2018, LADWP customers consumed approximately 24 billion kilowatt-hours (kWh) of electricity (CEC 2018). LADWP receives electric power from a variety of sources. Approximately 29% of LADWP's power came from renewable energy sources in 2016, including biomass/waste, geothermal, small hydroelectric, solar, and wind sources (LADWP 2017). Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita has remained stable for more than 30 years, while the national average has steadily increased (CEC 2015).

Natural Gas

SoCalGas serves the City (including the proposed project area). SoCalGas serves 21.6 million customers in a 20,000-square-mile service area that includes over 500 communities (SoCalGas 2018). In 2016 (the most recent year for which data is available), SoCalGas delivered 5,123 million therms of natural gas, with the majority going to residential uses. Demand for natural gas can vary depending on factors such as weather, price of electricity, the health of the economy, environmental regulations, energy-efficiency programs, and the availability of alternative renewable energy sources. Natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand.

Petroleum

Transportation accounts for the majority of California's total energy consumption (CEC 2018). According to the United States Energy Information Administration (EIA), California used approximately 672 million barrels of petroleum in 2016 (EIA 2018). This equates to a daily use of approximately 1.8 million barrels of petroleum. There are 42 U.S. gallons in a barrel, so California consumes approximately 77 million gallons of petroleum per day, adding up to an annual consumption of 28 billion gallons of petroleum. However, technological advances, market trends, consumer behavior, and government policies could result in significant changes in fuel consumption by type and in total. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and GHG emissions, and reduce vehicle miles traveled.

Construction Energy Use

Electricity

Temporary electric power for as-necessary lighting and electronic equipment would be provided by LADWP. The amount of electricity used during construction would be minimal, because typical demand would stem from electrically powered hand tools. The electricity used for construction activities would be temporary and minimal; therefore, proposed project construction would not result in wasteful, inefficient, or unnecessary consumption of electricity. Impacts would be less than significant.

Natural Gas

Natural gas is not anticipated to be required during construction of the proposed project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed under the subsection "Petroleum." Any minor amounts of natural gas that may be consumed as a result of proposed project construction would be temporary and negligible and would not have an adverse effect; therefore, proposed project construction would not result in wasteful, inefficient, or unnecessary consumption of natural gas. Impacts would be less than significant.

Petroleum

Petroleum would be consumed throughout construction. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction. Transportation of construction materials and construction workers would also result in petroleum consumption. Heavy-duty construction equipment, vendor trucks, and haul trucks would use diesel fuel. Construction workers would likely travel to and from the project area in gasoline-powered vehicles. Construction is expected to take approximately 48 months, beginning in 2023 and ending in 2027. Once construction activities cease, petroleum use from off-road equipment and transportation vehicles would end. Because of the short-term nature of construction and relatively small scale of the project, the proposed project's petroleum consumption would be negligible when compared to California's daily total use of approximately 1.8 million barrels of petroleum. As such, impacts would be less than significant.

Operational Energy Use

As discussed in Section 2.0, maintenance activities for the proposed trunk line would be similar in scope and scale to the maintenance activities that are currently conducted for the existing pipelines that would be connected and other pipelines throughout LADWP's service area under existing conditions. Anticipated maintenance activities would be minimal and similar to maintenance activities currently occurring for the existing pipelines in the project area; therefore, the project's energy demand for maintenance would be similar to existing conditions. In addition, energy used for maintenance purposes would decrease over time, as worker vehicles and equipment become increasingly efficient, in accordance with the energy efficiency and GHG reduction standards. As such, energy use for maintenance purposes would not substantially change under the proposed project, and no impacts would occur as a result of project operations and maintenance.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The proposed project would follow applicable energy standards and regulations during the construction phases. In addition, the proposed project would be built and operated in accordance with all existing, applicable regulations at the time of construction. As such, impacts related to the project's potential to conflict with plans for renewable energy and energy efficiency would be less than significant.

References

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3.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. Surface fault rupture occurs when movement on a fault deep within the earth breaks through the surface. Ground surface fault rupture may also accompany fault creep or natural or man-induced subsidence. Fault rupture can cause structural damage and safety risks on and near the rupture. Fault rupture along or near a pipeline alignment would have the potential to compromise the structural integrity of the pipeline, resulting in the potential for pipeline breakage and associated safety hazards for people in the area (e.g., flooding and/or temporary service outages).

The "Alquist-Priolo Earthquake Fault Zoning Act" is a state law that regulates development projects near active faults to mitigate the hazard of surface fault rupture. The proposed project alignment is not located immediately within an Alquist-Priolo fault zone, meaning that the state has not mapped any

surface traces of active faults along the alignment. However, the proposed alignment falls between two mapped segments of the Newport - Inglewood Fault Zone. The first segment lies approximately 0.5-mile west of the proposed alignment near W. Imperial Highway and travels northwest away from the project site. According to the California Department of Conservation (DOC), the second segment lies immediately east of the alignment at W. Imperial Highway and runs southeast away from the project site (DOC 2019a). This fault is considered Holocene-active (CGS 2010). While no fault traces have been mapped throughout the project site, the locations proximity to two active fault segments suggests there's a low potential for fault rupture to occur. However, project construction and operation would not increase or exacerbate the potential for fault rupture to occur. Therefore, the project would not directly or indirectly cause potential adverse effects involving rupture of a known earthquake fault and impacts would be less than significant.

ii) Strong seismic ground shaking?

Less Than Significant Impact. As stated above, the project area is located within a seismically active region that is known for its many active faults and historic seismicity. Therefore, ground shaking resulting from an earthquake could potentially impact the proposed project. The degree of ground shaking that is felt at a given site depends on the distance from the earthquake source (epicenter), the magnitude of the earthquake, the type of subsurface material on which the site is situated, and topography. Ground shaking can result in severe damage to pipelines if subjected to strong horizontal movement that exceeds design standards. Ground shaking could result in pipeline breakage and associated flooding hazards for people in the area. As such, the proposed project would be designed based on the design ground motions calculated for the project area, as required by the California Building Code. Additionally, the proposed pipeline and appurtenant structures would be constructed in compliance with earthquake-resistant standards as required by the LADWP Engineering Standards Manual. In addition, project construction and operation would not increase or exacerbate the potential for strong seismic ground shaking to occur. Therefore, the project would not directly or indirectly cause potential adverse effects involving seismically induced ground shaking and impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Seismic-related ground failure can include hazards such as liquefaction, earthquake-induced landslides, and seismically induced settlement. (Landslides are addressed below in Section 3.6(a)(iv)). With the exception of a small portion of the northern-most section of the proposed alignment, the majority of the project is not located within a liquefaction hazard zone as mapped by the California Geological Survey (CGS). The project alignment from its northern terminus at 59th place to approximately 69th Street is located within a potential liquefaction

zone (DOC 2019b). In the event of liquefaction along or near the project alignment, the structural integrity of the pipeline could be compromised, posing a potential risk to the pipeline. However, the proposed trunk line segments and appurtenant structures would be constructed in compliance with earthquake-resistant standards, as required by the California Building Code and LADWP Engineering Standards Manual. With appropriate design precautions, the potential for liquefaction, seismically induced settlement, or other seismic-related ground failure to adversely affect the new pipeline would be minimal. Furthermore, although portions of the project alignment could be subject to seismic-related ground failure, the project would not increase or exacerbate the potential for seismic-related ground failure to occur. Therefore, the proposed project would not directly or indirectly cause potential adverse effects involving seismically induced ground failure and impacts would be less than significant.

iv) Landslides?

No Impact. The alignment is characterized by flat, even, paved terrain that would not be susceptible to landslides. In addition, the site is not located within an area of potential seismically induced landslides, as designated by the CGS. The nearest landslide area is located in the Baldwin Hills, approximately three miles west of the project alignment (DOC 1982, 2019b). Therefore, the proposed project would not directly or indirectly cause potential adverse effects involving landslides and no impact would occur.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The proposed project would be located within Western Avenue's ROW. Construction activities including open trenching and pipe jacking would produce exposed soils that could be susceptible to erosion as a result of rain, windy conditions, and/or construction vehicles traveling over the exposed soils. However, LADWP or its construction contractor would be required to implement a Stormwater Pollution Prevention Plan (SWPPP), in compliance with the National Pollutant Discharge Elimination System (NPDES) requirements for stormwater discharges at construction sites. SWPPPs are required to include erosion control measures, such as covering exposed soil stockpiles, lining the perimeter of construction areas with sediment barriers, and protecting storm drain inlets. These measures would control and reduce erosion and loss of topsoil to a less than significant level. Once construction is complete, the replaced pipelines would be located entirely underground, and additional operational impacts related to soil erosion or loss of topsoil would not occur. Therefore, impacts related to soil erosion or the loss of topsoil would 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. As previously discussed, the project is not located within a liquefaction hazard zone or within a landslide hazard zone. The project is underlain by alluvial sediments and is likely underlain by minor amounts of artificial fill (Dibblee 2007), indicating that some on-site soils may not be adequate for supporting the proposed pipeline and may be subject to collapse. In the event that soils are inadequate for supporting the proposed pipeline, the structural integrity of the pipeline could become compromised, which could result in damage to the pipeline and associated safety hazards for people in the area (e.g., flooding and/or temporary service outages).

In addition, there is a potential for localized shallow groundwater to be present along the project site. In the event that groundwater is present, the pipeline could be subject to uplift and/or hydrostatic loads, as well as other geotechnical hazards including swelling, consolidation, erosion, etc. These hazards could compromise the structural integrity of the pipeline. However, the proposed pipeline and appurtenant structures would be constructed in compliance with geotechnical engineering standards as required by the California Building Code and LADWP Engineering Standards Manual. In addition, construction and operation of the proposed project would not be expected to cause local geologic units or soils to become unstable and would not be expected to result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. As such, impacts would be less than significant.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact. Expansive soils are often clay based and tend to increase in volume as they absorb water and can shrink when water is drawn away. The project is underlain by alluvial gravel, sand, and clay (Dibblee 2007). As such, soils underlying the project contain clay, indicating that the soils may be expansive. Expansive soils can result in structural damage, particularly if wetting and drying does not occur uniformly throughout the soil. Soil expansion or shrinkage in the soils surrounding the proposed pipeline could compromise the structural integrity of the pipeline, causing potential safety risks for the pipeline and for people in the area (e.g., flooding and/or temporary service outages). However, sand or cement slurry would be poured over the pipe segments, thus reducing contact with potentially expansive soils. In addition, the proposed pipeline and appurtenant structures would be constructed in compliance with geotechnical engineering standards, as required by the California Building Code and LADWP Engineering Standards Manual, which include measures such as backfilling with sandy material to reduce the potential for damage due to expansive soil. Furthermore, although the project could be subject to soil expansion hazards, project construction and operation would not increase or exacerbate the potential for soils to expand or contract. For these reasons, impacts would be less than significant.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. No septic tanks or alternative wastewater disposal systems are proposed. Therefore, no impact associated with the use of such systems would occur.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant with Mitigation Incorporated. The project proposes to replace an existing pipeline and a mainline along Western Avenue in the City of Los Angeles and unincorporated Los Angeles County. Considering that the existing pipeline was constructed in 1947, and considering that the surrounding land uses are developed with industrial, commercial and residential uses, there is a very low probability of the project encountering or destroying a unique paleontological resource, site or unique geologic feature within the footprint of the existing line. However, given excavation into previously undisturbed, Pleistocene age older alluvium, monitoring would be required.

The project area is located within sedimentary deposits of the northern Los Angeles Basin in western Los Angeles. Within the project area, these deposits extend along Western Avenue from just south of I-105 north to just south of Slauson Avenue Older alluvial deposits that are Pleistocene in age ("Ice Age" deposits, ~2.7 Ma to 11,700 years old) are mapped at the surface in this area of Los Angeles (Dibblee and Minch 2007; McLeod 2019).

Although no fossils are recorded from within the project area itself, fossil localities are documented nearby the project area and have produced significant paleontological resources. According to the records search results received from the Natural History Museum of Los Angeles County (LACM), locality LACM 7758, discovered north of the project area, near 46th Street and Western Avenue, produced both bony fish (three-spine stickleback, *Gasterosteus aculeatus*) and rodent remains (e.g., pocket gopher, *Thomomys*; deer mice, *Peromyscus* and *Microtus*; and pocket mouse, *Perognathus*) at 16 feet below the ground surface (bgs) (McLeod 2019). Three additional localities (LACM 3252, 5888, and 1170) were discovered near Hyde Park and Centinela Park west of the northern project area. Pleistocene megafauna, including bison (*Bison*) and camel (*Camelops*) were recovered from LACM 3252, near the intersection of Hyde Park Boulevard and Crenshaw Boulevard (McLeod 2019). LACM 5888, south of LACM 3252 and south of Florence Avenue and east of Crenshaw Boulevard, a mastodon (*Mammut*) was recovered during sewer excavation (McLeod 2019). Along the northwest side of Florence Avenue and the northeast side of Centinela Avenue, an assemblage of terrestrial fossils was discovered at locality LACM 1170, and includes the following taxa: coot (*Fulica americana*), ground sloth (*Megalonyx jeffersoni*), mastodon (*Mammut americanum*), rodent (Rodentia), camel (*Camelops hesternus*), pronghorn antelope (*Capromeryx minor*), deer (*Odocoileus hemionus*), and bison (*Bison antiquus*) (McLeod 2019). Near 120th Street and Athens Boulevard, east of Vermont Avenue and the southern terminus of the project area, locality LACM 3266 yielded fossil vertebrates (Vertebrata) between 15 and 18 feet bgs (McLeod 2019). Around Athens on the Hill, east of I-110 (Harbor Freeway), localities LACM 1344

and 3365 produced mammoth (*Mammuthus*), squirrel (Sciuridae), horse (*Equus*), and pronghorn antelope (*Breameryx*) between 15 and 20 feet bgs (McLeod 2019). North of these localities, LACM 1295 and 4206 were discovered at I-110 between 112th and 113th Streets, along Imperial Highway, near Main Street, east of the southern project area. It produced characteristic late Pleistocene fauna recovered from shallow depths, and included: pond turtle (*Clemmys*), puffin (*Mancalla*), turkey (*Parapavo*), ground sloth (*Paramylodon*), mammoth (*Mammuthus*), dire wolf (*Canis dirus*), rabbit (*Sylvilagus*), squirrel (Sciuridae), deer mouse (*Microtus*), pocket gopher (*Thomomys*), horse (*Equus*), deer (*Cervus*), pronghorn antelope (*Capromeryx*), and bison (*Bison*) (McLeod 2019).

No paleontological resources were identified within the project area as a result of the institutional records search or desktop geological review. Furthermore, the project area is located within an area that has been previously developed and is likely underlain by fill materials, at least in part. As such, the project area is not anticipated to be underlain by unique geologic features. While this area locally has been heavily disturbed by urban development over the years, intact paleontological resources may be present below the original layer of fill material. If intact paleontological resources are located onsite, ground-disturbing activities associated with construction of the project, such as excavation, have the potential to destroy a unique paleontological resource or site. As such, the project area is considered to be potentially sensitive for paleontological resources and without mitigation, the potential damage to paleontological resources during construction associated with the project is considered a potentially significant impact. Given the proximity of past fossil discoveries in the surrounding area and potential for underlying, Pleistocene-age older alluvial deposits, the project area is highly sensitive for supporting paleontological resources below the depth of fill and recent Quaternary alluvium. However, upon implementation of MM-GEO-1, impacts would be less than significant. Construction impacts of the proposed project are therefore considered less than significant with mitigation incorporated. No impacts to paleontological resources would occur during operation, since the project would operate passively below ground.

MM-GEO-1 **Paleontological Monitoring Program.** Prior to commencement of excavation into undisturbed, high sensitivity paleontological units on-site, the Los Angeles Department of Water and Power (LADWP) shall retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the project. The PRIMP shall be consistent with the SVP (2010) guidelines and should outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the project area based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The PRIMP shall include a paleontological sensitivity map showing where full-time, part-time, spot-check, or no monitoring is required based on whether ground disturbing activities will impact previously undisturbed, fine-grained older Quaternary

alluvial deposits. The qualified paleontologist shall attend the preconstruction meeting and a paleontological monitor shall be on-site during all excavation and other significant ground-disturbing activities in previously undisturbed, fine-grained older Quaternary alluvial deposits as outlined in the PRIMP. These deposits may be encountered at shallow depths within the project area. In the event that paleontological resources (e.g., fossils) are unearthed during excavation, the paleontological monitor will temporarily halt and/or divert ground-disturbing activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find.

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3.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system, and many factors (natural and human) can cause changes in Earth's energy balance. The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature, and it creates a livable environment on Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise. Global climate change is a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (see also 14 CCR 15364.5). The three GHGs evaluated herein are CO_2, CH_4, and N_2O. Emissions of HFCs, PFCs, SF_6, and NF_3 are generally associated with industrial activities including the manufacturing of electrical components, heavy duty air conditioning units, and insulation of electrical transmission equipment (substations, power lines, and switch gears.). Therefore, emissions of these GHGs were not evaluated or estimated in this analysis because the project would not include these activities or components and would not generate HFCs, PFCs, SF_6, and NF_3 in measurable quantities.

Gases in the atmosphere can contribute to climate change both directly and indirectly.[7] The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons of CO_2 equivalent (MT CO_2e). Consistent with CalEEMod Version 2016.3.2, this GHG emissions analysis assumed the GWP for CH_4 is 25 (emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the Intergovernmental Panel on Climate Change Fourth Assessment Report (IPCC 2007).

As discussed in Section 3.3 of this IS/MND, the project is located within the jurisdictional boundaries of the SCAQMD. In October 2008, the SCAQMD proposed recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects as presented in its *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* (SCAQMD 2008). This document, which builds on the previous guidance prepared by the California Air Pollution Control Officers Association, explored various approaches for establishing a significance threshold for GHG emissions. The draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. However, in December 2008, the SCAQMD adopted an interim 10,000 MT CO_2e per-year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency (see SCAQMD Resolution No. 08-35, December 5, 2008).

The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

Tier 1. Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

Tier 2. Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.

[7] Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2017).

Tier 3. Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO_2e per-year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO_2e per year), commercial projects (1,400 MT CO_2e per year), and mixed-use projects (3,000 MT CO_2e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO_2e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

Tier 4. Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of Assembly Bill (AB) 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO_2e per-service population for project-level analyses and 6.6 MT CO_2e per-service population for plan-level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

Tier 5. Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, establish specific thresholds of significance, or mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance that are consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009).

To determine the project's potential to generate GHG emissions that would have a significant impact on the environment, the project's GHG emissions were compared to the non-industrial quantitative threshold of 3,000 MT CO_2e per year. Because the project does not include operational sources of emissions, and because the project does not conform to the standard land use types, the 3,000 MT CO_2e per year threshold, which was identified under Tier 3 Option 1, was applied herein. Per the SCAQMD guidance, construction emissions should be amortized over the operational life of the project, which is assumed to be 30 years (SCAQMD 2008). This impact analysis, therefore, compares amortized construction emissions to the proposed SCAQMD threshold of 3,000 MT CO_2e per year.

Construction Emissions

Construction of the project would result in GHG emissions primarily associated with the use of off-road construction equipment, on-road trucks, and worker vehicles. A depiction of expected construction schedules (including information regarding phasing, equipment used during each phase, truck trips, and worker vehicle trips) assumed for the purposes of emissions estimation is provided in Table 3.3-1 and in Appendix A. On-site sources of GHG emissions include off-road equipment; off-site sources include trucks and worker vehicles. Table 3.8-1 presents construction GHG emissions for the project from on-site and off-site emissions sources.

Table 3.8-1 Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	CO_2e
Metric Tons per Year				
2023	1,611.60	0.31	0.00	1,619.26
2024	1,771.05	0.34	0.00	1,779.43
2025	1,760.06	0.33	0.00	1,768.37
2026	1,756.09	0.33	0.00	1,764.40
2027	120.87	0.02	0.00	121.44
Total	**7,019.67**	**1.33**	**0.00**	**7,052.90**
Amortized Construction Emissions				**235.10**

Source: See Appendix A for complete results.
Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.

As shown in Table 3.8-1, the estimated total GHG emissions in 2023, 2024, 2025, 2026 and 2027 would be approximately 1,619 MT CO_2e, and 1,779 MT CO_2e, 1,768 MT CO_2e, 1,764 MT CO_2e and 121 MT CO_2e respectively. Amortized over 30 years, construction GHG emissions would be approximately 235 MT CO_2e per year. In addition, as with project-generated construction criteria air pollutant emissions, GHG emissions generated during proposed construction activities would be short term, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions.

Operational Emissions

Once project construction is complete, no operational activities associated with the proposed project would occur (no routine daily equipment operation or vehicle trips would be required). Because the project would not result in any long-term operational activities, there would be no potential GHG emissions impacts associated with operational GHG emissions. As shown in Table 3.8-1, amortized project-generated construction emissions would not exceed the 3,000 SCAQMD threshold. Therefore, GHG emissions impacts would be less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The proposed project would result in less than significant impacts related to conflicts with greenhouse gas emission reduction plans, for the reasons described below.

Consistency with the City of Los Angeles Sustainable City Plan

LADWP has not adopted a qualified climate action plan and the City of Los Angeles's Sustainable City Plan is not a quantified GHG reduction plan according to the CEQA Guidelines Section 15183.5 and thus cannot be used in a cumulative impact analysis to determine significance. However, a discussion of the project's consistency with the City's plan is provided for informational purposes. Table 3.8-2 provides an overview of the measures and goals set forth in the Sustainable City Plan and the project's consistency with these measures and goals. As shown in Table 3.8-2, the proposed project would not conflict with any of the GHG reduction measures or goals set forth in the Sustainable City Plan. Thus, the proposed project is consistent with this plan.

Table 3.8-2. Proposed Project Consistency with the Sustainable City Plan's GHG Emission Reduction Strategies

Sustainable City Plan Measure	Proposed Project Consistency
Water	
Reduce LADWP purchases of imported water by 50% by 2025 and source 50% of water locally by 2035.	Consistent. The proposed project is consistent with the City's plan to reduce purchases of imported water as the new trunk line would create the ability to transmit local water supplies in the future.
Reduce average per capita water use by 22.5% by 2025 and 25% by 2035.	Does not apply. The proposed project is necessary for continued water service in the downtown Los Angeles area during planned or emergency outages. The project would not interfere with efforts to reduce per capita water use.
Solar Power	
Increase cumulative total megawatts (MW) of local solar photovoltaic power to 900-1,500 MW by 2025 and 1,500-1,800 MW by 2035.	Does not apply. The proposed project does not pertain to solar power and would not interfere with efforts to increase the use of solar power.
Increase cumulative total MW of energy storage capacity to at least 1,654-1,750 MW by 2025.	Does not apply. The proposed project does not pertain to energy storage and would not interfere with efforts to increase energy storage in the City.
Energy Efficient Buildings	
Reduce energy use per square foot below 2013 baseline for all building types by at least 14% by 2025 and 30% by 2035.	Does not apply. The proposed project involves underground pipelines and would not involve any new building construction or building renovations. As such, the project would not interfere with efforts to reduce the energy use of buildings.
Use energy efficiency to deliver 15% of all LA's projected electricity needs by 2020.	Does not apply. Aside from temporary energy use to power equipment during construction, the proposed project would not use energy or electricity, as it would involve conveyance of potable water that is already flowing through LADWP's water distribution system. As such, measures for electricity efficiency would not apply to the project.

Table 3.8-2. Proposed Project Consistency with the Sustainable City Plan's GHG Emission Reduction Strategies

Sustainable City Plan Measure	Proposed Project Consistency
GHGs	
Reduce GHG emissions below 1990 baseline by at least 45% by 2025, 60% by 2035, and 80% by 2050.	Does not apply. The proposed project would not contribute to long-term GHG emission generation. As such, the proposed project would not interfere with efforts to reduce GHG emissions.
Improve GHG efficiency of LA's economy from 2009 levels by 55% by 2025 and 75% by 2035.	Does not apply. The proposed project would not contribute to long-term GHG emission generation. As such, the proposed project would not interfere with efforts to improve GHG efficiency.
Influence national and global action through the leadership of LA and other cities on climate change.	Does not apply. The proposed project would not interfere with efforts to influence action on climate change.
Have no ownership stake in coal-fired power plants by 2025.	Does not apply. The proposed project involves the extension of potable water pipelines and, therefore, would not affect the ownership stake of coal-fired power plants.
Waste	
Increase landfill diversion rate to at least 90% by 2025 and 95% by 2035.	Consistent. The proposed project would produce waste during construction. Construction debris, such as pavement and excavated soils, would be reused on site or recycled to the extent feasible. Wastes would be diverted from landfills to the extent practicable and in accordance with state law. The proposed project would not generate waste during operation.
Increase proportion of waste production and recyclable commodities productively reused and/or repurposed within LA County to at least 25% by 2025 and 50% by 2035.	Does not apply. The proposed project would involve the extension of potable water pipelines and, therefore, would not interfere with efforts to increase reuse or repurposing of commodities. During construction, pavement and excavated soils would be reused on site or recycled as feasible. The proposed project would not generate waste during operation.

Source: City of Los Angeles 2015

Consistency with CARB's Scoping Plan

The CARB Scoping Plan, approved by CARB in 2008 and updated in 2014 and 2017, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for project-level evaluations.[8] Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of

[8] The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009).

the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others.

Consistency with the Southern California Association of Governments 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy

SCAG's 2016 RTP/SCS is a regional growth-management strategy that targets per capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region. The 2016 RTP/SCS incorporates local land use projections and circulation networks in city and county general plans. The 2016 RTP/SCS is not directly applicable to the project because the purpose of the 2016 RTP/SCS is to provide direction and guidance by making the best transportation and land use choices for future development. The proposed project would not conflict with implementation of the strategies identified in the 2016 RTP/SCS that would reduce GHG emissions.

The project would not impede the attainment of the GHG reduction goals for 2030 or 2050 identified in Executive Order S-3-05 and Senate Bill (SB) 32. Executive Order S-3-05 establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050. SB 32 establishes a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030. While there are no established protocols or thresholds of significance for that future year analysis, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update to the Climate Change Scoping Plan states that the level of reduction is achievable in California (CARB 2014). CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and Executive Order S-3-05. This is confirmed in the *Second Update*, which states (CARB 2017):

> The Proposed Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasibility and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Proposed Plan is developed to be consistent with requirements set forth in AB 32, SB 32, and AB 197.

The project's consistency with the State's Scoping Plan would assist in meeting the City's contribution to GHG emission reduction targets in California. With respect to future GHG targets under SB 32 and Executive Order S-3-05, CARB has also made clear its legal interpretation that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet the SB 32 40% reduction target by 2030 and the Executive Order S-3-05 80% reduction target by 2050. This legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the trajectory toward meeting these future GHG targets.

Based on the above considerations, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. This impact would be less than significant.

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3.9 Hazards and Hazardous Materials

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

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. Relatively small amounts of commonly used hazardous substances such as gasoline, diesel fuel, lubricating oil, adhesive materials, grease, solvents, and architectural coatings would be used during construction. These materials are not considered extremely hazardous and are used routinely throughout urban environments for both construction projects and structural improvements. Further, these materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Consequently, use of these materials for their intended purpose would not pose a significant risk to the public or environment. Once construction has been completed, hazardous substances, including fuels and other petroleum products would no longer remain within the work area.

Operation of the proposed project would include aboveground maintenance, which may include relatively small amounts of commonly used hazardous substances, such as lubricating oils and greases. These materials would be handled as described above, and would not remain onsite after maintenance is complete. Impacts would be less than significant.

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. As discussed under Section 3.9(a), construction would involve relatively small amounts of commonly used hazardous substances such as gasoline, diesel fuel, lubricating oil, grease, adhesive materials, solvents, and architectural coatings. These materials are not considered acutely hazardous and are used routinely throughout urban environments for both construction projects and small-scale structural improvements. Further, these materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials.

Asbestos containing materials are not expected to be found during project construction; however, in the event that asbestos is encountered, these materials would be removed in accordance with regulatory requirements prior to demolition (pursuant to SCAQMD Rule 1403 [Asbestos Emissions]), which establishes survey, notification, and work practice requirements to prevent asbestos emissions during building demolition.

For these reasons, construction of the proposed project is not anticipated to cause the release of hazardous materials into the environment that would pose a threat to human health or the environment. Operation of the proposed project would include aboveground maintenance, which may include relatively small amounts of commonly used hazardous substances, such as lubricating oils and greases. These materials would be handled as described in response (a), and would not remain onsite after maintenance is complete. Impacts would be less than significant.

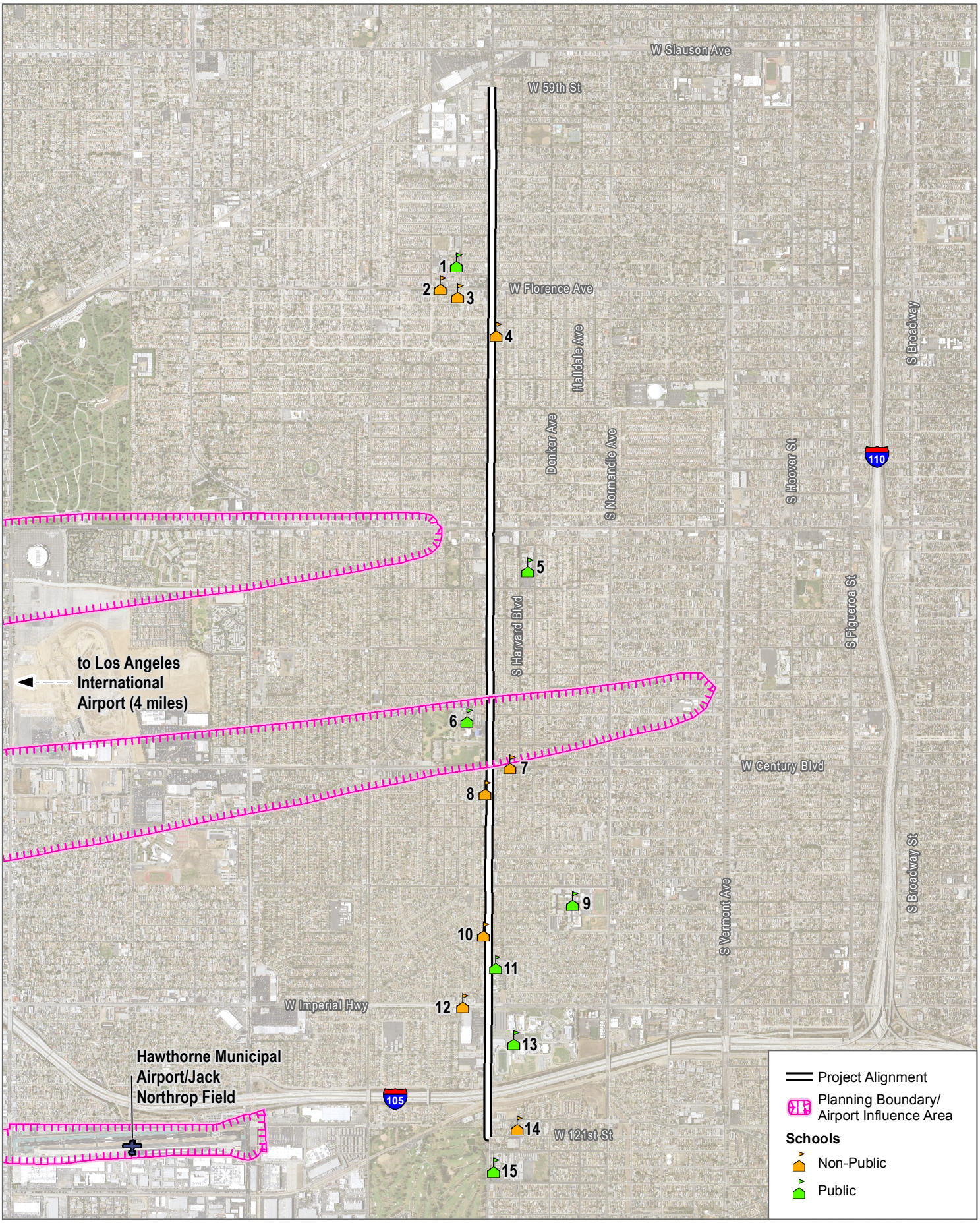
c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant with Mitigation Incorporated. There are several public and non-public schools within 0.25 miles of the project alignment, as listed in Table 3.9-1 and shown on Figure 3.9-1.

Table 3.9-1 Schools Within 0.25-Mile of the Project Alignment

	School Name[1]	Address	Public / Non-Public	Distance and Direction from Project Alignment
1	Horrance Mann Middle School	7001 St. Andrews Place	Public	0.13 miles west
2	New Testament Happy Land Nursery	1955 W Florence Avenue	Non-Public	0.21 miles west
3	Cleophas Oliver Learning Academy	1902 W Florence Avenue	Non-Public	0.13 miles west
4	Buckner Education Christian Academy	2330 W Florence Avenue	Non-Public	Adjacent to east
5	La Salle Avenue Elementary School	8715 La Salle Avenue	Public	0.13 miles east
6	Manhattan Place Elementary School	1850 W 96th Street	Public	Adjacent to west
7	California Technical High School	1717 ½ W Century Blvd	Non-Public	0.08 miles east
8	Teach Academy of Technologies	10045 S Western Avenue	Non-Public	Adjacent to west
9	Washington Preparatory High School	10860 Denker Avenue	Public	0.25 miles east
10	Bundle of Joy Christian Academy	10963 S Western Avenue	Non-Public	Adjacent to west
11	Amino South Los Angeles High School	11100 S Western Avenue	Public	Adjacent to east
12	Busy Bees Wonderland School	1851 W Imperial Highway	Non-Public	0.10 miles west
13	Los Angeles Southwest Community College	1600 W Imperial Highway	Public	Adjacent to east
14	Moore's Daycare Preparatory School	1700 W 120th Street	Non-Public	0.12 miles east
15	Henry Clay Middle School	12226 S Western Avenue	Public	0.07 miles south

Notes:
[1] The number in parentheses identifies the location on Figure 3.9-1.
Source: California School Campus Database 2019.



SOURCE: County of Los Angeles 2014/2016, USDA 2016

Los Angeles Department of Water & Power

0 1,400 2,800 Feet

FIGURE 3.9-1

Project Alignment, Schools and Airports

Western Trunk Line Project

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Multiple schools are located adjacent to the project alignment on Western Avenue or a cross street. As discussed in Section 3.9(a), project construction would involve relatively small amounts of commonly used hazardous substances such as gasoline, diesel fuel, lubricating oil, grease, adhesive materials, solvents, and architectural coatings. In the event of an accidental release of fuels, oils, lubricants, or other hazardous materials associated with construction, hazardous emissions could occur within a quarter mile of a school. All spills would be quickly contained and cleaned up. Potential effects would only occur during construction activities, which would be temporary and localized. Hazardous substances would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Use and management of these materials for their intended purpose and in accordance with applicable safety laws would not pose a significant risk to nearby schools. Should excavation of contaminated soils or dewatering of contaminated groundwater occur (due to nearby hazardous material sites, see Section 3.9(d)), handling of these materials would be in accordance with applicable local, state, and federal laws and regulations to prevent exposure to the public. In addition, Mitigation Measure MM-HAZ-1 requires hazardous materials contingency measures be put in place during construction for the identification and management of hazardous soils and groundwater related to the hazardous material sites, should they be encountered (see Section 3.9(d)). This hazardous material contingency plan will include procedures to identify, handle, and remove contamination encountered during construction in a way to avoid endangering the public or the environment. These procedures would be sufficient to reduce potential impacts to nearby schools. Operation of the proposed project would not require the use, storage, or disposal of hazardous substances. Emergency conditions involving the proposed project would involve the release of potable water. In the event of pipeline failure, valves throughout the water distribution system would be shut off (as deemed necessary by LADWP) in response to the loss of pressure and to isolate the break. The volume of potable water released in such an event may cause damage to nearby property, depending on the response time. However, hazardous materials are not expected to be released in the event of a pipeline failure. Therefore, project operations would not pose a hazard to schools involving the release or handling of hazardous materials. Impacts would be less than significant with mitigation incorporated.

MM-HAZ-1 **Hazardous Materials Contingency Measures.** Prior to construction, the Los Angeles Department of Water and Power (LADWP) or its contractor shall implement contingency measures that address potential impacts in soil, soil vapor, and groundwater from releases at the identified hazardous material sites within the project alignment. These measures would include, but are not limited to, the following:

- Training procedures for identification of contamination.
- Management, removal, disposal, and reporting of contaminated soils and/or groundwater in accordance with local and state regulations.
- Health and safety measures, including periodic work breathing zone monitoring, if appropriate, and South Coast Air Management District (SCAQMD) Rule 1166 monitoring for volatile organic compounds (using a handheld organic vapor analyzer) in the event impacted soils are encountered during excavation activities.

LADWP or its contractor shall implement these contingency measures during construction activities for the proposed project.

d) Would the project be located on a site that 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?

Less Than Significant with Mitigation Incorporated. Government Code Section 65962.5 requires the Department of Toxic Substances Control (DTSC), the State Department of Health Services, the State Water Resources Control Board (SWRCB), and the California Department of Resources Recycling and Recovery (CalRecycle) to compile and annually update lists of hazardous waste sites and lands designated as hazardous waste sites throughout the state. The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List." The Cortese List, which includes the resources listed below, was reviewed for hazardous waste sites along the project alignment.

- List of hazardous waste and substances sites from the (DTSC) EnviroStor database
- List of leaking underground storage tank (LUST) sites from the SWRCB GeoTracker database
- List of solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit
- List of "active" cease-and-desist orders and cleanup and abatement orders from SWRCB
- List of hazardous waste facilities subject to corrective action identified by DTSC

Dudek reviewed a search of regulatory databases conducted by Environmental Data Resources (EDR) (Appendix D). The EDR report includes the Cortese List databases and other databases related to hazardous materials/waste. These databases are searched at varying distances up to one mile from the proposed project site boundary. Multiple sites were identified on Cortese List databases within one mile of the proposed project. A full list of these sites is provided in the EDR Report (Appendix D). Table 3.9-2 details the listings involving potentially contaminated soils and/or groundwater that could be encountered during proposed project construction, based on distance from the project alignment, known groundwater gradients, and status of the regulatory listing. The locations of these sites are shown on Figure 3.9-2: Potential Hazardous Material Sites. Due to their proximity to the project alignment, excavation associated with the proposed project near these sites could potentially release contaminated soil, soil gas, or groundwater to the environment.

Table 3.9-2 List of Potentially Contaminated Soil and groundwater Sites

Hazardous Site Name and Address	Regulatory Database[1]	Distance/Direction from Project Alignment
Western Gage Gateway Park 6300 S Western Avenue	EnviroStor, LUST, VCP, US Brownfields	Adjacent to the east
Details: This site operated as a former gasoline service station from the 1920s to 1960s. Due to uncontrolled releases from the former underground storage tanks (USTs), the soil and groundwater beneath the site contain elevated levels of gasoline-range hydrocarbons (TPHg) and related volatile organic compounds (VOCs). Remediation began in 2014, and groundwater monitoring is currently ongoing. The most recent groundwater monitoring results indicate low -level detections of TPHg and related VOCs in a monitoring well near the project alignment (AECOM 2019). Monitoring in the Western Avenue right-of-way has not been conducted, therefore it cannot be confirmed if contamination exists within the project alignment. Groundwater levels at this site are approximately 24 feet below ground surface (bgs) and it flows in a northwesterly direction towards Western Avenue. Based on the existing contamination near the eastern border of the project alignment, groundwater flow being towards the project alignment, and the lack of information regarding potential contamination within the Western Avenue right-of-way, proposed project excavation near this site would have the potential to release contaminated soil, soil vapor, and/or groundwater to the environment. This would cause potential exposure to workers and the public.		
Former Shell Service Station 8222 Western Avenue	LUST, RGA LUST, FINDS, Drycleaners, EMI, RCRA-SQG, CPS-SLIC, ECHO, HAZNET, UST	Adjacent to the east
Details: This is a former gasoline service station and commercial drycleaner. Uncontrolled releases from both operations resulted in contamination of soil and groundwater beneath the site. Following investigation and remediation, the gasoline station received a no further action (NFA) letter from the Los Angeles Regional Water Quality Control Board (LARWQCB) in 2015. The remaining contamination consists of tetrachloroethylene in soils beneath the site from 5 to 45 feet bgs. Tetrachloroethylene contamination in soil vapor has also been identified. Groundwater has been reported at 41 to 42 feet bgs, and flows in a westerly direction towards Western Avenue. Soil vapor extraction (SVE) is currently underway to reduce the tetrachloroethylene contamination. Investigation within the Western Avenue right-of-way has not been conducted, therefore it cannot be confirmed if contamination exists within the project alignment. Recent groundwater samples indicate that low levels of tetrachloroethylene contamination extends to the western edge of the gas station site (AET 2019). Based on the existing contamination near the eastern border of the project alignment, groundwater flow towards the project alignment, and the lack of information regarding potential contamination within the Western Avenue right-of-way, proposed project excavation near this site would have the potential to release contaminated soil, soil vapor, and/or groundwater to the environment. This would cause potential exposure to workers and the public.		
Circle K Stores #2211194 Former Mobil #18-KWL 1803 Manchester Avenue	Hist UST, RCRA-SQG, HAZNET, SWEEPS UST, CA FID UST, Drycleaners, EDR Hist Auto, UST, LUST, Hist Cortese	Adjacent to the west
Details: This site is an active gasoline service station. Following removal of three USTs in 1987 and 1988, petroleum hydrocarbon contamination was discovered in soil and groundwater beneath the site. The contamination included liquid-phase hydrocarbons (LPH) on the surface of the groundwater. Groundwater is reported at a depth of 40 to 47 feet bgs, and flows in a northeasterly direction towards Western Avenue. According to the most recent groundwater monitoring report (TRC 2019), the contamination plume extends eastward from the gasoline station, across Western Avenue and the project alignment, into the properties east of Western Avenue. The plume also reportedly extends north-south along the project alignment from 85th Street to West Manchester Avenue. Contaminants of concern include TPHg, benzene, methyl tert-butyl ether (MTBE), tert-butyl alcohol (TBA), and LPH. In addition, there are three active monitoring wells installed in the Western		

Table 3.9-2 List of Potentially Contaminated Soil and groundwater Sites

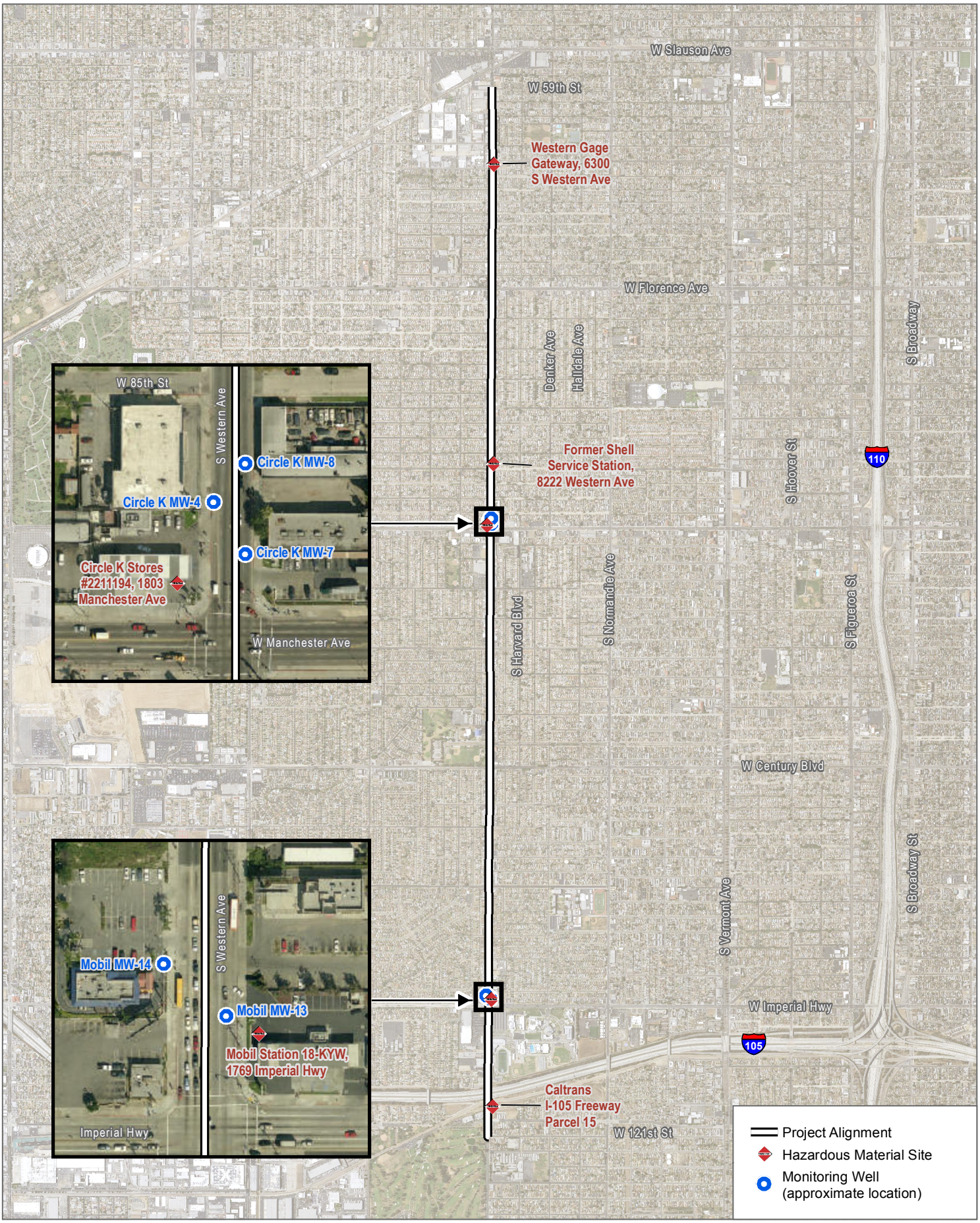
Hazardous Site Name and Address	Regulatory Database[1]	Distance/Direction from Project Alignment
Avenue right-of-way. The approximate location of these wells is shown on Figure 3.9-2. Due to the presence of this groundwater contamination within the project alignment, and the presence of active groundwater monitoring wells within the project alignment, proposed project excavation within the vicinity of this site would have the potential to release contaminated soil, soil vapor, and/or groundwater to the environment, causing potential exposure to workers and the public.		
Mobil Station 18-KYW 1769 W Imperial Highway	RCRA-LQG, FINDS, EDR Hist Auto, SWEEPS UST, Hist UST, LUST, UST	Adjacent to the east
Details: This active gasoline service station has a LUST file, which was closed in 2010. The site was closed via the low-threat closure policy, which allows contamination to remain in place, so long as the site meets the criteria established by the Regional Water Quality Control Board (RWQCB) (e.g. no direct exposure pathways and protection of drinking water aquifers). Groundwater at this site is 100 to 110 feet bgs, and flows in a northwesterly direction towards Western Avenue. The most recent sampling event preceding site closure reported TPHg and benzene contamination in groundwater in the Western Avenue right-of-way (LARWQCB 2010) above their respective maximum contaminant levels (MCLs). However, the plume was determined to be fully-defined and stable. In addition, there is no documentation of removal of the monitoring wells in the Western Avenue right-of-way. The approximate location of these wells is shown on Figure 3.9-2. Due to the presence of this confirmed groundwater contamination within the project alignment, and the presence of active groundwater monitoring wells within the project alignment, proposed project excavation within the vicinity of this site would have the potential to release contaminated soil, soil vapor, and/or groundwater to the environment, causing potential exposure to workers and the public.		
Caltrans I-105 Freeway Project 3, Parcel 15 NE Intersection of Western Avenue and 121st Street	Response, EnviroStor, Hist Cal-Sites, DEED, Cortese, Hist Cortese	Adjacent to the east
Details: This site was used as an uncontrolled dumpsite beginning in 1928, and oil production activities occurred on and around the site. Preliminary investigations identified hazardous wastes present in the soils, including heavy metals and petroleum hydrocarbons. One possible exposure pathway is blowing dust, and potential receptors include onsite and nearby workers and residents. The site was fenced in 1987. Deed restrictions were placed on the property in 1994, and include maintenance of the monitoring well network and restrictions of work or activities in the area that will disturb the soil (DTSC 1994). While this site is not located within the project alignment, staging should not occur near this area so as to avoid disturbance of contaminated soils.		

Notes:

[1] A definition of database acronyms is provided in the EDR Report in Appendix D.

In addition to the hazardous material sites listed above, there is also the potential for methane to be encountered along the project alignment:

- Methane: According to the City of Los Angeles Map of Methane and Methane Buffer Zones (LADWP 2004), a portion of the project alignment (surrounding the intersection of W Century Blvd) is included in the Methane Zone. Methane gas is colorless and odorless. When methane accumulates, it is highly flammable and may cause explosions. Proposed project excavation within an area that may contain methane could expose workers and/or the public to hazards associated with methane accumulation and potential explosions.



SOURCE: County of Los Angeles 2016, LARIAC 2013, USDA 2016

Los Angeles Department of Water & Power

0 1,400 2,800 Feet

FIGURE 3.9-2

Potential Hazardous Material Sites

Western Trunk Line Project

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The portion of the project alignment south of West Century Blvd overlaps the Howard Townsite well field, which consists of 48 oil wells, only three of which are currently active. The wells adjacent to the project alignment are plugged. The active wells are located on the south side of West 120th Street, between 0.25 mile and 0.5 mile east of the project alignment (DOGGR 2019). Based on the information reviewed, it does not appear that these wells or the wellfield are a concern to the proposed project.

Once operational, the project would operate underground, with minimal to negligible operational activities, and would not disturb hazardous materials sites. Therefore, potential risks associated with the sites and potentially hazardous materials listed above would be limited to the construction period. Construction activities would occur in close proximity to the hazardous material sites listed above. Potential hazards identified include encountering and releasing contaminated soil, soil vapor, and/or groundwater, and methane. If contaminated materials are encountered and are not handled properly, they could create a hazard to the public, construction workers on the proposed project, or the environment. Petroleum and VOC contaminated soil, soil vapor, and/or groundwater could cause health exposure risks (e.g. potential carcinogens), and the presence of methane gas could create an explosion hazard and/or could displace oxygen in trenches, thereby creating human health risks.

Mitigation measures MM-HAZ-1 and MM-HAZ-2 have been included to reduce the potential hazards associated with the proposed excavation activities within and/or near the hazardous materials and hazardous materials sites listed above. Specifically, implementation of MM-HAZ-1 would require preparation of and adherence to site-specific hazardous materials contingency measures, which would avoid or minimize hazards associated with excavation near the sites listed in Table 3.9-2. Implementation of MM-HAZ-2 would require a methane study to be conducted prior to construction to identify potential methane hazards. This may require LADWP to coordinate with the Los Angeles Department of Building and Safety (LADBS) to address any potential impacts related to methane and to conduct methane monitoring during construction if necessary. LADBS has developed the methane code ordinances 175790 and 180619. While these ordinances do not apply to development within the public right-of-way, it is recommended LADBS be consulted to determine if the project is subject to any requirements related to the City's methane zones. Damage or improper removal of active monitoring wells would cause a release of hazardous materials to the environment. Therefore, MM-HAZ-3 has been included, which requires consultation with RWQCB to determine appropriate actions to protect, decommission, and/or replace monitoring wells that fall within the project alignment. With the implementation of MM-HAZ-1, MM-HAZ-2, and MM-HAZ-3, and compliance with all applicable federal, state, and local regulations, the potential for the proposed project to create a significant hazard to the public or environment due to its location on a hazardous materials site is low. Therefore, impacts related to hazardous materials sites would be less than significant with mitigation incorporated.

MM-HAZ-2 **Methane Zone Requirements.** A methane study shall be conducted by Los Angeles Department of Water and Power (LADWP) or its contractor prior to construction to address the potential presence of methane in the project area. Any appropriate health and safety measures and

engineering controls that are recommended in the methane study shall be implemented by LADWP or its contractor.

MM-HAZ-3 **Monitoring Well Management.** Two hazardous material cleanup sites adjacent to the project site, Circle K #2211194 (Former Mobil #18-KWL) and Mobil Station 18-KYW, have monitoring wells located within the project alignment. Some of these wells may still be actively monitored as part of cleanup activities. The Regional Water Quality Control Board, the agency overseeing the sites, would be consulted prior to construction activities that could affect the monitoring wells to determine the best plan of action to either decommission and destroy, protect, and/or replace affected monitoring wells.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Less Than Significant Impact. The project alignment is located one mile east of the Hawthorne Municipal Airport, a general aviation airport located at 12101 Crenshaw Blvd in Hawthorne, California. The Airport Influence Map for the Hawthorne Airport (LA County 2003a) shows the airport influence area does not extend into the project alignment. Therefore, this airport would not result in a safety hazard or excessive noise for project workers or operators.

The project alignment is located four miles east of Los Angeles International Airport (LAX) airport, but lies within the airport influence area (LA County 2003b). The 65 Community Noise Equivalent Level (CNEL) noise contour extends eastward from LAX and overlaps the project alignment approximately between West 96th Street and West Century Blvd. This indicates an average daily noise level of 65 decibels over a 24-hour period. The Cal/OSHA action level for noise is 85 dbA, and the permissible exposure limit (PEL) for noise is 90 dbA (State Fund 2016). Therefore the 65 CNEL does not exceed Cal/OSHA safety requirements for noise and the proposed project would not expose construction workers to excessive noise levels. Once construction is complete, the new trunk line would be located underground, with the exception of minor small appurtenances aboveground, and therefore would not create visual or physical obstructions for the airport influence area. The proposed project would not include the construction of any habitable structures, and, as such, would not expose any residents to excessive noise levels as a result of its proximity to LAX. Therefore, the presence of the airport influence area would not result in a safety hazard or excessive noise for project workers or operators. Impacts would be less than significant. No mitigation is required.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant with Mitigation Incorporated. The City of Los Angeles has a Local Hazard Mitigation Plan, which includes a thorough hazard vulnerability analysis, community disaster mitigation priorities, and plans for disaster mitigation strategies and projects. The City adopted its current Local Hazard Mitigation Plan in January 2018 (City of Los Angeles 2018). Additionally, the Los Angeles County Department of Public Works designates disaster routes. Western Avenue is a designated disaster route (LA County 2012). As discussed in Section 2.3, two-way travel along the affected roadways would be maintained throughout construction. Construction would primarily occur along the center of the street and would progress along the alignment with the maximum length of open trench being 500 feet in length at any one time. As such, these roadways could continue to function as disaster routes during project construction, if necessary. Once construction in area is complete, traffic interruptions at these locations associated with the proposed project would cease.

During construction, partial block closures would occur along adjoining streets (see Section 2.3 for details). As further explained in Section 3.17, incorporation of a Construction Traffic Control Plan, as required by MM-TRAF-1, would ensure that any temporary impacts to emergency vehicle flow and/or ingress/egress to properties along the alignment are coordinated in advance with emergency service providers and law enforcement to ensure that provision of sufficient emergency service, access, and evacuation can occur during construction if necessary. Implementation of MM-TRAF-1 would reduce impacts to local emergency service providers to less than significant levels. At the end of construction, the new trunk line would be located underground. Minor appurtenant structures may protrude above grade near the alignment; however, these structures would be small in size and would not obstruct emergency response or evacuation. The City's Local Hazard Mitigation Plan would proceed and be implemented with or without the proposed project. Impacts to emergency access and plans would be less than significant with mitigation incorporated.

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 proposed project would be located in an urbanized environment with little potential for wildland fires. The nearest Very High Fire Hazard Severity Zone (VHFHSZ) is greater than 2 miles northwest, around the Inglewood Oil Field and Kenneth Hahn State Recreation Area (CalFire 2019). Construction and operation of the proposed project would be in developed urban areas outside the VHFHSZ, and would not expose people or structures to a significant risk of wildland fires. Therefore no impact would occur.

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3.10 Hydrology and Water Quality

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

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. Water quality impacts could occur during construction if activities resulted in spilled or leaked petroleum products and/or entrainment of sediment, debris, or other construction-related materials into stormwater runoff. In addition, the project may involve certain non-stormwater discharges, including trench dewatering discharges and hydrostatic testing discharges, that, if improperly performed, could contribute pollutants to the local storm drain system or receiving waters.

LADWP requires its workers and construction contractors to adhere to standard site management practices and applicable water quality regulations, which collectively would avoid or substantially minimize potential threats to water quality. Additionally, the nature and location of the pipe installation activities would pose an overall low threat to water quality, since construction activities would be limited and contained within one segment at a time. Construction would occur within Western Avenue, which is an urban streetscape environment; as such, runoff would flow to storm drains rather than directly to natural creek corridors or infiltrating into the groundwater.

To avoid adverse impacts on water quality, LADWP and/or its construction contractor would implement standard site management practices (e.g., perimeter controls, storm drain inlet protection, maintaining a clean and orderly work area, etc.) and would conduct construction activities in accordance with the statewide Construction General Permit (Order No. 2009-0009-DWQ/CAS000002, as amended). Where applicable, LADWP and/or its construction contractor would submit all permit registration documents to the SWRCB (including a SWPPP), which would demonstrate compliance with linear underground project requirements (Type 1). The SWPPP would include all applicable best management practices (BMPs) necessary to meet discharge prohibitions, effluent limitations, and other performance standards specified in the permit. The following list includes examples of BMPs that would be implemented during construction of the project:

- Storm drain inlets in the construction area would be surrounded by gravel bags or other suitable methods of filtration.
- All potential hazardous wastes would be contained, transported, and disposed of in accordance with applicable regulations.
- Construction work areas would be regularly swept and kept clean, orderly, and free of trash.
- Upon completion of construction activities, the area would be restored to pre-construction conditions.
- All authorized non-storm water discharges would be identified in the SWPPP along with BMPs that would be implemented to eliminate or reduce pollutants, which may include use of settling tanks or screens to reduce suspended sediment loads.

The specific location and type of BMPs to be implemented would be outlined in the SWPPP, which must be prepared by a qualified SWPPP professional. Construction would not begin until a waste discharge identification number and letter of coverage has been received from the SWRCB. Compliance with the Construction General Permit and the associated SWPPP prepared for the project would result in less than significant impacts to water quality during construction and excavation.

If high groundwater is encountered during excavation, either a watertight shoring system would be implemented or dewatering may be required. As explained in Section 2.3, groundwater would be removed during the excavation of the trenches, usually by pumping it from the ground through dewatering wells that have been drilled along the alignment or by using sump pumps in the bottom of the excavation. The extracted groundwater would be pumped into a settling tank, tested, and then treated for any contaminants before being discharged to the storm drain system, in accordance with RWQCB permit requirements, or to the sewer system in accordance with Sewer Capacity Availability Request (SCAR) Permit requirements. If water is to be discharged to the storm drain system, LADWP would file a Notice of Intent to comply with the General NPDES Permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters (Order No. R4-2018-0125, NPDES No. CAG994004). LADWP would be required to comply with all applicable permit conditions.

In addition to stormwater runoff and dewatering discharges, construction may involve other sources of discharge water. Prior to operation, the new pipelines would be hydrostatically tested and disinfected with chlorine. As described in Section 2.3, hydrostatic test water and disinfectant water would be discharged directly into the storm drain or sewer systems. These actions would need to comply with the provisions of the Construction General Permit (if the storm drain system is used) or SCAR Permit requirements (if the sewer system is used). Compliance with the provisions of the Construction General Permit and/or SCAR Permit requirements would ensure that the processes of hydrostatic testing and disinfecting the new pipeline segments, as well as flushing the decommissioned pipeline segments, would not violate water quality standards or waste discharge requirements.

Once constructed, the new pipelines would be located underground, and the work sites would be returned to pre-construction conditions. As the project would not involve changes in impervious surfaces or operational discharges, operation of the project would not be associated with increases in stormwater runoff, polluted runoff, or other types of water quality impacts. The water supplied by the proposed project would meet all applicable water quality standards. Based on the type and magnitude of activities anticipated during project construction and operation, the proposed project would not otherwise substantially degrade surface or ground water quality. Impacts would be less than significant.

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. A project would have the potential to decrease groundwater supplies if it resulted in increased water usage from groundwater sources, such that overdraft conditions occur. The proposed project includes the replacement of 23,300 feet of an existing underground water trunk line and approximately 4,495 feet of water distribution mainline, and would not draw upon groundwater supplies to the extent that such supplies would be compromised.

During construction, either a watertight shoring system would be implemented or dewatering may occur if groundwater is encountered during trenching and excavation activities. However, dewatering would be temporary, limited to the construction period, and would not occur in quantities that could substantially deplete groundwater supplies. The new pipeline would serve existing consumers in LADWP's service area and would not involve an increase in demand for groundwater.

The proposed project would occur within the existing Western Avenue ROW, which is paved and extends through developed, urban areas. During construction, some pavement would be temporarily removed from the roadway to allow for installation of the new trunk line and mainline segments. Once construction is complete, the excavated areas would be repaved. As such, the proposed project could prevent water from infiltrating the ground and replenishing groundwater supplies. However, repaving would not impede infiltration to a greater extent than under existing conditions as no change in impervious surface area would occur. Therefore, the proposed project would not deplete groundwater supplies or interfere substantially with groundwater recharge. No impacts would 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:

i) result in substantial erosion or siltation on or off site;

No Impact. There are no streams or rivers that could be impacted by the project within the vicinity of the proposed alignment. Project construction activities would not include earthmoving or grading sufficient to alter topography or to change drainage patterns. During construction, some pavement would be temporarily removed from the roadways to allow for installation of the new trunk line and mainline segments. However, all portions of the project area that would be disturbed during construction would be restored to pre-construction conditions. As such, no change in impervious surface area would occur. Site conditions during project operation would be similar to existing conditions, and operation would not result in increased erosion or siltation in the area. For these reasons, no impact would occur. Refer to Section 3.10(a) above for a discussion of construction-related impacts as related to erosion and siltation.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;

No Impact. As stated above in 3.10(c)(i), there are no streams or rivers that could be impacted by the project within the vicinity of the proposed alignment. Project construction activities would not include earthmoving or grading sufficient to alter topography or to change drainage patterns. During construction, some pavement would be temporarily removed from the roadways to allow for installation of the new trunk line and mainline segments. However, once construction is complete, the excavated areas would be repaved. As such, no change in impervious surface area would occur. During operation, site conditions would be similar to existing conditions. As such, the project would not result in increased potential for flooding. For these reasons, no impacts would occur.

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

No Impact. The proposed project would be a closed system that would not create or contribute to runoff water. All portions of the project area disturbed during construction would be repaved and restored to pre-construction conditions. During operation, site conditions would be similar to existing conditions and runoff patterns would not markedly differ than those under existing conditions. No impact would occur.

iv) impede or redirect flood flows?

No Impact. The project alignment is within Zone X of Federal Emergency Management Agency's (FEMA) Flood Map Service (FEMA 2019) and a small segment of the north alignment is within Zone AO. Zone X is considered an area of minimal flood hazard and AO is considered an area subject to one percent annual chance of flood (i.e., 100-year flood plain), with depths of one to three feet. All portions of the project area that would be disturbed during construction would be restored to pre-construction conditions once the new trunk line and mainline segments have been installed. As such, site conditions during project operation would be similar than under existing conditions. The proposed project would operate passively below ground with the exception of minor appurtenant facilities such as isolation valves, blow-offs, and air/vacuum valves. However, these structures would be low in profile and small in size relative to the surrounding buildings and other built environment features. As such, the proposed project would not impede or redirect flood flows. No impact would occur.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No Impact. The project alignment is not located within a Tsunami Inundation Area, as mapped by DOC, and the project alignment is not located near any coastal areas (DOC 2015). The project alignment is located approximately eight miles inland from the Pacific Ocean. As such, the risk of a tsunami affecting the project site is low.

Seiches are earthquake-induced waves in enclosed bodies of water, such as lakes or reservoirs. The Los Angeles River is the nearest body of water to the project site, located approximately seven miles east of the alignment. Considering that the Los Angeles River runs through a concrete channel/levee and considering the project alignment's distance from the river (seven miles), the potential for project inundation from seiche is low.

As stated above in 3.10(c)(iv), most of the project alignment is located in an area that is considered at minimal risk of flood hazards. However, a small segment of the north alignment is located within a 100-year flood zone. In the event of inundation, the proposed pipeline would not be inundated, since it would be located underground. In the unlikely event that an inundation event were to adversely affect or compromise the pipeline, inundation would not release pollutants to the environment during a flood event, since the pipeline would convey potable water. For these reasons, no impact would occur.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. During project construction, the proposed project would comply with regional and local regulations requiring preparation of a SWPPP, as well as with construction dewatering permit requirements, if necessary. During operation, the water supplied by the proposed project would meet all applicable water quality standards. The proposed project would not obstruct existing water quality control plans or sustainable groundwater management plans. In addition, the proposed project alignment is not considered a suitable site for groundwater recharge and would not introduce impervious areas over a significant groundwater recharge zone. Therefore, no impacts would occur related to conflicts with a water quality control plan or sustainable groundwater management plan.

References

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3.11 Land Use and Planning

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

a) Would the project physically divide an established community?

No Impact. The project alignment is located within Western Avenue, an existing roadway. During construction, portions of the roadway would be closed, and some construction work and staging activities may also occur along adjacent sidewalks. Given this, construction activities associated with the proposed project may create a temporary nuisance to residents and employees in the communities surrounding the project alignment. However, two-way traffic would be maintained during construction and access and circulation would be maintained for residential and commercial purposes. Once construction is complete, the project would operate underground and would not involve any access restrictions or physically divide an established community. No impact would 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. A portion of the northern segment of the proposed project, between 59th Place and 108th Street, is within the South Los Angeles Community Plan area and would be subject to the South Los Angeles Community Plan as well as the City of Los Angeles General Plan. The South segment of the proposed project is within the W. Athens – Westmont Community Plan area of unincorporated Los Angeles County and would be subject to the W. Athens – Westmont Community Plan, the W. Athens – Westmont Community Parks and Recreation Plan as well as the Los Angeles County General Plan. The project's consistency with these land use plans and with the Los Angeles Municipal Code is described below.

South Los Angeles Community Plan

The northern portion of the proposed project's alignment, from 59th Place to 108th Street is located within the South Los Angeles Community Plan area. The South Los Angeles Community Plan is a component of the City's General Plan Land Use Element. The plan outlines the long-term community goals of the planning area, including: long-term physical development, economic revitalization, and community enhancement as well as establishes actions to achieve these goals (City of Los Angeles 2017).

The proposed project would include the replacement of 23,300 feet of an existing underground water trunk line and approximately 4,495 feet of water distribution mainline along Western Avenue between 59th Place and 108th Street within the South Los Angeles Community Plan area. This portion of the alignment is primarily surrounded by industrial, commercial and low-density residential land uses. During construction, temporary nuisances for residents, businesses and people traveling through the area may occur. Nuisances would include partial block closures, increased construction vehicle trips, access restrictions, and increased construction noise. Construction, therefore, could temporarily affect the character of nearby neighborhoods and the function of commercial corridors. However, the goals and policies set forth in the South Los Angeles Community Plan involve long-term development patterns. Temporary construction activities would not affect the community's ability to preserve and enhance its neighborhoods, commercial corridors, and industrial areas. Additionally, this IS/MND sets forth a variety of mitigation measures that would reduce temporary construction noise as well as control temporary construction traffic (see Sections 3.13 and 3.17 of this IS/MND for details). Furthermore, the proposed project would enhance the reliability and resiliency of the water system in the area. Reliable and safe water supply to residences and businesses is necessary for achieving the goals and policies in the South Los Angeles Community Plan, specifically those pertaining to the reliability, economy and efficiency of services and facilities. For these reasons, the proposed project would not conflict with the provisions of the South Los Angeles Community Plan such that a significant environmental impact would result.

City of Los Angeles General Plan

The City of Los Angeles General Plan contains several elements that set forth policies for avoiding or mitigating environmental effects, including the Air Quality Element, Conservation Element, Noise Element, and Safety Element. Many of the policies pertain to land use patterns and commercial, residential, industrial, or open space land use and development and, therefore, do not apply to public works projects such as the proposed trunk line. However, there are a number of policies that apply to construction projects in general. Examples of these policies are listed below (City of Los Angeles 1992, 1999, 2001).

- Air Quality Policy 1.3.1: Minimize particulate emissions from construction sites.
- Noise Objective 2: Reduce or eliminate non-airport related intrusive noise, especially relative to noise sensitive uses.
- Noise Policy 2.2: Enforce and/or implement applicable city, state, and federal regulations intended to mitigate proposed noise producing activities, reduce intrusive noise and alleviate noise that is deemed a public nuisance.
- Conservation Objective (Cultural Resources): Protect the City's archaeological and paleontological resources for historical, cultural, research, and/or educational purposes.

The proposed project would create construction-related air pollutant emissions and would also generate noise during construction near noise-sensitive receptors at the low-density residential neighborhoods. However, as described in Sections 3.3 and 3.13, these effects would be minimized to the extent practicable through compliance with regulations and/or implementation of mitigation measures. Regarding the conservation of archaeological and paleontological resources, the proposed project involves excavation of soils and therefore has the potential to uncover previously undiscovered resources. However, as explained in Section 3.5, mitigation measures have been set forth to minimize the potential for previously undiscovered resources to be adversely affected by the project. For the reasons described above, the proposed project would not conflict with the policies set forth in applicable land use plans such that a significant environmental impact would result.

West Athens – Westmont Community Plan

The southern portion of the proposed project's alignment, from 108th Street to 121st Street is located within the West Athens - Westmont Community Plan area. The West Athens - Westmont Community Plan is a component of the Los Angeles County General Plan. The plan outlines a framework of goals, policies and programs on which to make decisions as to the allocation of resources and the pattern, density, and character of development in the West Athens – Westmont area (Los Angeles County 1990).

The proposed project would involve the replacement of approximately 23,300 feet of new potable water trunk line and approximately 4,495 feet of water distribution mainline along Western Avenue between 108th Street and 121st Street within the West Athens - Westmont Community Plan area. This portion of the alignment is primarily surrounded by commercial and low-density residential land uses. During construction, temporary nuisances for residents, businesses and people traveling through the area may occur. Nuisances would include full or partial street closures, increased construction vehicle trips, access restrictions, and increased construction noise. Construction, therefore, could temporarily affect the character of nearby neighborhoods and the function of commercial corridors. However, the goals and policies set forth in the West Athens - Westmont Community Plan involve long-term development patterns. Temporary construction activities would not affect the community's ability to preserve and enhance its neighborhoods, commercial corridors, and industrial areas. Additionally, this IS/MND sets forth a variety of mitigation measures that would reduce temporary construction noise as well as control temporary construction traffic (see Sections 3.13 and 3.17 of this IS/MND for details). Furthermore, the proposed project would enhance the reliability and resiliency of the water system in the area. Reliable and safe water supply to residences and businesses is necessary for achieving the goals and policies in the West Athens - Westmont Community Plan, specifically those pertaining to economic revitalization and environmental management within the planning area. For these reasons, the proposed project would not conflict with the provisions of the West Athens - Westmont Community Plan such that a significant environmental impact would result.

West Athens – Westmont Community Parks and Recreation Plan

The southern portion of the proposed project's alignment, from 108th Street to 121st Street is located within the West Athens - Westmont Community Parks and Recreation Plan area. The West Athens - Westmont Community Parks and Recreation Plan was developed by the Los Angeles County Department of Parks and Recreation. The plan outlines the parks and recreation needs of the area as well as goals and policies intended to increase the population's access to recreation. (Los Angeles County 2016).

The proposed project includes the replacement of 23,300 feet of an existing underground water trunk line and approximately 4,495 feet of water distribution mainline along Western Avenue between 108th Street and 121st Street within the West Athens - Westmont Community Parks and Recreation Plan planning area. As stated above, during construction, temporary nuisances for residents, businesses and people traveling through the area may occur; however with implementation of the mitigation measures in Section 3.13 and Section 3.17 of this IS/MND, construction-related noise and traffic would not impede residents' access to parks and recreational facilities. Once operational, the project would be underground and would not utilize land dedicated, or otherwise utilized, as parkland or recreational facilities. As such, the project would not impact implementation of the West Athens - Westmont Community Parks and Recreation Plan.

Los Angeles County General Plan

The Los Angeles County General Plan contains several elements that establish policies for avoiding or mitigating environmental effects, including the Air Quality Element, Noise Element, Conservation and Natural Resources Element and Public Services and Facilities Element. Many of the policies pertain to land use patterns and commercial, residential, industrial, or open space land use and development and, therefore, do not apply to public works projects such as the proposed trunk line. However, the policies below apply to construction projects and to public utility infrastructure in general (Los Angeles County 2015a).

- **Policy AQ 1.3:** Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible.
- **Policy N 1.3:** Minimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering controls through Best Available Technologies (BAT).
- **Policy C/NR 5.2:** Require compliance by all County departments with adopted Municipal Separate Storm Sewer System, General Construction and Point Source NPDES permits.
- **Policy C/NR 14.1:** Ensure proper notification and recovery processes are carried out for development on or near historic, cultural and paleontological resources.
- **Policy PS/F 1.4:** Ensure the adequate maintenance of [public facilities] infrastructure.

- **Policy PS/F 6.4:** Protect and enhance utility facilities to maintain the safety, reliability, integrity and security of utility services.
- **Policy PS/F 6.6:** Encourage the construction of utilities underground, where feasible.

The proposed project would create construction-related air pollutant emissions and generate noise. However, as described in Sections 3.3 and 3.13 these effects would be reduced to a less-than-significant level after implementation of the applicable mitigation measures. Regarding the conservation of archaeological and paleontological resources, the proposed project includes the replacement of 23,300 feet of an existing underground water trunk line and approximately 4,495 feet of water distribution mainline. Given this, the ground along the alignment has been previously disturbed and the surrounding vicinity is, likewise, comprised of developed industrial, commercial and residential land uses. Unearthing a previously-undiscovered archaeological or paleontological resource is unlikely; however as explained in Section 3.5, mitigation measures have been set forth to minimize the potential for previously undiscovered resources to be adversely affected by the project. Additionally, the project is consistent with the County General Plan's policies for public facilities infrastructure (Policies PS/F 1.4, PS/F 6.4 and PS/F 6.6).

For the reasons described above, the proposed project would not conflict with the policies set forth in applicable land use plans such that a significant environmental impact would result. No impact would occur.

References

City of Los Angeles. 1992. "Air Quality Element" in City of Los Angeles General Plan. Adopted November 24, 1992. Accessed March 29, 2019. https://planning.lacity.org/GP_elements.html.

City of Los Angeles. 1999. "Noise Element" in City of Los Angeles General Plan. Adopted February 3, 1999. Accessed March 29, 2019. https://planning.lacity.org/GP_elements.html.

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Los Angeles County. 1990. West Athens – Westmont Community Plan. Accessed, March 29, 2019. http://planning.lacounty.gov/assets/upl/data/pd_west-athens.pdf.

Los Angeles County. 2016. West Athens – Westmont Community Parks and Recreation Plan. Accessed, March 29, 2019. http://file.lacounty.gov/SDSInter/dpr/238855_WestAthensWestmontCPRPPublicReviewDraft.pdf.

3.12 Mineral Resources

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

a) 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 Mine Reclamation, the majority of the proposed alignment lies within Mineral Resource Zone (MRZ-) 1. The MRZ-1 zone is defined as "an area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence" (DOC 1982). There are two small portions of the alignment within zones MRZ-3 and MRZ-4, both of which are defined as areas where available information is inadequate to determine the presence or significance of available mineral resources. The project site is located within an existing roadway in a developed, urbanized area and does not support any mineral extraction activities. Due to the developed, urbanized nature of the project area and its surroundings, as well as the absence of known mineral resources mapped by the state, project implementation would not result in the loss of availability of a known mineral resource of value to the region and residents of the state. No impacts to state or regionally important mineral resources would occur.

According to the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, the project alignment's southern segment is within the Howard Townsite Oil/Gas field between Century Boulevard and 121st Street. Additionally, there are several plugged wells along the alignment within this segment of Western Avenue as well as three active wells approximately 0.3 mile east of the alignment at 120th Street.

(DOGGR 2019). The proposed project would occur entirely within Western Avenue, a paved roadway and, as such, the project would not preclude future use of the oil field, in the event that new oil wells are established in the future. The proposed project would not involve any land use changes precluding future use of the oil field. As such, the proposed project would not interfere with oil, gas, or geothermal resource production and no impact would occur.

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 stated above, the project alignment extends into the Howard Townsite Oil/Gas field between Century Boulevard and 121st Street. However, as described above under Section 3.12(a), the proposed project would occur entirely within paved roadways and would not preclude or affect use of the oil field. As such, the proposed project would not interfere with oil, gas, or geothermal resource production. The project alignment is not delineated as a locally important mineral resource recovery site in the General Plan (City of Los Angeles 2001). The project site is located in a fully urbanized area and does not support any mineral extraction activities. Due to the developed, urbanized nature of the project area and its surroundings, as well as the absence of significant mineral resources as mapped in the General Plan, project implementation is not anticipated to result in loss of availability of a known mineral resource of value to the region and residents of the state. No impacts to locally important mineral resources would occur.

References

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DOGGR (California Department of Conservation, Division of Oil, Gas and Geothermal). 2019. DOC DOGGR Well Finder Map. Accessed, March 28, 2019. https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-118.28202/33.94872/14.

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3.13 Noise

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

Background Information for the Noise Analysis

Existing Noise Conditions

The proposed project alignment would be within the right-of-way of City streets (i.e., Western Avenue). Adjacent land uses include commercial uses on both sides of the roadway for the majority of the alignment. Residential uses extend from approximately 84th Street to 85th Street, fronting the eastern side of the roadway; residential uses extending from 92nd Street to 96th Street, fronting the western side of the roadway; residential uses extending from approximately 108th Street to 111th Street, fronting both sides of the roadway; and three public facilities (the Los Angeles Southwest College, Manhattan Place Elementary School, and Jesse Owens Park) also exist along the project alignment. Existing ambient noise measurements were conducted adjacent to the project alignment to characterize the existing noise environment. The daytime, short-term (1 hour or less) attended sound level measurements were taken with a Piccolo SoftdB sound-level meter. This sound-level meter meets the current American National Standards Institute (ANSI) standard for a Type 2 (General Purpose) sound-level meter. The calibration of the sound level meter was verified before and after the measurements were taken, and the measurements were conducted with the microphone positioned approximately five feet above the ground.

Six noise measurement locations were taken near noise-sensitive receptors adjacent to or near the project site. The measurement locations are shown in Figure 3.13-1, and the measured average noise levels and measurement locations are provided in Table 3.13-1. The primary noise sources at the measurement locations consisted of traffic along the adjacent roads; other (secondary) noise sources included distant aircraft, distant conversations, and birdsong.

Table 3.13-1 Measured Noise Levels

Receptors	Location (Land Use)/Address	Date	Time	L_{eq} (dBA)	L_{max} (dBA)
ST1	6050 S. Western Avenue. (Residential) Los Angeles, CA	April 25, 2019	9:06 a.m. – 9:21 a.m.	69.9	82.1
ST2	7422. S. Western Avenue. (School) Los Angeles, CA	April 25, 2019	9:33 a.m. – 9:48 a.m.	75.1	88.5
ST3	8464. S. Western Avenue. (School) Los Angeles, CA	April 25, 2019	9:59 a.m. – 10:14 a.m.	73.7	83.3
ST4	9303. S. Western Avenue. (School) Los Angeles, CA	April 25, 2019	10:23 a.m. – 10:38 a.m.	74.4	88.6
ST5	10907. S. Western Avenue. (School) Los Angeles, CA	April 25, 2019	10:48 a.m. – 11:03 p.m.	69.7	87.0
ST6	12070. S. Western Avenue. (School) Los Angeles, CA	April 25, 2019	11:15 a.m. – 11:30 a.m.	75.1	90.8

Notes: L_{eq} = Equivalent Continuous Sound Level (Time-Average Sound Level); L_{max} = Maximum Noise Level
Source: Dudek 2019

County of Los Angeles Noise Ordinance

The County of Los Angeles regulates noise through several sections of its Municipal Code, specifically, Section 12.08.440, which prohibits the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m. or at any time on Sundays and holidays. Additionally, the County Municipal Code establishes acceptable thresholds for construction noise, which are typically a maximum of 85 dBA between 7:00 a.m. and 8:00 p.m. on weekdays for mobile (short-term) construction equipment and 70 dBA between 7:00 a.m. and 8:00 p.m. on weekdays for stationary (long-term) construction equipment.

City of Los Angeles Noise Ordinance

The City of Los Angeles regulates noise through several sections of its Municipal Code: Section 41.40 (Noise Due to Construction, Excavation Work – When Prohibited), which establishes time prohibitions on noise generated by construction activity; Section 112.04 (Powered Equipment Intended for Repetitive Use in Residential Areas and Other Machinery, Equipment and Devices), which prohibits the use of loud machinery and/or equipment within 500 feet of residences and prohibits noise from machinery, equipment, or other devices that would result in an increase of more than 5 decibels (dB) above the ambient noise level at residences; and Section 112.05 (Maximum Noise Level of Powered

Equipment or Powered Hand Tools), which establishes maximum noise levels for powered equipment and powered hand tools (i.e., 75 dBA at a distance of 50 feet for construction, industrial, and agricultural equipment between the hours of 7:00 a.m. and 10:00 p.m.). According to Section 41.40, no construction activity that might create loud noises in or near residential areas or buildings shall be conducted between the hours of 9:00 p.m. and 7:00 a.m. on weekdays, before 8:00 a.m. or after 6:00 p.m. on Saturday and national holidays, or at any time on Sunday.

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?

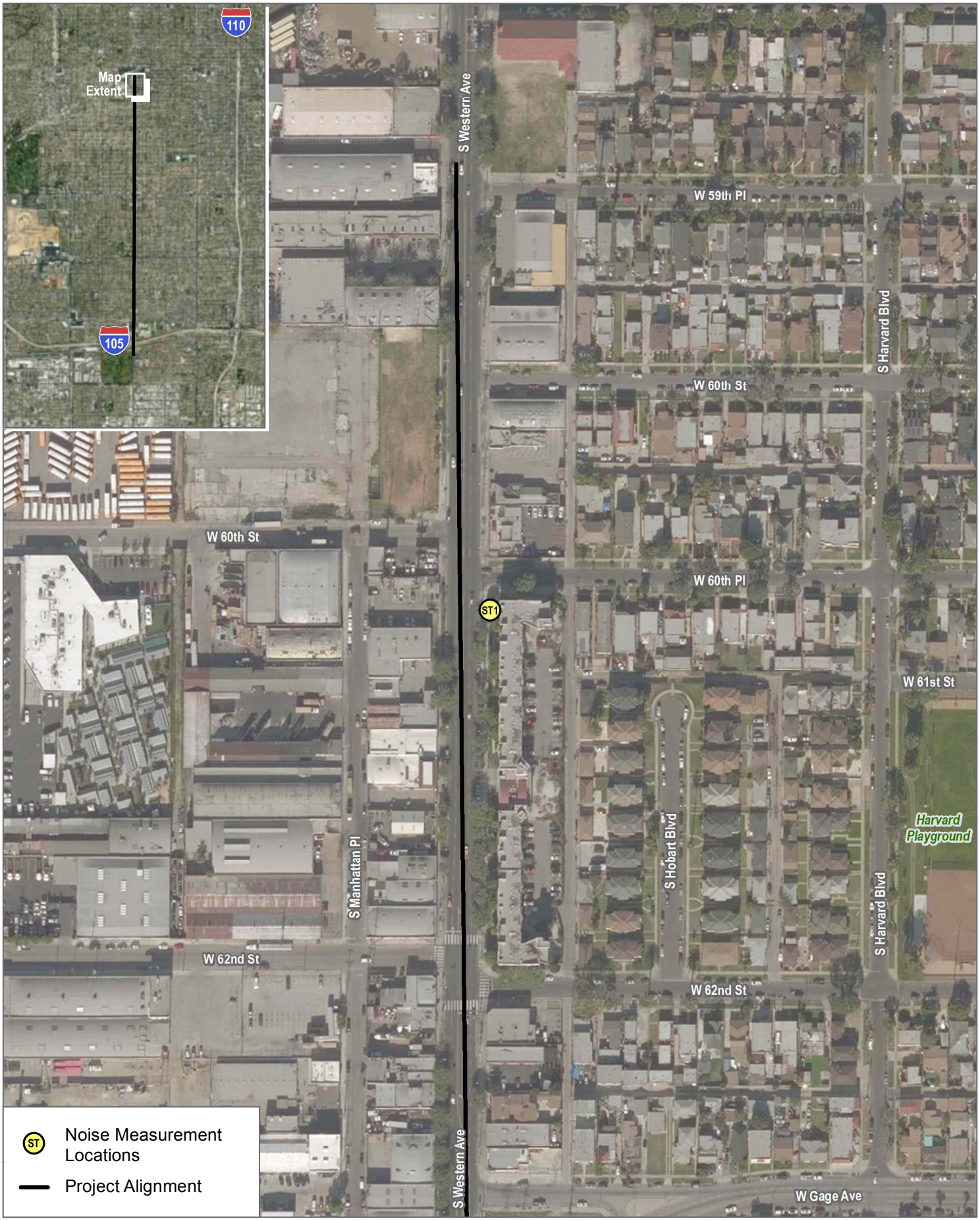
Less Than Significant with Mitigation Incorporated. Implementation of the proposed project would result in two primary types of potential noise impacts: short-term (i.e., temporary) noise during construction, and long-term noise during operation.

Operation

Operation of the proposed project would be below-ground and would primarily be passive in nature. Any noise generated by the pipeline and associated mechanical equipment (i.e., valves) would occur underground and is anticipated to be negligible. Maintenance would include exercising valves and replacing or repairing worn appurtenances to ensure proper performance over the life of the facilities, similarly to those that occur throughout LADWP's service area under existing conditions. No permanent workers would be required to operate or maintain the proposed project. Activities associated with long-term operations and maintenance would therefore be minimal. Noise associated with these activities would range from no noise to negligible amounts of noise and, therefore, would be less than significant.

Construction

Construction of the proposed project would occur along the existing public right-of-way of Western Avenue using the open-trench and pipe-jacking/tunneling methods (see Figure 2-1, Project Components and Construction Staging Areas). Pipe jacking/tunneling installation would be used for approximately 2,926 lineal feet of pipe installation (60th Street, Florence Avenue, Manchester Avenue, Imperial Highway and 105 Freeway), while open trenching would be utilized for the remaining 20,281 feet of pipe installation. Both open trench pipe installations and pipe jacking installations would occur over 48 months. Installations would occur concurrently. The existing trunk line would remain in service during construction activities. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. The nearest sensitive receptors to the project site are residences located as close as 30 feet from the project alignment. Because of the linear nature of the project, the amount of time that construction work would occur immediately adjacent to any one noise-sensitive receiver would generally be relatively short (typically, one to two days for open-trench pipeline installation). For trenchless installation, if determined necessary, it is anticipated that work would take place for approximately 6 to 10 months.



SOURCE: County of Los Angeles 2016, LADWP 2019, ESRI 2019, Digital Globe 2017

LA DWP Los Angeles Department of Water & Power

N 0 100 200 Feet

FIGURE 3.13-1A

Noise Measurement Locations

Western Trunk Line Project

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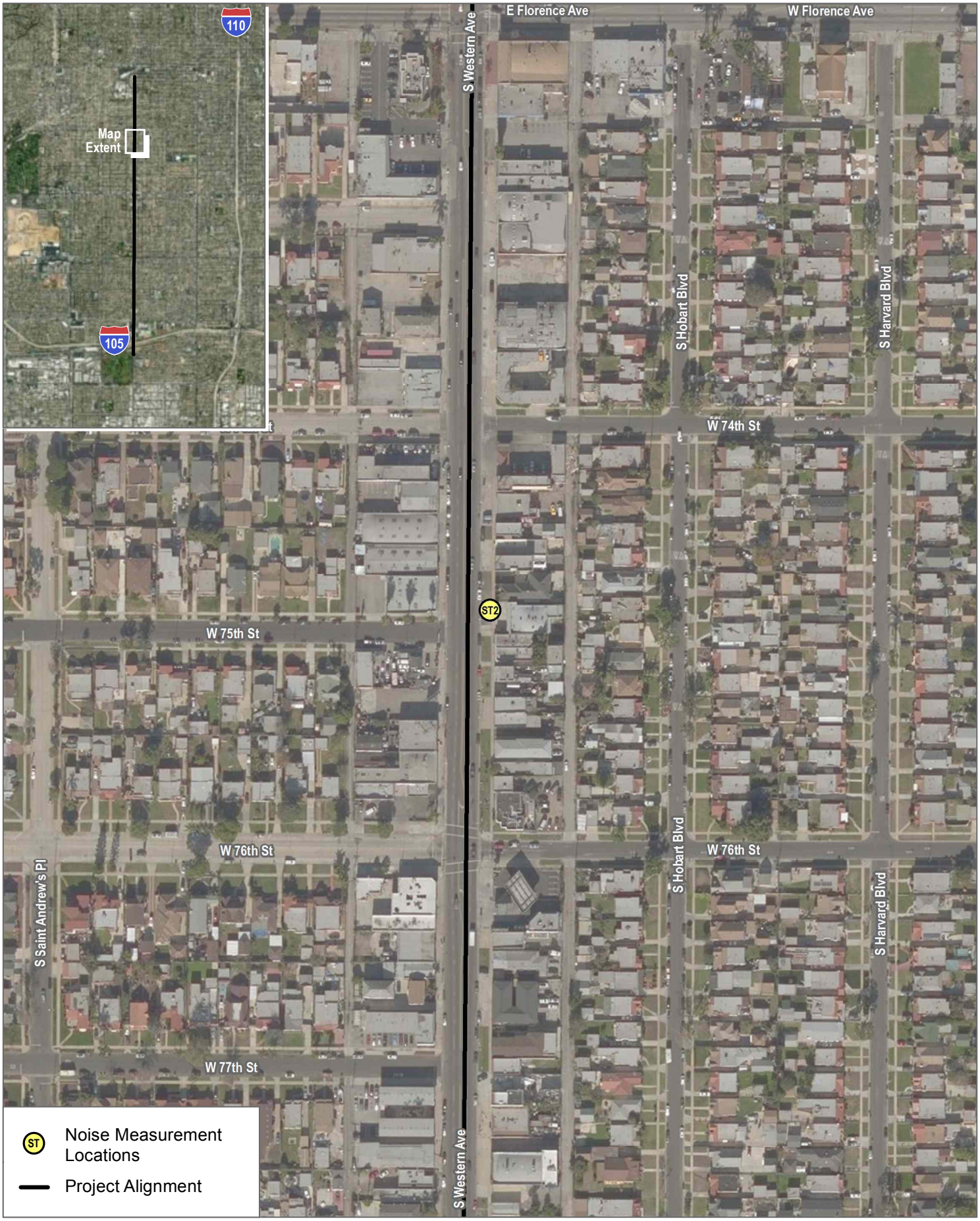

SOURCE: County of Los Angeles 2016, LADWP 2019, ESRI 2019, Digital Globe 2017

Los Angeles Department of Water & Power

0 100 200 Feet

FIGURE 3.13-1B

Noise Measurement Locations

Western Trunk Line Project

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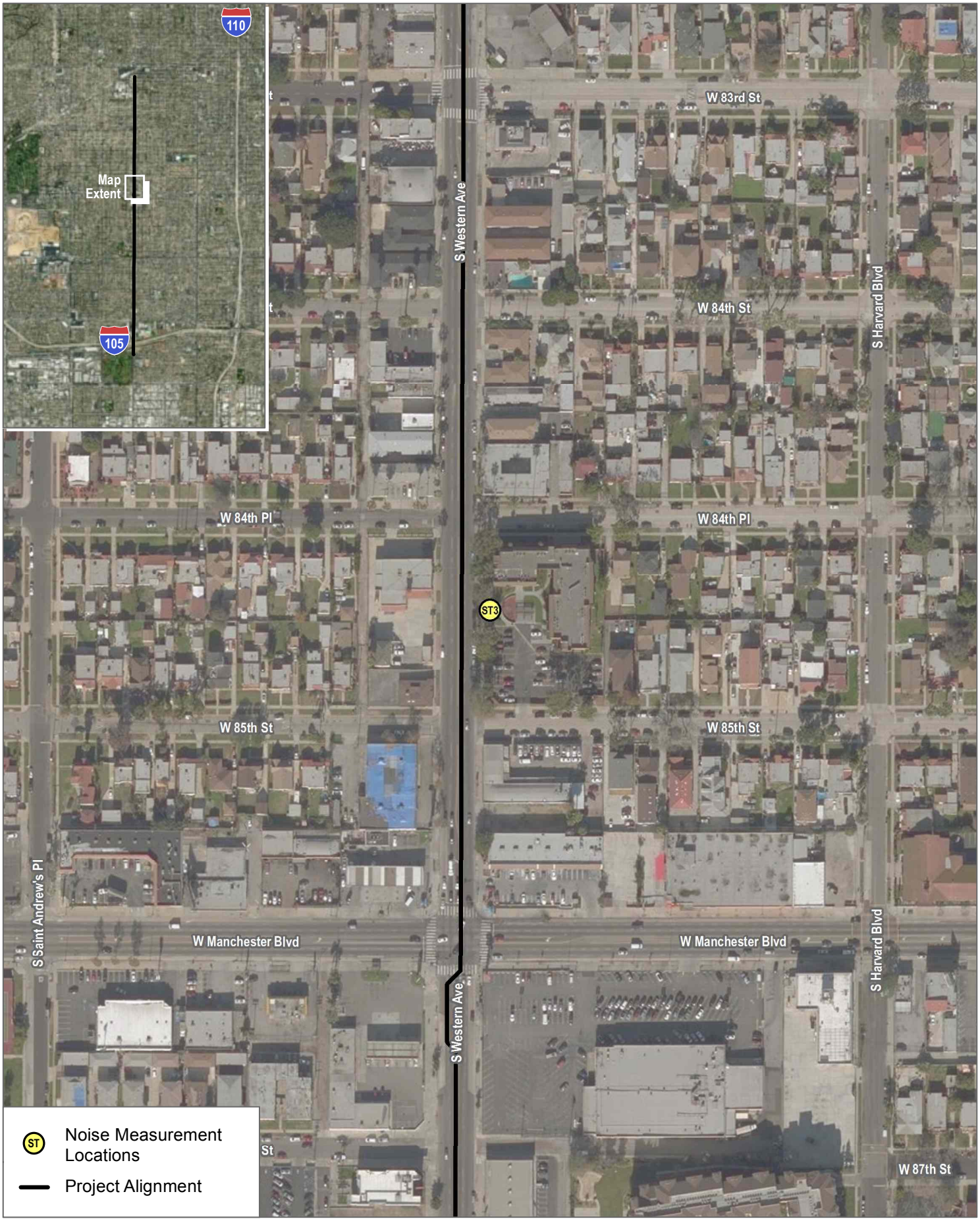

SOURCE: County of Los Angeles 2016, LADWP 2019, ESRI 2019, Digital Globe 2017

FIGURE 3.13-1C

Noise Measurement Locations

Western Trunk Line Project

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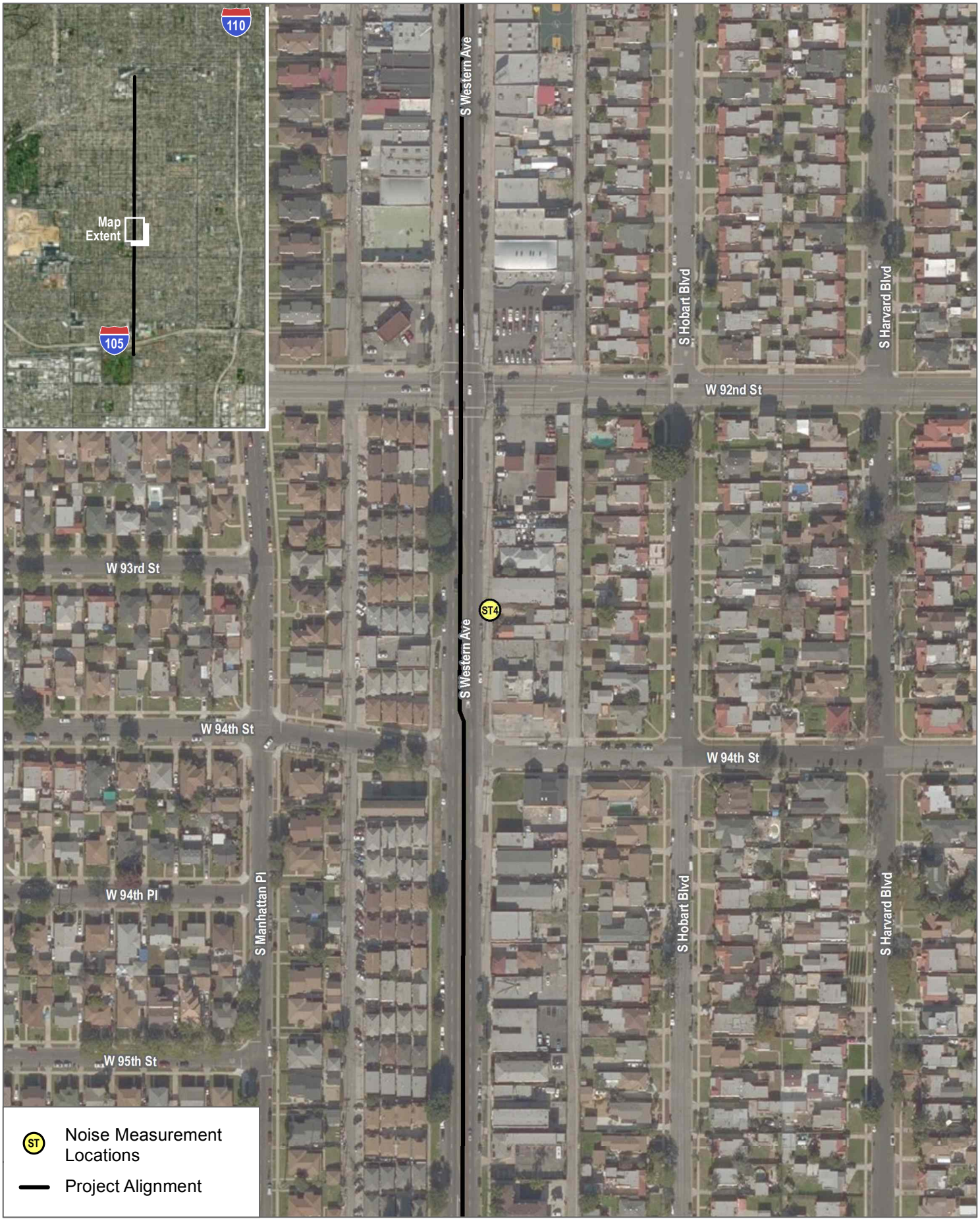

SOURCE: County of Los Angeles 2016, LADWP 2019, ESRI 2019, Digital Globe 2017

Los Angeles Department of Water & Power

0 100 200 Feet

FIGURE 3.13-1D

Noise Measurement Locations

Western Trunk Line Project

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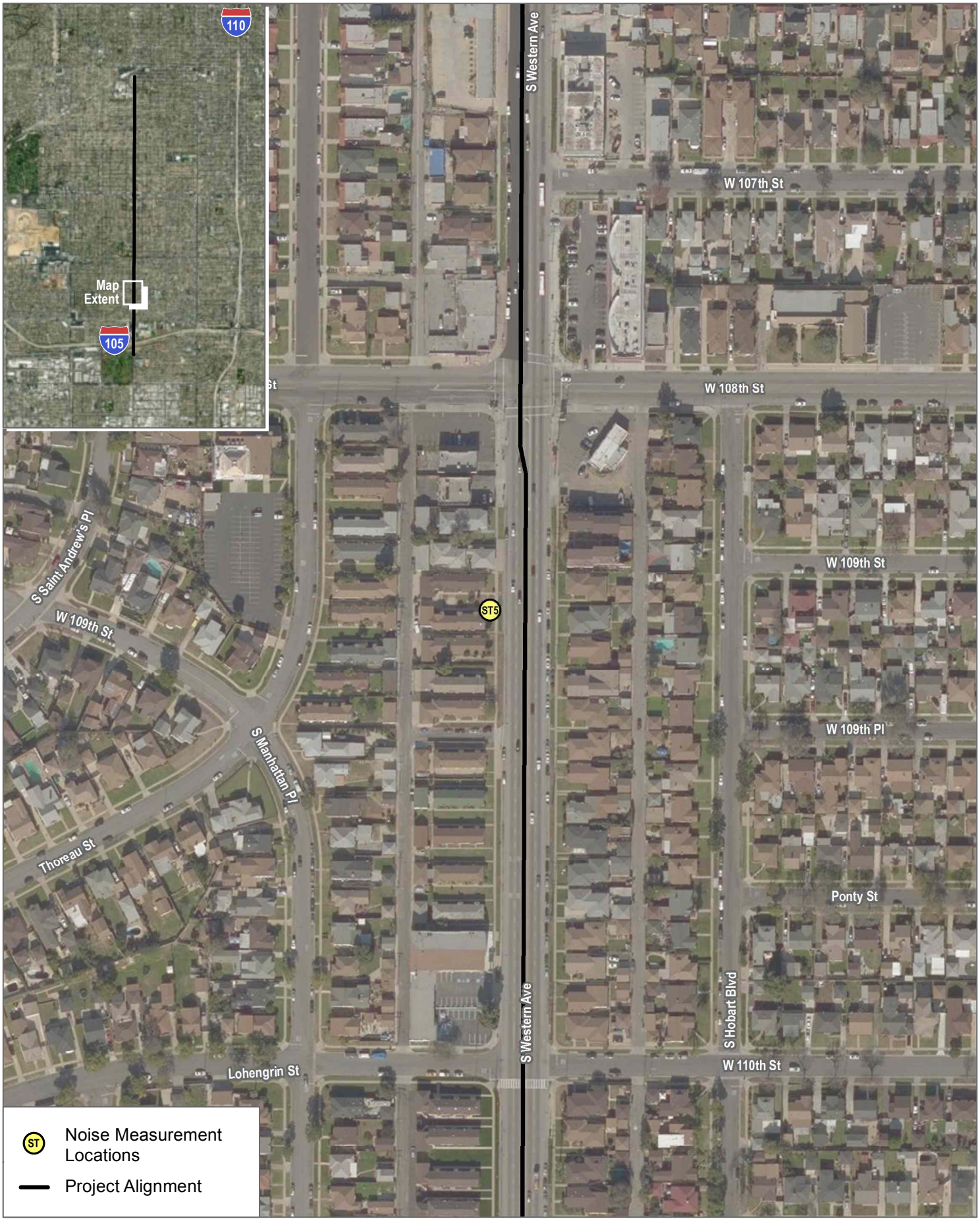

SOURCE: County of Los Angeles 2016, LADWP 2019, ESRI 2019, Digital Globe 2017

Los Angeles Department of Water & Power

0 100 200 Feet

FIGURE 3.13-1E

Noise Measurement Locations

Western Trunk Line Project

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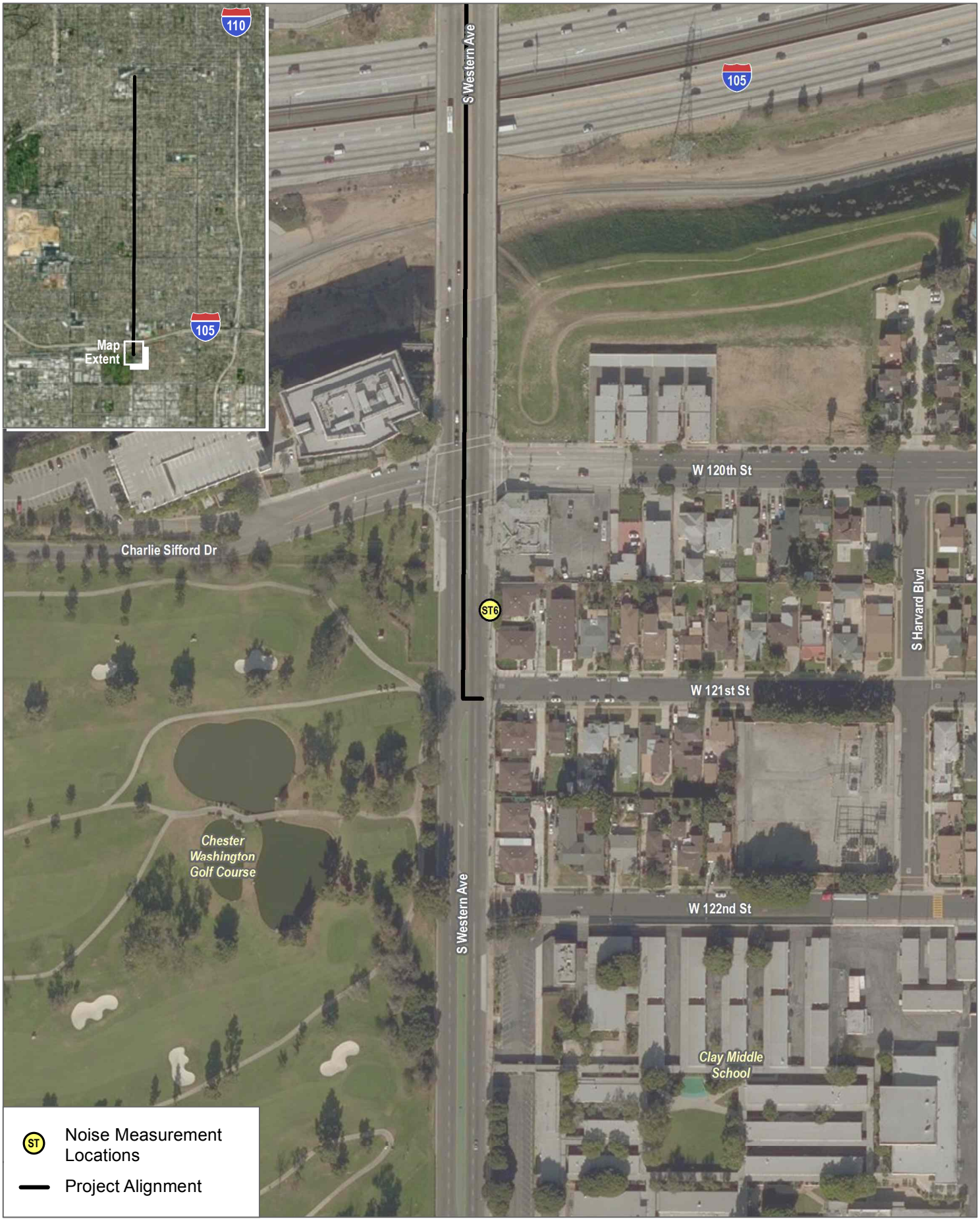

SOURCE: County of Los Angeles 2016, LADWP 2019, ESRI 2019, Digital Globe 2017

LA DWP Los Angeles Department of Water & Power

N

0 100 200 Feet

FIGURE 3.13-1F

Noise Measurement Locations

Western Trunk Line Project

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Construction of the proposed project would result in temporary localized increases in noise levels from on-site construction equipment, as well as from off-site trucks hauling construction materials. Noise generated by construction equipment would occur with varying intensities and durations during the various phases of construction. The typical maximum noise levels at a distance of 50 feet for various pieces of construction equipment anticipated to be used during construction are listed in Table 3.13-2. Note that these are maximum noise levels, not an average sound level. The equipment would operate in alternating cycles of full power and low power, thus producing noise levels that would ultimately fall below the maximum levels. The average sound level of the construction activity as a whole depends upon the amount of time that the equipment operates and the intensity of construction. As such, the average noise level during construction activity is generally lower, since maximum noise generation may only occur up to 50% of the time. Noise levels from construction operations decrease at a rate of approximately 6 dBA per doubling of distance from the source.

Table 3.13-2 Construction Equipment Noise Levels

Equipment Type	Maximum Noise Level dB(A) at 50 feet
Backhoe	80
Compactor	82
Concrete Mixer	85
Crane	83
Generator	81
Loader	85
Paver	89
Roller	74
Truck	88
Saw	76

Source: DOT 2018.

Noise from the construction phase of the proposed project was estimated using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) (FHWA 2008). Input variables for the RCNM consist of the receiver/land use types, the equipment type and number of each (e.g., two graders, a loader, a tractor), the duty cycle for each piece of equipment (e.g., percentage of hours the equipment typically works per day), and the distance from the noise-sensitive receiver. No topographical or structural shielding was assumed in the modeling of construction noise. Construction scenario assumptions, including phasing and equipment mix, were based on the project construction details described in Section 2.3 of this document and the CalEEMod default values developed for the Air Quality impacts analysis (and detailed in Table 3.3-1). Construction noise levels were assessed at two distances for each project phase. One represents the anticipated construction noise that may be experienced at the closest possible sensitive receptor (residences nearest to the proposed work areas). The second represents anticipated construction noise that may be experienced within the general vicinity of construction. Table 3.13-3 summarizes these estimated construction noise levels, with

separate calculations provided for the different types of construction activities that would occur for this project. The detailed RCNM input and output is provided in Appendix E.

Table 3.13-3 Construction Noise Summary (dBA Leq)

Construction Activity	Construction Noise Level at Nearest Sensitive Receptor	Construction Noise Level in the Vicinity
	30 feet	*250 feet*
Open Trench Pipe Installation	89	75
Jacking and Receiving Pit Installation	89	75
Pipe Jacking	84	70

Source: Dudek 2018

As shown in Table 3.13-3, noise levels from construction activities would be as high as 89 dBA equivalent continuous sound level (L_{eq}) at the nearest existing residences, approximately 30 feet away. At more typical distances of approximately 250 feet, construction noise would range from approximately 70 to 75 dBA L_{eq}.

Although nearby off-site residences would be exposed to elevated construction noise levels, the exposure would be short term and would cease upon completion of project construction. It is anticipated that active construction associated with the proposed project would generally take place within the allowable hours per Section 12.08.430 of the Los Angeles County Municipal Code (7:00 a.m. through 8:00 p.m. Monday through Friday) and Section 41.40 of the City of Los Angeles Municipal Code (7:00 am through 9:00 pm Monday through Friday, 8:00 am through 6:00 pm on Saturdays, if weekend work is necessary, and would not occur on Sundays or national holidays. In the event that construction is required to extend beyond these times, extended hours permits would be required. As such, construction would not violate City of Los Angeles standards for construction.

However, construction noise levels would be higher than existing ambient daytime noise levels, particularly within 30 feet of the proposed construction activities (see Tables 3.13-1 and 3.13-3). For this reason, noise impacts from construction would be considered potentially significant. MM-NOI-1 and MM-NOI-2 have been set forth to reduce construction noise associated with the proposed project and to ensure that nearby receptors are informed of construction activities. The effectiveness of the measures listed in MM-NOI-1 would vary from several decibels (which in general is a relatively small change) to ten or more decibels (which would be perceived as a substantial change). The range of effectiveness would vary based on the equipment in use, the original condition of the equipment, the specific location of the noise source and receiver, etc. The noise reduction achieved by equipment silencers, for example, would range from several decibels to well over 10 decibels. Limiting equipment idling could reduce overall noise levels up to several decibels. However, the measures listed in MM-NOI-1, in conjunction, would result in a substantial decrease in construction noise. While MM-NOI-2 would not reduce construction noise levels, it would ensure that receptors in the project area are prepared for any nuisances that may occur and would allow them to plan accordingly. Upon implementation of MM-NOI-1 and MM-NOI-2, impacts would be less than significant with mitigation incorporated.

MM-NOI-1 **Construction Noise Reduction.** The Los Angeles Department of Water and Power (LADWP) and/or its construction contractor shall comply with the following measures during construction:

1. Construction activities shall not occur between the hours of 9:00 pm and 7:00 am Monday through Friday, 6:00 pm and 8:00 am on Saturday, or on Sundays or national holidays. In the event that construction is required to extend beyond these times, extended hours permits shall be required.
2. Pumps and associated equipment (e.g., portable generators etc.) shall be situated and configured so as to minimize noise at nearby noise-sensitive receivers.
3. Where possible, staging of construction equipment shall be situated at least 30 feet from noise- or vibration-sensitive land uses.
4. All noise-producing equipment and vehicles using internal combustion engines shall be equipped with mufflers; air-inlet silencers where appropriate; and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specification. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment.
5. All mobile or fixed noise-producing equipment used for the project that are regulated for noise output by a local, state, or federal agency shall be in compliance with regulations.
6. Idling equipment shall be kept to a minimum and moved as far as practicable from noise-sensitive land uses.
7. Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.
8. Mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
9. The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be used for safety warning purposes only.

MM-NOI-2 **Notification.** Effective communication with local residents shall be maintained prior to and during construction. Specifically, the Los Angeles Department of Water and Power (LADWP) shall inform local residents of the schedule, duration, and progress of the construction. Additionally, residents shall be provided contact information for noise- or vibration-related complaints.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant with Mitigation Incorporated. Construction activities may generate excessive groundbourne vibration or groundbourne noise, causing a potentially significant impact. Caltrans has collected groundbourne vibration information related to construction activities (Caltrans 2013). Information from Caltrans indicates that continuous vibrations with a peak particle velocity of approximately 0.1 inch/second begin to cause annoyance. Heavier pieces of construction equipment, such as bulldozers, have peak particle velocities of approximately 0.089 inch/second or less at a distance of 25 feet (DOT 2018).

Groundbourne vibration typically attenuates over short distances. At the distance from the nearest residence to the construction area (approximately 30 feet) and with the anticipated construction equipment, the peak particle velocity would be approximately 0.068 inch/second. At the closest sensitive receptors, vibration levels are not anticipated to exceed the vibration threshold of potential annoyance of 0.1 inch/second; furthermore, vibration would only occur intermittently during transitory pipeline construction activities. As described in Section 2.3, open trench pipeline construction would proceed at a rate of approximately 40 to 100 feet per day, limiting the duration of vibration exposure to one week or less at any sensitive receptor location along the alignment. Therefore, vibration impacts related to open trench construction would be less than significant.

Noise- and vibration-sensitive receptors are located approximately 30 feet from the proposed trenchless installation at several locations; implementation of mitigation measure MM-NOI-1 would ensure that construction staging is situated further than 30 feet of any sensitive receptors where possible, and MM-NOI-2 would ensure that sensitive receptors are notified of construction activities and are provided contact information for noise- or vibration-related complaints. Implementation of these measures would reduce vibration impacts at sensitive receptor locations to a less than significant level.

Construction can also affect nearby buildings by inflicting damage from vibration. However, construction vibration associated with this project would not result in structural building damage. Building damage typically occurs at vibration levels of 0.5 inch/second or greater for buildings of reinforced concrete, steel, or timber construction. The heavier pieces of construction equipment used for this project would include backhoes, front-end loaders, and flat-bed trucks. Pile driving, blasting, or other special construction techniques would not be used for construction of the proposed project; therefore, excessive groundbourne vibration and groundborne noise with the potential to adversely affect nearby buildings would not be generated. Once operational, the project would not generate groundbourne vibration. As such, no building damage would be expected to occur as a result of project-related vibration during construction or operation. Overall, upon compliance with MM-NOI-1 and MM-NOI-2, impacts would be less than significant with mitigation incorporated.

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?

Less Than Significant Impact. The project area is not located within the vicinity of a private airstrip (Airnav.com 2018). Accordingly, no impacts related to exposing people residing or working in the project area to excessive noise levels related to private airstrips would occur. The nearest airports to the project are the Hawthorne Municipal Airport, located approximately one mile to the west of the southern terminus of the project alignment, and LAX, located approximately four miles to the west of the southern portion of the project alignment (Caltrans 2018). The proposed project is located outside of the influence area boundary of the Hawthorne Municipal Airport; however, a small portion of the proposed project is within the influence area boundary of LAX (County of Los Angeles 2003). Based upon the most recent California State Airport Noise Standards Quarterly Report (May 1, 2019) the proposed project alignment between West 96th Street and West 104th Street is located within the 65 dBA CNEL noise contour for LAX (Los Angeles World Airports 2019). During construction, workers would utilize hearing protection on the worksite as a routine measure, and thus would not be exposed to excessive aircraft noise. Therefore, the project would not expose people residing or working in the project area to excessive noise related to public airports. A less than significant impact would occur.

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Los Angeles World Airports. 2019. Los Angeles International Airport, 1Q19, California State Airports Noise Standards Quarterly Report. LAWA Noise Management. May 1, 2019. Accessed June 20, 2019.

3.14 Population and Housing

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

a) 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 would include the replacement of 23,300 feet of an existing underground water trunk line and approximately 4,495 feet of water distribution mainline. The proposed project would not include construction or operation of any new residential or commercial land uses and, therefore, would not result in a direct population increase from construction of new homes or businesses. During proposed construction activities, construction personnel would be required. The need for these workers would be accommodated within the existing and future labor market in the City and the surrounding Los Angeles metropolitan area. Under operational activities, the proposed project would be unmanned, requiring only periodic maintenance, and would therefore not require permanent employees for operation. As such, implementation of the proposed project would not result in a direct increase in the population of the area due to increases in employment opportunities.

Expanded infrastructure has the potential to indirectly induce population growth. However, the proposed project includes the replacement of 23,300 feet of an existing underground water trunk line and approximately 4,495 feet of water distribution mainline for the purposes of reducing dependence on imported water supplies and enhancing system reliability. The pipeline would be designed to meet existing water demands in the Harbor District service area and would ensure continued water service to the existing homes and businesses in that area during planned or emergency outages. As such, the proposed project would not introduce any habitable structures onto the site and is not anticipated to induce population growth either directly or indirectly. No impacts would 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 includes the replacement of 23,300 feet of an existing underground water trunk line and approximately 4,495 feet of water distribution mainline and would not displace people or involve removal of existing housing. As such, the project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. No impact would occur.

References

None.

3.15 Public Services

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☐	☒

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 could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire Protection

No Impact. The need for improvements to an existing fire facility or for a new fire facility is usually associated with a substantial population increase in a specific service area. As described under Section 3.14, the proposed project would not alter population in the project area. Construction of the proposed project could potentially reduce access for emergency vehicles near the work areas. However, all construction activities would be carried out in accordance with all applicable LADOT, LADWP, and Los Angeles Fire Department traffic controls, and emergency access standards. Additionally, emergency access would be maintained during construction, as needed. Operation of the

proposed project would be underground and would not require additional fire protection. As such, the proposed project would not alter service ratios, response times, or other performance objectives to the extent that new or expanded fire protection facilities, equipment, or staff would be required. No impact would occur.

Police Protection

No Impact. The need for improvements to an existing police station or for a new police station is usually associated with a substantial population increase in a specific service area. As described under Section 3.14, the proposed project would not alter population in the project area. Construction of the proposed project could potentially reduce access for emergency vehicles near the work areas. However, all construction activities would be carried out in accordance with all applicable LADOT, LADWP and Los Angeles Police Department traffic controls and emergency access standards. Additionally, emergency access would be maintained during construction, as needed. Operation of the proposed project would be underground and would not require additional police protection. As such, the proposed project would not alter service ratios, response times, or other performance objectives to the extent that new or expanded police protection facilities, equipment, or staff would be required. No impact would occur.

Schools

Less Than Significant Impact. The need for new or altered school facilities is typically associated with an increase in population. As described under Section 3.14, the proposed project would not alter population in the project area. However, construction of the proposed project could have the potential to temporarily interfere with access to schools in the project area, the locations of which are shown in Table 3.15-1 below.

These schools may be subject to temporary nuisance as a result of partial and full road closures during project construction; however, construction would be temporary in the vicinity of each school and access to each school would be guaranteed throughout the construction period. Operation of the project would occur underground and would not affect local schools. For these reasons, the proposed project would not alter the ability of existing schools to accommodate students to the extent that new or expanded school facilities, materials, or staff would be required and impacts would be less than significant.

Table 3.15-1. Schools Within One Mile of the Project Alignment (Potentially Impacted by Construction)

School Name	Location	Distance from Proposed Project Alignment
First Student Charter	5950 S. St. Andrews Place, Los Angeles	Immediately adjacent, to the west
Horace Man Middle School	7001 S. St. Andrews Place, Los Angeles	688 feet west
La Salle Avenue Elementary School	8715 La Salle Avenue, Los Angeles	680 feet east
Apple Academy Charter Public School	1850 W. 96th Street, Los Angeles	Immediately adjacent, to the west
Manhattan Place Elementary School	1850 W. 96th Street, Los Angeles	Immediately adjacent, to the west

Table 3.15-1. Schools Within One Mile of the Project Alignment (Potentially Impacted by Construction)

School Name	Location	Distance from Proposed Project Alignment
Teach Academy of Technologies	10045 S. Western Avenue, Los Angeles	Immediately adjacent, to the west
Teach Public Schools	1846 W. Imperial Highway, Los Angeles	Immediately adjacent, to the west
California Technical High School	1717 ½ Century Boulevard, Los Angeles	487 feet east
Teach Tech Charter High School	10616 S. Western Avenue, Los Angeles	Immediately adjacent, to the east
Washington Preparatory High School	10860 Denker Avenue, Los Angeles	0.35-mile east
Bundle of Joy Christian Academy	10963 S. Western Avenue, Los Angeles	Immediately adjacent, to the west
Ellington High School	1541 W. 110th Street, Los Angeles	0.25-mile east
Century Park Elementary School	10935 Spinning Avenue S., Inglewood	0.6-mile west
Animo South Los Angeles Charter High School	1110 S. Western Avenue, Los Angeles	Immediately adjacent, to the west
Busy Bees Wonderland School	1851 W. Imperial Highway, Los Angeles	500 feet west
Cimarron Avenue Elementary School	11559 Cimarron Avenue, Hawthorne	0.35-mile west
Los Angeles Southwest College	1600 W. Imperial Highway, Los Angeles	Immediately adjacent, to the west
Henry Clay Middle School and Animo Western Charter School	12226 S. Western Avenue, Los Angeles	Immediately adjacent, to the east

Source: Dudek 2019; Google Earth 2019

Parks

Less Than Significant Impact. The need for new or altered parks is typically associated with an increase in population. As described under Section 3.14, the proposed project would not alter population in the project area. There are seven parks and recreational facilities within an approximate one mile radius of the project alignment, as shown in Table 3.15-2 below.

Table 3.15-2. Parks Within One Mile of the Project Alignment (Potentially Impacted by Construction)

Park Name	Location	Distance from Proposed Project Alignment
Chesterfield Square Park	1950 W. 54th Street, Los Angeles	0.2-mile east
Harvard Park	1535 W. 62nd Street, Los Angeles	650 feet east
St. Andrews Recreation Center	8701 S. St. Andrews Place	700 feet east
Maggie Hathaway Golf Course	1921 W. 98th Street, Los Angeles	800 feet east
Jesse Owens Park and Swimming Pool	9651 S. Western Avenue, Los Angeles	Immediately adjacent, to the west
Rex's Baseball Batting Cage	11723 S. Western Avenue, Los Angeles	Immediately adjacent, to the west
Chester Washington Golf Course	1818 Charlie Sifford Drive, Los Angeles	Immediately adjacent, to the west

Source: Dudek 2019; Google Earth 2019

Project construction could temporarily interfere with access to public parks and facilities in the project vicinity. However, these effects would be temporary in nature and access to all parks and recreation facilities would be maintained throughout the construction period. For these reasons, the proposed project would not alter the ability of parks to serve the region to the extent that new or expanded parks would be required and this would be considered a less-than-significant impact.

Other Public Facilities

No Impact. Other public facilities include libraries and government administrative services. The need for new or altered libraries or administrative services is typically associated with an increase in population. As described under Section 3.14, the proposed project would not result in any increase in local population and no new libraries or other government administrative services or expanded facilities would be required. No impact would occur.

References

None.

3.16 Recreation

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

a) 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?

No Impact. There are seven parks and recreational facilities within proximity to the project alignment, as shown above in Table 3.15-2. The proposed project would include the replacement of an existing trunk line and mainline within a ROW. The proposed project would not result in population increases resulting in an increased need for park facilities. Project construction and operation would not increase the use of existing neighborhood and regional parks or other recreational facilities. No impact would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

No Impact. As stated above in Section 3.15a, the need for new or altered parks is typically associated with an increase in population. The proposed project would not alter population in the project area. There are seven parks and recreational facilities within proximity to the project alignment, as shown above in Table 3.15-2. Project construction could temporarily interfere with access to public parks and facilities in the project vicinity. However, these effects would be temporary in nature and access to all parks and recreation facilities would be maintained throughout the construction period. For these reasons, the proposed project would not alter the ability of parks to serve the region to the extent that new or expanded parks would be required. No impact would occur.

References

None.

3.17 Transportation

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

Western Avenue is comprised of two lanes in each direction and construction would be limited to the roadway itself. The existing trunk line in Western Avenue would remain in service during construction and interruptions in water service would not occur during the construction process. The replacement pipe would be installed within the existing public ROW parallel to the existing trunk line, immediately east of its existing alignment. The existing trunk line would be abandoned and left in place.

Four potential off-site staging areas may be used during construction; however, staging areas would be located adjacent or in close proximity to the proposed project alignment and would be utilized solely to store construction equipment and materials. The potential locations of these staging areas include (and are shown previously in Figure 2-1):

- 5975 S. Western Avenue (between 59th Place and 60th Street)
- 8731 S. Western Avenue (between 87th Street and 88th Street
- 1326 W. Imperial Highway (between Imperial Highway and 120th Street)
- 12610 S. Western Avenue (between 126th Street and 127th Street)

The following provides background information for the transportation analysis:

Project Study Area

The proposed study area extends along Western Avenue, from 59th Place to 121st Street (see Figure 1-1). The segment of Western Avenue from 59th Place to 108th Street is within the City of Los Angeles and maintained by LADOT. The segment from 108th Street to 121st Street is located in unincorporated Los Angeles County and is maintained by the County's Public Works Department. Major freeways in the project vicinity include I-105, which extends through the southern portion of the project alignment and I-110 to the east. Major cross streets include Florence Avenue, Manchester Avenue, Century Boulevard, and Imperial Highway.

Existing Conditions

Average daily traffic (ADT) volumes were collected along segments of Western Avenue in the study area. The counts were collected on a typical weekday in early June 2019 while adjacent schools were in-session. The following reports the roadway segment ADT volumes:

- Western Avenue, south of Manchester Avenue: 28,965 ADT
- Western Avenue, south of Imperial Highway: 31,132 ADT

The traffic volumes are provided in Appendix F. Characteristics of the existing street system in the study area are shown in Table 3.17-1.

Table 3.17-1 Study Area Existing Street System Summary

Roadway	Street Classification	Posted Speed Limit (MPH)[1]	# of Travel Lanes	Parking	Sidewalks	Bicycle Lanes
Western Avenue	Avenue II	35	4	Some sections/ parking restrictions[2]	Yes	Yes – Class II and Class III along some sections
Imperial Highway	Boulevard II	40	6	Some sections/ parking restrictions[2]	Yes	No
Century Boulevard	Avenue I	35	4	Some sections/ parking restrictions[2]	Yes	No
Manchester Avenue	Avenue I	35	4-6	Some sections/ parking restrictions[2]	Yes	No
Slauson Avenue	Avenue II	30	4	Some sections/ parking restrictions[2]	Yes	No

Source: City of Los Angeles 2015
Notes: MPH = miles per hour
1 No posted speed limits found; speed limits noted are design speeds from the City of Los Angeles Complete Streets Design Guide for the indicated street classifications.
2 Parking restrictions on certain days/times for street cleaning.

Transit System

The Los Angeles County Metropolitan Transportation Authority (LA Metro) provides transit service in the project study area. LA Metro Routes 757, 207, and 102 provide bus service within the study area.

Route 757 Rapid Line provides Monday through Saturday service along Western Avenue from Selma/Argyle to Crenshaw Station. Weekday service runs from 5:37 am through 6:55 pm, with service every 11 minutes, limited on weekends and holidays to every 20 minutes to half-hour. Some stops within the service area are only served every half-hour to every hour depending on the day and time.

Route 207 provides Monday through Sunday service along Western Avenue from Western/Franklin to Crenshaw Station. Weekday service runs from 4:11 am to 6:44 pm, with service every 10 minutes to quarter-hour, limited on weekends, holidays, and some times of day to every 20 minutes to half-hour.

Senate Bill 743

On September 27, 2013, SB 743 was signed into law, which creates a process to change the way that transportation impacts are analyzed under CEQA. SB 743 requires that the Governor's Office of Planning and Research (OPR) amend the CEQA Guidelines to provide an alternative to Level of Service (LOS) for evaluating transportation impacts. Once the new transportation guidelines are adopted, LOS, or automobile delay, will no longer be considered an environmental impact under CEQA. Per OPR's Final Proposed Updates to the CEQA Guidelines released on November 27, 2017, OPR proposes to add Section 15064.3 to the CEQA Guidelines, which would provide that, in most cases, vehicle miles

traveled is the most appropriate measure of transportation impacts. OPR also proposed several changes to the questions related to transportation in Appendix G of the CEQA Guidelines. First, OPR proposed to revise the question related to "measures of effectiveness" (threshold question A) so that the analysis focuses on circulation elements of city and county general plans and other land use plans governing transportation. Second, OPR proposed to delete the second question related to LOS and insert references to proposed new Section 15064.3. Third, OPR proposed to clarify the question related to design features.

The new Section 15064.3(b), "Criteria for Analyzing Transportation Impacts," states "If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate."

OPR's regulatory text indicates that a public agency may immediately commence implementation of the transportation impact guidelines, and that the guidelines shall apply statewide by January 1, 2020. The following analysis section utilizes the recently updated significance thresholds per Appendix G of the CEQA Guidelines.

Transportation Analysis

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Less Than Significant Impact. Construction would occur between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday. In the event that construction is required to extend beyond these times, extended hours permits would be required. Nighttime and weekend construction, while infrequent, may occur. Additional construction assumptions assumed in this analysis are provided in Section 2.3 of this IS/MND.

Construction Trip Generation

It is assumed that both open trench pipe installations and pipe jacking installations would occur concurrently and in multiple locations within the proposed project's study area. Based on the work schedule, workers would not be traveling during the AM or the PM peak periods. However, to provide a conservative analysis, workers were assumed to arrive during the AM peak hour and leave the site during the PM peak hour. The vendor and haul trucks were assumed to be distributed evenly throughout the work shift. Passenger car equivalent (PCE) factors were used to account for the project's truck traffic and provide a more realistic measurement in terms of the impact of project-related truck traffic. All truck trips were converted to PCE trips using a factor of 2.0 or 3.0. Table 3.17-2 provides the project trip generation for the peak construction phase.

Table 3.17-2 Peak Construction Phase Trip Generation

Vehicle Type	Daily Quantity	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	*Out*	*Total*	*In*	*Out*	*Total*
Trip Generation								
Open Trench Pipe Installation								
Construction Workers	16 workers	32	16	0	16	0	16	16
Vendor Trucks	10 trucks	20	1	1	2	1	1	2
Haul Trucks	20 trucks	40	2	2	4	2	2	4
Subtotal Open Trench		*92*	*19*	*3*	*22*	*3*	*19*	*22*
Pipe Installation and Backfilling								
Construction Workers	8 workers	16	8	0	8	0	8	8
Vendor Trucks	0 trucks	0	0	0	0	0	0	0
Haul Trucks	0 trucks	0	0	0	0	0	0	0
Subtotal Pipe Installation/ Backfilling		*16*	*8*	*0*	*8*	*0*	*8*	*8*
Total		**112**	**27**	**3**	**30**	**3**	**27**	**30**
Trip Generation with PCE								
Open Trench Pipe Installation								
Const Workers (1.0 PCE)	16 workers	32	16	0	16	0	16	16
Vendor Trucks (2.0 PCE)	10 trucks	40	2	2	4	2	2	4
Haul Trucks (3.0 PCE)	20 trucks	120	6	6	12	6	6	12
Subtotal Open Trench (w/ PCE)		*192*	*24*	*8*	*32*	*8*	*24*	*32*
Pipe Installation and Backfilling								
Const Workers (1.0 PCE)	8 workers	16	8	0	8	0	8	8
Vendor Trucks (2.0 PCE)	0 trucks	0	0	0	0	0	0	0
Haul Trucks (3.0 PCE)	0 trucks	0	0	0	0	0	0	0
Subtotal Pipe Installation/ Backfilling (w/ PCE)		*16*	*8*	*0*	*8*	*0*	*8*	*8*
Total (w/ PCE)		**208**	**32**	**8**	**40**	**8**	**32**	**40**

Source: Dudek 2019
Notes: PCE = passenger car equivalent

As shown in Table 3.17-2, the project is expected to generate approximately 112 daily trips during the peak period of construction, with 30 AM peak-hour trips (27 inbound and 3 outbound), and 30 PM peak-hour trips (3 inbound and 27 outbound). With the application of PCE factors to truck trips, the proposed project would generate 208 PCE daily trips, with 40 PCE trips during the AM peak hour (32 inbound and 8 outbound) and 40 PCE trips during the PM peak hour (8 inbound and 32 outbound).

The proposed project would generate less than 500 ADT, and hence would not require a traffic impact analysis per LADPW Transportation Impact Analysis Report Guidelines (December 2013). Per LADOT Traffic Impact Study Guidelines (December 2016), a Traffic Impact Study is required for projects that add over 43 or more permanent peak hour vehicle trips. Also, the Los Angeles County Congestion Management Program (CMP) requires evaluation

of all CMP arterial monitoring intersections where the project would add 50 or more new peak-hour trips. However, due to the temporary nature of the project, there will be no permanent trips that will be added as a result of construction activities, and those temporary trips would be less than 500 ADT, and less than 43 peak hour trips. Therefore, per County and LADOT standards, a traffic analysis would not be required as the project would generate relatively low traffic volumes, and those volumes would only be generated for a temporary period.

Pipe Installation

Partial block closures would be necessary for installing the new pipeline and its appurtenances. Pipe jacking/tunneling installation would be used for approximately 2,926 lineal feet of pipe installation (60th Street, Florence Avenue, Manchester Avenue, Imperial Highway and 105 Freeway), while open trenching would be utilized for the remaining 20,281 feet of pipe installation. The general process for both open-trench construction and pipe jacking/tunneling consists of utility clearance, site preparation, excavation, shoring, pipe installation, backfilling, and work site street restoration. Construction would require on-site and off-site staging areas for temporary storage of supplies, materials, and equipment.

Construction activity may block parking, portions of travel lanes or full blocks, restrict access to driveways, disrupt access for emergency providers, and result in potential safety issues and nuisances for vehicular traffic, pedestrians, bicyclists, and transit riders along Western Avenue, Imperial Highway and some of the intersecting cross streets. Potential safety issues and nuisances, as well as appropriate mitigation, are discussed in Section 3.17(c) and 3.17(d). The Mobility Plan 2035 element of the City of Los Angeles General Plan details the existing transit, roadway, bicycle, and pedestrian facilities as well as plans and policies to implement enhanced facilities throughout the City. Although temporary inconveniences and conflicts may occur for vehicular traffic, pedestrians, bicyclists, and transit riders during the construction period, no changes would be made to the plans and policies detailed in the Mobility Plan 2035.

Permanent Operations

Additionally, no permanent workers would be required to operate or maintain the proposed project as operational activities would be limited to scheduled maintenance, repair, and inspection. These activities would be minimal and would be similar to those that occur throughout LADWP's service area under existing conditions. Activities associated with long-term operations and maintenance of the proposed project would be minimal. Therefore, the proposed project would not conflict with transportation plans and policies during its permanent operation. Impacts are therefore less than significant.

The proposed project would not increase roadway capacity, generate additional traffic or change traffic patterns that could cause an impact to the circulation system including transit, roadway, bicycle, and pedestrian facilities. Therefore, proposed project would not conflict with adopted policies, plans, or programs regarding transit, bicycle, and pedestrian facilities, and impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

CEQA Guidelines Section 15064.3, subdivision (b), focuses on specific criteria (vehicle miles traveled (VMT)), for determining the significance of transportation impacts. It is further divided into four subdivisions: (1) land use projects, (2) transportation projects, (3) qualitative analysis, and (4) methodology. The proposed project is a potable water pipeline project that would generate temporary construction-related traffic and nominal operations and maintenance traffic. This project would be categorized under subdivision (b)(3), qualitative analysis. Subdivision (b)(3) recognizes that lead agencies may not be able to quantitatively estimate VMT for every project type. In those circumstances, this subdivision encourages lead agencies to evaluate factors such as the availability of transit, proximity to other destinations, and other factors that may affect the amount of driving required by the project.

Less Than Significant Impact. As described previously, construction of the proposed project would result in a temporary increase in local traffic as a result of construction-related workforce traffic and material deliveries, and construction activities occurring within the public right-of-way. The primary off-site impacts from the movement of construction trucks would include short-term and intermittent effects on traffic operations because of slower movements and larger turning radii of delivery and haul trucks compared to passenger vehicles. However, the majority of the proposed pipeline is located close to major arterials and freeways, including Imperial Highway, Western Avenue, I-105, and I-110, and travel on local streets would be minimized.

Potential increases in vehicle trip generation as a result of project construction would vary based on the construction activity, location, equipment needs, and other factors. However, once construction is completed, construction-related traffic would cease and VMT levels would return to pre-project conditions. Therefore, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). Impacts would 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)?

Less Than Significant with Mitigation Incorporated. During construction, lane closures, roadway closures, detours, driveway blockages, loss of parking, and disruptions to traffic, transit, bicycle, and pedestrian movement would occur in and around the project alignment. This may result in a potentially significant safety hazard to construction workers and/or the public; therefore, mitigation would be required. To minimize these potential safety hazards, mitigation measure MM-TRAF-1 would be implemented.

MM-TRAF-1 Construction Traffic Control Plan. Prior to the start of any construction-related work or encroachment, the Los Angeles Department of Water and Power (LADWP) shall develop and

implement a Traffic Control Plan. The Traffic Control Plan shall include but will not be limited to the following measures:

1. All construction activities shall be conducted in accordance with the Standard Specifications for Public Works Construction (Greenbook), traffic control plans designed by the City of Los Angeles Department of Transportation (LADOT) and LADWP, California Manual on Uniform Traffic Control Devices, and the Work Area Traffic Control Handbook Manual to allow the least impacts to levels of service, traffic safety, and emergency access to the site during construction.
2. LADWP shall install temporary equipment necessary for safe and efficient traffic control including changeable message signs, delineators, arrow boards, flagmen, etc.
3. LADWP shall provide advance notification of the proposed construction work area limits and lane closure times to transit services and all local emergency service providers (police, fire, ambulance, etc.).
4. Qualified flagmen shall be posted at each work site to direct construction traffic entering and exiting the site and/or to direct large construction-related vehicles to/from the work areas.
5. Two-way travel shall always be provided along the affected commercial corridors of Imperial Highway, and Western Avenue throughout construction. During construction periods with reduced lane capacity at impacted intersections, LADOT/LADWP shall implement traffic control measures including the provision of detour routes around the impacted intersections. The detour routes shall include the use of adjacent streets such as Normandie Avenue, Van Ness Avenue, Crenshaw Boulevard, and Century Boulevard.
6. The Traffic Control Plans shall also include detours and safe passage areas for bicyclists and pedestrians in the impacted work areas.

The construction of the proposed project would be conducted in accordance with the Standard Specifications for Public Works Construction (Greenbook), traffic control plans designed by LADOT/LADWP, and the WATCH Manual to allow acceptable LOS, traffic safety, and emergency access to the site during construction. With implementation of MM-TRAF-1, impacts related to hazards during construction would be reduced to less than significant levels. Once operational, the maintenance, repair, and inspections for the proposed project would be similar in nature to what is currently occurring for the existing pipelines in the project area. Therefore, no new impacts would occur. As such, impacts would be limited to the construction period and would be less than significant with mitigation incorporated.

d) Would the project result in inadequate emergency access?

Less Than Significant with Mitigation Incorporated. As previously discussed, construction vehicles would temporarily access the project site via Western Avenue, Imperial Highway, Century Boulevard and other local roadways. The proposed project would have the potential to obstruct portions of these roadways during construction. However, incorporation of a Traffic Control Plan, as required by MM-TRAF-1, and associated traffic control plans and adherence to the Greenbook and WATCH Manual would ensure that any temporary impacts to emergency vehicle flow and/or ingress/egress to properties along the alignment are coordinated in advance with emergency service providers and law enforcement to ensure that provision of sufficient emergency service, access, and evacuation can occur during construction if necessary. Implementation of a Traffic Control Plan with applicable traffic control plans and adherence to the Greenbook and WATCH Manual would reduce impacts to emergency access to less than significant levels. Once operational, the proposed project would not include any impediments to emergency access. Additionally, vehicular trips for maintenance, repair, and inspection during operation of the pipeline would be minimal and would be similar in quantity and nature to those currently occurring in the area for other LADWP pipelines. Therefore, no new impacts to emergency access would occur during operation. As such, impacts would be limited to the construction period and would be less than significant with mitigation incorporated.

References

County of Los Angeles. 1997. Traffic Impact Analysis Report Guidelines. https://dpw.lacounty.gov/Traffic/Traffic%20Impact%20Analysis%20Guidelines.pdf.

City of Los Angeles. 2015. Citywide General Plan Circulation System, Map A8 – South Subarea. December 2015. Accessed July 9, 2019. https://navigatela.lacity.org/common/mapgallery/pdf/planning/mobility/mobility_maps_A1_A9.pdf.

Metro (Los Angeles County Metropolitan Transportation Authority). 2010. 2010 Congestion Management Program for Los Angeles County. Accessed July 9, 2019. http://www.metro.net/projects/congestion_mgmt_pgm/.

3.18 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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:				
i) 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	☐	☐	☒	☐
ii) 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.	☐	☒	☐	☐

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:

i) 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. As described under Section 3.5 of this IS/MND, a CHRIS records search was conducted for the proposed project area. No tribal cultural resources were identified as a result of the records search. In a SLF results letter dated May 23, 2019, the NAHC stated that the SLF search was completed with negative results. Additionally, no specific tribal cultural resources were identified by California Native American tribes as part of LADWP's AB 52 notification and consultation process (see Section 3.18(a)(ii) below for a description of this process). Therefore, the proposed project would not adversely affect tribal cultural resources that are listed or eligible for listing in the state or local register. Impacts would be less than significant.

ii) 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 with Mitigation Incorporated. There are no resources in the project area that have been determined by the lead agency to be significant pursuant to the criteria set forth in Public Resources Code Section 5024.1. Further, no specific tribal cultural resources were identified in the project area by the NAHC, by California Native American tribes, or by LADWP as part of the AB 52 notification and consultation process. In June 2017, LADWP sent notification of the proposed project to all California Native American tribal representatives that have requested project notifications from LADWP pursuant to AB 52 and that are on file with the NAHC as being traditionally or culturally affiliated with the geographic area. To date, LADWP has not received any requests for consultation.

In the event that unknown subsurface tribal cultural resources are uncovered during construction ground disturbance, and such resources are not identified and avoided or properly treated, a potentially significant impact could result. As such, mitigation measure MM-TCR-1 has been set forth to protect tribal cultural resources, in the event that any are discovered during project construction. Upon implementation of MM-TCR-1, impacts would be less than significant with mitigation incorporated.

MM-TCR-1 **Inadvertent Discovery of Tribal Cultural Resources.** While no tribal cultural resources (TCRs) have been identified that may be affected by the project, the following approach for the inadvertent discovery of TCRs has been prepared to ensure there are no impacts to unanticipated resources. Should a potential TCR be encountered, construction activities near the encounter shall be temporarily halted within 50 feet of the discovery and the Los Angeles Department of Water and Power (LADWP) shall be notified. LADWP will notify Native American tribes consulting under Assembly Bill (AB) 52. If the potential resource is archaeological in nature, appropriate management requirements shall be implemented as outlined in Mitigation Measure MM-CUL-1. If LADWP determines that the potential resource is a TCR (as defined by California Public Resources Code, Section 21074), tribes consulting under AB 52 shall be provided a reasonable period of time, typically 5 days from the date that a new discovery is made, to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered TCRs. Depending on the nature of the resource and tribal recommendations, review by a qualified archaeologist may be required. Implementation of proposed recommendations will be made based on the determination of LADWP that the approach is reasonable and feasible. All activities shall be conducted in accordance with regulatory requirements.

References

None.

3.19 Utilities and Service Systems

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

a) ***Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

No Impact.

Existing Utilities

The proposed project would include the replacement of 23,300 feet of an existing underground water trunk line and approximately 4,495 feet of water distribution mainline within the Western Avenue ROW between 59th Place in the City and 121st Street in unincorporated LA County. Other utilities, including other water pipelines, natural gas pipelines, and street light conduits are present underneath the roadways along the project alignment while overhead power lines and storm drain inlets are present along the surface of the streets. As described in Section 2.3, construction would include utility clearance/mark out activities and any subsurface utilities would be supported and protected as excavation and shoring occurs. Gutters and storm drain inlets would be protected where necessary through compliance with stormwater best management practices such as the SWPPP outlined in Section 3.10. Where trenching activities are situated adjacent to existing utilities, manual excavation may be used to ensure that such utilities are not inadvertently damaged. As such, existing utilities would be protected and maintained. The construction activities associated with supporting utilities during excavation or manually excavating around utilities are included as part of the project and, therefore, have been analyzed for their potential environmental effects in this IS/MND. As substantiated throughout this document, no impacts would occur as a result of the proposed project.

New/Expanded Facilities

Wastewater Facilities

The proposed project would include the replacement of 23,300 feet of an existing underground water trunk line and approximately 4,495 feet of water distribution mainline and would not entail the construction of any habitable structures that would result in long-term sanitary sewer discharges. Non-stormwater discharges would be added to the local municipal sewer system during construction (hydrostatic testing, pipeline disinfection, pipeline flushing, and trench dewatering). However, such discharges would be temporary and periodic in nature and would comingle with wastewater in the municipal sewer collection system prior to being treated at a regional wastewater treatment plant. Before making such discharges, especially related to pipeline disinfection, LADWP would coordinate with Los Angeles Sanitation and Environment (LASAN) to ensure that the sewer conveyance system would not be unduly burdened with regard to either capacity or water quality (e.g., disinfection agents and/or by-products). LADWP would obtain a SCAR from LASAN, which would specify an approved maximum allowable discharge rate. LADWP would not release construction-related discharges to the sewer system at a rate that exceeds the specifications in the SCAR. Adherence to those specifications would ensure that the sewer system and downstream wastewater treatment facilities are not unduly burdened and that existing capacities are not exceeded as a result of the project. As such, the proposed project would not require or result in the need for new wastewater facilities or expansion of existing facilities. No impact would occur.

Water Facilities

The proposed project includes the replacement of 23,300 feet of an existing underground water trunk line and approximately 4,495 feet of water distribution mainline and, as such, is a water facility improvement project. The environmental effects of constructing and operating the new pipeline are analyzed for their potential environmental effects in this IS/MND. As substantiated throughout this document, no significant, adverse environmental effects would occur as a result of the proposed project.

Proposed project construction would result in temporary increases in water use in the project area, since water would be required for dust control, concrete mixing, hydrostatic testing, and pipeline disinfection. However, the project's water needs would be limited to the construction period. Temporary, minor increases in water use in the project area would not result in the need for new or expanded water and/or wastewater facilities. During operation, the new pipeline would operate below ground. The project would convey existing potable water sources and would not require new water treatment facilities. As such, operation of the project would not require or result in the need for new water facilities or expansion of existing facilities. No impact would occur.

Stormwater Drainage Facilities

Stormwater drainage facilities are provided throughout the project area. During construction, hydrostatic testing, pipeline disinfection, dewatering, and pipeline flushing could result in temporary increases in discharges to the stormwater drainage system. The hydrostatic test water, disinfectant water, extracted groundwater, and flushed water would either be discharged to the stormwater or sewer systems. If this water is discharged to the storm drain system, the project could cause a temporary increase in runoff water entering the drainage systems in the project area. However, because dewatering, disinfection, flushing, and hydrostatic testing activities would be temporary and spread out along the project alignment, they would not result in a need for new or expanded stormwater drainage facilities. Once operational, the proposed project would be part of a closed water supply system and would not affect stormwater drainage facilities. For these reasons, the proposed project would not be anticipated to require, or indirectly result in, the construction of new stormwater drainage facilities or the expansion of existing facilities. No impact would occur.

Electric Power and Natural Gas Facilities

The proposed project would involve installation of a new water pipeline and would not involve habitable structures that would require new or expanded electric power and/or natural gas facilities. The proposed regulator station, located at the intersection of Manchester Avenue and Western Avenue, would require power for lighting and operation of the sump, ventilation equipment and flow data recording systems; however, the required operational power would be similar to that required under existing conditions and would not require new or expanded power generation facilities. Therefore, no new or expanded electric power or natural gas facilities would be required, and no impacts would occur.

Telecommunications Facilities

The proposed project includes the replacement of 23,300 feet of an existing underground water trunk line and approximately 4,495 feet of water distribution mainline and would not involve the construction of any habitable structures that would require new or expanded telecommunications facilities. Furthermore, as explained in Section 3.14, the proposed project would not result in substantial population growth. As such, the project would not require new or expanded telecommunications facilities. Further, the proposed project is in a largely developed area. Therefore, no impacts related to the need for new or expanded telecommunication facilities would occur.

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. A significant impact may occur if a project were to increase water consumption to such a degree that new water sources would need to be identified, or that existing resources would be consumed at a pace greater than planned for by purveyors, distributors, and service providers. LADWP provides potable water to the City, and the proposed project would be used to convey that water to portions of LADWP's Harbor District service area. The LADWP's 2015 Urban Water Management Plan (UWMP) provides normal year, single dry year, and multiple dry year supply-and-demand analysis for LADWP's domestic water service area. As shown in the 2015 UWMP, LADWP's supplies can meet demand for multiple dry years (LADWP 2015).

Water needs of the project during construction would be relatively minor and temporary. Water would be used for dust control, concrete mixing, hydrostatic testing, and pipeline disinfection. Water use during construction would be negligible relative to regional supplies and would be typical of similar water conveyance projects. Existing water resources are sufficient to meet those needs. Following construction, the proposed project would continue to convey potable water to the Harbor District and the proposed improvements would enhance the reliability of the water distribution system. Therefore, impacts related to water supply would be less than significant.

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?

No Impact. During construction, hydrostatic testing, pipeline disinfection, pipeline flushing, and dewatering could result in temporary increases in wastewater in the project area. As explained in Section 3.10(a), the hydrostatic test water, disinfectant water, flushing water, and extracted groundwater would either be discharged to the storm drain or sewer system. If this water is discharged to the sewer system, the project could cause a temporary increase in wastewater entering the sewer systems in the project area. However, because these discharges would be temporary and would end once construction is complete, they would not adversely affect

wastewater treatment capacity. During operation, the project would not generate wastewater. As such, the project would not result in a long-term demand for wastewater treatment services and no impacts to wastewater treatment capacity would 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. The proposed project would be required to comply with all applicable local and state regulations related to solid waste. Construction associated with the proposed project would generate minor amounts of solid waste. Solid waste would primarily consist of soils and asphalt from the proposed trenching and potential pipe jacking activities. Once construction is complete, the project would not require solid waste disposal.

Per the California Green Building Standards Code, 65% of construction and demolition waste must be diverted from landfills. As such, at least 65% of all construction and demolition debris from the site would be diverted. Any hazardous wastes that are generated during construction activities would be managed and disposed of in compliance with all applicable federal, state, and local laws outlined in Section 3.9. At the local level, the City has a Citywide Construction and Demolition Waste Recycling Ordinance, which requires that all construction and demolition waste generated within City limits be taken to City-certified construction and demolition waste processors (City of Los Angeles 2010). All haulers and contractors responsible for handling construction and demolition waste must obtain a private waste hauler permit from LASAN. LADWP and/or its construction contractor would be required to adhere to the requirements of the Citywide Construction and Demolition Waste Recycling Ordinance.

As described in Section 2.3 of this document, pavement that is removed from the project site would be recycled, reused as pavement base material, or transported to an appropriate facility for recycling or disposal. Soils would be hauled off site. During construction activities, approximately 100,000 CY of excavated material would be removed and hauled off. It is anticipated that haul trucks would deliver the export to the nearest facility that processes construction and demolition debris. Most likely, haul trucks would deliver export to either Scholl Canyon Landfill or Savage Canyon Landfill. Scholl Canyon Landfill is located approximately 18 roadway miles northeast of the project alignment in the City of Glendale; Scholl Canyon Landfill has a maximum permitted throughput of 3,400 tons per day, a remaining capacity of 9,900,000 CY and an expected cease operation date of 2030 (CalRecycle 2019a). Savage Canyon Landfill is located approximately 25 roadway miles east of the project alignment in the City of Whittier; Savage Canyon Landfill has a maximum permitted throughput of 3,350 tons per day, a remaining capacity of 19,337,450 CY, and an anticipated cease operation date of 2055 (CalRecycle 2019b). As such, regional landfills are expected to have sufficient capacity to accommodate the construction debris that would be generated by the proposed project. Specifically, the project's total

construction waste generation would represent a nominal 0.3% of the landfills' combined remaining capacity.[9] As such, the amount of debris generated during construction is anticipated to be minimal and is anticipated to be accommodated by landfills in the area. The proposed project is a potable water trunk line replacement project, which would not generate solid waste upon operation.

For these reasons, the proposed project would not generate waste in excess of state or local standards or in excess of the capacity of local infrastructure and would not impair the attainment of solid waste reduction goals. Impacts would be less than significant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. As described under Section 3.19(d), the proposed project would comply with the City's Citywide Construction and Demolition Waste Recycling Ordinance as well as state requirements for construction and demolition waste. In addition to the California Green Building Standards Code's requirements for recycling construction and demolition waste, the state has set a goal of 75% recycling, composting, and source reduction of solid waste by 2020. To help reach this goal, the state has adopted AB 341 and AB 1826. AB 341 is a mandatory commercial recycling bill, and AB 1826 pertains to mandatory organic recycling. Waste generated by the proposed project would enter the City's waste stream but would not adversely affect the City's ability to meet AB 341 or AB 1826, since the proposed project's waste generation would be limited to the temporary construction period and would represent a nominal percentage of the waste created within the City. Once construction is complete, the proposed project would not generate solid waste. Therefore, impacts related to compliance with solid waste regulations would be less than significant.

References

CalRecycle (California Department of Resources Recycling and Recovery). 2019a. SWIS Facility Detail: Scholl Canyon Landfill [online database]. Accessed, November 22, 2019. https://www2.calrecycle.ca.gov/swfacilities/Directory/19-AA-0012.

CalRecycle (California Department of Resources Recycling and Recovery). 2019b. SWIS Facility Detail: Savage Canyon Landfill [online database]. Accessed, November 22, 2019. https://www2.calrecycle.ca.gov/swfacilities/Directory/19-AH-0001.

[9] 100,000 CY total C&D waste / 29,237,450 CY total remaining capacity = 0.0034 * 100 = 0.34%

City of Los Angeles. 2010. Citywide Construction and Demolition Waste Recycling Ordinance. Accessed, April 1, 2019. https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s/s-lsh-wwd-s-r/s-lsh-wwd-s-r-cdr;jsessionid=NLDZnCQkauSuJT549_vxyv21wYq1qSST1FBqqKJiyjnQrcsrO4gg!-621722827!-481453323?_afrLoop=1337030195381546&_afrWindowMode=0&_afrWindowId=null&_adf.ctrl-state=9piex3cjs_1#!%40%40%3F_afrWindowId%3Dnull%26_afrLoop%3D1337030195381546%26_afrWindowMode%3D0%26_adf.ctrl-state%3D9piex3cjs_5.

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3.20 Wildfire

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

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. As described in Section 3.9(g), the proposed project alignment is located underground within an urbanized area comprising industrial, commercial and low-density residential development with little potential for wildland fires. Additionally, the project is not within, or in close proximity to, a VHFHSZ as mapped by the City of Los Angeles (City of Los Angeles 2019).

There are four designated disaster routes in the project vicinity: The Rosa Parks (I-10) Freeway to the north, I-110 to the east, I-105 to the south and Western Avenue itself (City of Los Angeles 2008). Project construction would occur in the Western Avenue ROW; however two-way travel would be maintained on Western Avenue during construction and access to the designated disaster routes would be maintained.

As further explained in Section 3.17, incorporation of a Construction Traffic Control Plan would ensure that any temporary impacts to emergency vehicle flow and/or ingress/egress to properties along the alignment are coordinated in advance with emergency service providers and law enforcement to ensure that provision of sufficient emergency service, access, and evacuation can occur during construction if necessary. At the end of construction, the new trunk line would be located underground. Minor appurtenant structures may protrude above grade near the alignment; however, these structures would be small in size and would not obstruct emergency response or evacuation. The City's Local Hazard Mitigation Plan would proceed and be implemented with or without the proposed project. As such, impacts to emergency response plans or emergency evacuation plans would be less than significant.

b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less Than Significant Impact. As described in 3.20(a), the proposed project alignment is located within a highly urbanized environment comprising industrial, commercial and low-density residential development with little potential for wildland fires. Additionally, the project is not within a VHFHSZ as mapped by the City of Los Angeles (City of Los Angeles 2019).

The proposed project includes the replacement of 23,300 feet of an existing underground water trunk line and approximately 4,495 feet of water distribution mainline. Construction work would be limited to Western Avenue, an existing paved roadway that is surrounded by urban development. Vegetation along the project alignment is minimal and is limited to street trees and private landscaping in yards. As such, construction activities associated with the proposed project would be unlikely to exacerbate wildfire risks. Due to the location of the proposed project within an urbanized area, proposed project construction is unlikely to expose workers to increased risk of wildfire hazards.

Operation of the new trunk line and main lines would occur passively below ground with no potential to cause or exacerbate wildfires or their impacts to people or structures in the vicinity of the proposed project alignment. The proposed project would not have any occupants or permanent on-site workers. For these reasons, the proposed project is unlikely to exacerbate wildfire risks and would not result in exposure of project occupants to wildfire-related hazards. Impacts would be less than significant.

c) 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?

Less Than Significant Impact. The proposed project includes the replacement of 23,300 feet of an existing underground water trunk line and approximately 4,495 feet of water distribution mainline. As described in Section 3.20(b), construction projects have the potential to exacerbate fire risk. However, as explained above, the proposed project is located in a highly urbanized environment. Construction work would be limited to existing paved roadways that are surrounded by urban development. Vegetation along the project alignment is minimal and is limited to street trees and private landscaping in yards. As such, construction activities associated with the proposed project would be unlikely to exacerbate wildfire risks. Due to the type of project (a potable water trunk line) and the project location (a highly urbanized area southwest of downtown Los Angeles), the proposed project would not require new roads, fuel breaks, emergency water sources, power lines, or other utilities for construction or operation. During operation, the proposed project would operate passively below ground. Operational activities would be limited to scheduled maintenance and repair. Maintenance activities would be minimal and would be similar to those that occur throughout LADWP's service area under existing conditions. Maintenance would include exercising valves and replacing or repairing worn appurtenances to ensure proper performance over the life of the facilities. No permanent workers would be required to operate or maintain the proposed project. These activities would have minimal to negligible environmental impacts and are not expected to exacerbate fire risk in the area. For these reasons, impacts would be less than significant.

d) 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?

Less Than Significant Impact. The proposed project would involve installation and operation of a potable water trunk line and mainlines within Western Avenue's ROW between 59th Place in the City and 121st Street in unincorporated Los Angeles County. The proposed project would not involve construction or operation of occupiable structures, nor would it increase population such that the number of occupiable structures in the project area would increase. While additional workers would be temporarily present in the project area during construction, they would not be subject to undue risks associated with flooding or landslides, relative to other areas in the City or region. As explained in Section 3.7(a)(iv), the project is within a DOC CGS "Area with Landslide Reports or Maps" due to its proximity to the Baldwin Hills. The proposed alignment is characterized by flat, even, paved terrain that would not be susceptible to landslides. The nearest landslide area is Baldwin Hills, recorded as such due to residential

damage caused by landslides associated with torrential rain between 1969 and 1980 (DOC 1982). While this area could be prone to landslides or flooding, it is located approximately three miles west of the project alignment and is separated from the project alignment by urban development and several roadways. Furthermore, the hillside is generally covered with structures and vegetation. As such, the potential for the Baldwin Hills to produce landslides with the potential to affect the project alignment is low.

As explained in Section 3.10, the proposed project would not result in permanent drainage changes or significant runoff with the potential to cause or exacerbate flooding or landslides. As explained in Section 3.20(b), the proposed project is not located within a VHFHSZ and would not increase the risk of fire in the area. For these reasons, proposed project impacts involving exposure of people or structures to significant risks from flooding or landslides resulting from runoff, post-fire slope instability, and/or drainage changes would be less than significant.

References

City of Los Angeles. 2008. Disaster Routes Map. Accessed, March 29, 2019. https://dpw.lacounty.gov/dsg/DisasterRoutes/city.cfm.

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DOC (Department of Conservation). Division of Mines and Geology. 1982. Slope Stability and Geology of the Baldwin Hills, Los Angeles, California. Accessed, March 28, 2019. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_152/SR_152_Text.pdf.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐
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)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

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?

Less Than Significant with Mitigation Incorporated. As stated in Section 3.4, Biological Resources, the proposed project is located within a developed urban area and contains no sensitive habitat areas. The proposed project would not degrade the quality of the environment, as the proposed project would be placed below ground, under existing streets and public rights-of-way.

The project would involve excavation and grading activities, which could potentially unearth previously unknown buried cultural resources. Such actions could unearth, expose, or disturb subsurface archaeological, historical, or Native American resources that were not observable on the ground surface. However, with the incorporation of Mitigation Measures MM-CUL-1, MM-CUL-2, and MM-TCR-1, potential impacts to cultural resources that represent major periods of California history or prehistory would be less than significant. As such, impacts would be less than significant with mitigation incorporated.

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)?

Less Than Significant with Mitigation Incorporated. As discussed in the respective issue areas, the proposed project would not result in any significant, immitigable effects to environmental resources. The implementation of the identified project-specific mitigation measures and compliance with applicable codes, ordinances, laws, and other required regulations would reduce the magnitude of any impacts associated with proposed project construction activities to a level of less than significant. For the reasons further set forth below, impacts would not be cumulatively considerable.

Related projects with the potential to contribute to cumulative impacts would be those projects occurring concurrent with and in proximity to the proposed project. Such projects, as may be determined at this level of planning, would be other linear utility projects being undertaken by LADWP in the proposed project area at the time of construction activities and would also include development projects in the area that would create similar construction effects. The impacts of these projects, as well as those of the proposed project (as discussed above), would be temporary in nature, and would generally be limited to the area in which construction activities are occurring. Given that related linear utility projects would be coordinated by LADWP, it can be anticipated that LADWP would initiate construction of these related projects in a manner such that construction activities associated with different projects would occur either at different times or at sufficient distance from one another, avoiding cumulative effects relative to air quality, noise, and traffic.

With regard to air quality, the SCAQMD has established incremental emissions thresholds to determine whether a project will contribute to significant impacts. Because the proposed project would contribute emissions at rates well below SCAQMD significance thresholds, and given the aforementioned assumption that related LADWP projects would be coordinated as to avoid cumulative impacts, it is anticipated that the air quality impacts of the proposed project and other related projects would not be cumulatively considerable.

Noise impacts, similar to those related to air quality, would be dependent on the timing and location of related project construction in conjunction with the construction of the proposed project. As such, assuming that LADWP would phase such projects to avoid, to the extent feasible, concurrent construction of linear utilities in any one location, it can be concluded that noise impacts of the proposed project and related projects would not result in noise impacts that are cumulatively considerable. As explained in Section 3.13 of this IS/MND, noise from project construction would be greatest at the properties approximately 30 feet from the project alignment. As such, cumulative projects with the potential to combine with the noise effects of the proposed project would generally be limited to those located along the project alignment. The possibility of proposed project construction coinciding with construction of this project is unlikely. In the event that construction were to coincide, the overlap would be brief, since proposed project construction would not generally remain in a single location for more than a few days. The transitory nature of this project's construction process would

limit the potential for cumulative noise effects to occur from stationary development projects (e.g., a development of a multi-family building). Furthermore, implementation of MM-NOI-1 would limit noise produced by the proposed project to the extent practicable, and implementation of MM-NOI-2 would ensure that local residents are informed of the construction schedule, duration, and progress. Additionally, other development projects in the project area have been or would be subject to environmental review pursuant to state law. If potentially significant noise impacts are identified, appropriate mitigation would be applied to the related projects. The combination of the transitory nature of this project, implementation of project-specific mitigation, and regulatory and/or project-specific requirements that would be applied to related projects would ensure that cumulatively significant noise impacts would be less than significant with mitigation incorporated.

With regard to traffic, construction activities would generate truck traffic and vehicular traffic associated with construction workers. Construction activities would also result in lane closures and/or block closures along affected streets. Project-level impacts resulting from the proposed project's construction traffic would be temporary and less than significant with the implementation of MM-TRAF-1. Traffic impacts of the proposed project, in conjunction with those of related projects, would be minimized by coordination with LADOT, which is required to maintain proper levels of service and the overall function of the City's transportation network. Given that all related projects are subject to review by LADOT (when traffic system components or function are affected), LADOT would require that LADWP coordinate the proposed project such that the traffic system and levels of service in any one area are maintained to the extent feasible. Coordination with LADOT in conjunction with implementation of MM-TRAF-1 would preclude the possibility of cumulative traffic impacts resulting from the proposed project and related project construction activities. Based on the above, the cumulative traffic effects of the proposed project would be less than significant with mitigation incorporated.

In summary, the proposed project's cumulative impacts would be less than significant with mitigation incorporated.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant with Mitigation Incorporated. Implementation of the proposed project would not result in any impacts that are significant and unavoidable or cumulatively considerable. The implementation of the mitigation measures set forth herein would reduce all potential impacts to less-than-significant levels. Once operational, the proposed project would provide a reliable and safe water supply for existing LADWP water service customers within the Harbor District service zone. Therefore, upon implementation of the mitigation measures identified in this IS/MND, the proposed project would not result in impacts that would cause substantial adverse effects on human beings, either directly or indirectly. Therefore, impacts would be less than significant with mitigation incorporated.

References

None.

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