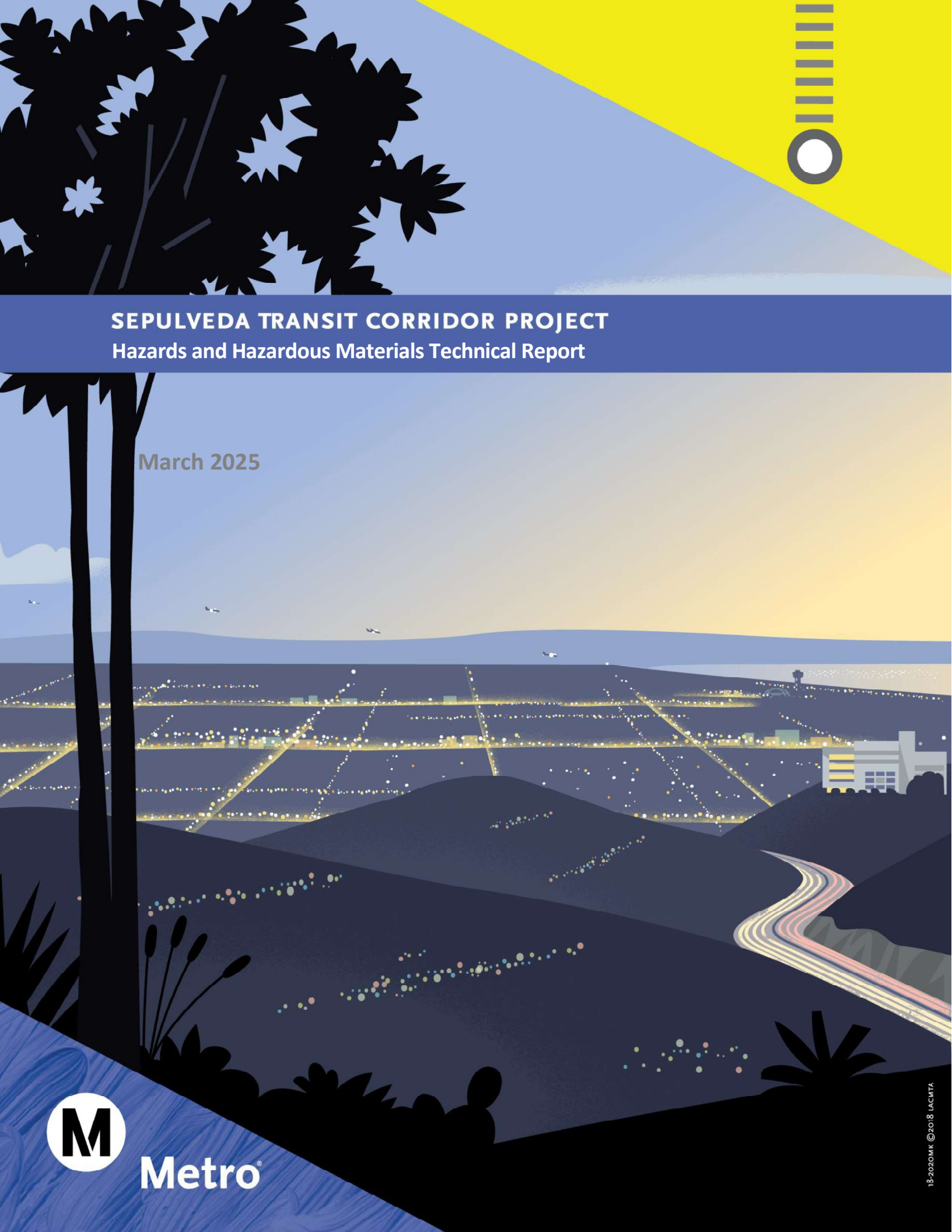
Appendix M. Hazards and Hazardous Materials Technical Report

SEPULVEDA TRANSIT CORRIDOR PROJECT

Hazards and Hazardous Materials Technical Report

March 2025



Metro

18-2020MK ©2018 LACMTA

SEPULVEDA TRANSIT CORRIDOR PROJECT

Contract No. AE67085000

Hazards and Hazardous Materials Technical Report

Task 5.24.11

Prepared for:

Metro

Los Angeles County
Metropolitan Transportation Authority

Prepared by:

HTA PARTNERS
HNTB + TAHA + AECOM

777 S. Figueroa Street, Suite 2300
Los Angeles, California 90017

Review		
	Date	Name
Originator	03/17/2025	Jennifer Lee
Checker	03/17/2025	Allyson Dong
Backchecker/Updater	03/18/2025	Kat Lee/ Steven Edmonds
Verifier	03/18/2025	Allyson Dong
QA Review	03/21/2025	Aaron Grisel

March 2025

Table of Contents

ABBREVIATIONS AND ACRONYMS XI

1 INTRODUCTION 1-1

1.1 Project Background 1-1
1.2 Project Alternatives 1-1
1.3 Project Study Area 1-2
1.4 Purpose of this Report and Structure 1-2

2 REGULATORY AND POLICY FRAMEWORK 2-1

2.1 Federal 2-1
2.1.1 Comprehensive Environmental Response, Compensation, and Liability Act 2-1
2.1.2 Superfund Amendments and Reauthorization Act 2-1
2.1.3 Resource Conservation and Recovery Act 2-1
2.1.4 Toxic Substances Control Act 2-1
2.1.5 Clean Water Act 2-1
2.1.6 Clean Air Act 2-2
2.1.7 Pipeline and Hazardous Materials Safety Administration 2-2
2.1.8 Federal Occupational Safety and Health Act 2-2
2.1.9 Federal Aviation Regulations, Part 77 2-2
2.2 State 2-3
2.2.1 California Environmental Quality Act 2-3
2.2.2 Hazardous Waste Control Act 2-3
2.2.3 State of California Occupational Safety and Health Act 2-4
2.2.4 Tanner Act 2-4
2.2.5 Hazardous Materials Management Plans 2-4
2.2.6 California Accidental Release Prevention Program 2-5
2.2.7 Hazardous Materials Transport 2-5
2.2.8 Hazardous Waste and Substances Sites List 2-6
2.2.9 Airport Land Use Commission Law 2-6
2.2.10 Liquid Pipeline Safety Act 2-6
2.2.11 Hazardous Materials Screening Levels 2-7
2.2.12 Asbestos Abatement 2-7
2.2.13 Lead and Lead-Based Paint Abatement 2-8
2.3 Regional 2-8
2.3.1 South Coast Air Quality Management District Rules 1403 and 1166 2-8
2.3.2 Certified Unified Program Agency (Chapter 6.11 of the California Health and Safety Code) 2-8

2.3.3 Los Angeles Metropolitan Transportation Authority Public Transportation Agency Safety Plan 2-9
2.3.4 Los Angeles County Airport Land Use Plan 2-9
2.3.5 Los Angeles County Operational Area Emergency Response Plan 2-10
2.4 Local 2-10
2.4.1 Local Certified Uniform Program Agencies 2-10
2.4.2 Division 71 of the City of Los Angeles Municipal Code Chapter IX (Methane Seepage Regulations) 2-10
2.4.3 City of Los Angeles General Plan 2-11
2.4.4 Van Nuys Airport Plan 2-11
3 METHODOLOGY 3-1
3.1 Definition of Terms 3-1
3.2 Hazard versus Risk 3-1
3.3 Operation and Construction 3-2
3.4 CEQA Thresholds of Significance 3-4
4 FUTURE BACKGROUND PROJECTS 4-1
4.1 Highway Improvements 4-1
4.2 Transit Improvements 4-1
4.3 Regional Rail Projects 4-2
5 NO PROJECT ALTERNATIVE 5-1
5.1 Existing Conditions 5-1
5.2 Impact Evaluation 5-1
5.2.1 Impact HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? 5-1
5.2.2 Impact HAZ-2: 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? 5-2
5.2.3 Impact HAZ-3: 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? 5-3
5.2.4 Impact HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? 5-4
5.2.5 Impact HAZ-5: 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? 5-4

6 ALTERNATIVE 1 6-1
6.1 Alternative Description 6-1
6.1.1 Operating Characteristics 6-1
6.1.2 Construction Activities 6-19
6.2 Existing Conditions 6-22
6.2.1 Regional Setting 6-22
6.2.2 Hazardous Materials from Known Release Sites 6-22
6.2.3 Hazardous Materials from Roadway Corridors 6-31
6.2.4 Treated Wood Waste 6-31
6.2.5 Hazardous Building Materials 6-31
6.2.6 Other Potential Hazardous Materials 6-32
6.2.7 Methane Hazard Zones 6-33
6.2.8 Petroleum and Natural Gas Pipelines 6-35
6.2.9 Proximity to Schools 6-36
6.2.10 Proximity to Airports 6-37
6.3 Impacts Evaluation 6-40
6.3.1 Impact HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? 6-40
6.3.2 Impact HAZ-2: 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? 6-45
6.3.3 Impact HAZ-3: 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? 6-50
6.3.4 Impact HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? 6-51
6.3.5 Impact HAZ-5: 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? 6-52
6.4 Project Measures and Mitigation Measures 6-54
6.4.1 Operational Impacts 6-54
6.4.2 Construction Impacts 6-55
6.4.3 Impacts After Mitigation 6-61
7 ALTERNATIVE 3 7-1
7.1 Alternative Description 7-1
7.1.1 Operating Characteristics 7-1

7.1.2 Construction Activities 7-19
7.2 Existing Conditions 7-22
7.2.1 Regional Setting 7-22
7.2.2 Hazardous Materials from Known Release Sites 7-23
7.2.3 Hazardous Materials from Roadway Corridors 7-32
7.2.4 Treated Wood Waste 7-32
7.2.5 Hazardous Building Materials 7-32
7.2.6 Other Potential Hazardous Materials 7-33
7.2.7 Methane Hazard Zones 7-34
7.2.8 Petroleum and Natural Gas Pipelines 7-36
7.2.9 Proximity to Schools 7-37
7.2.10 Proximity to Airports 7-38
7.3 Impacts Evaluation 7-41
7.3.1 Impact HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? 7-41
7.3.2 Impact HAZ-2: 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? 7-45
7.3.3 Impact HAZ-3: 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? 7-50
7.3.4 Impact HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? 7-51
7.3.5 Impact HAZ-5: 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? 7-52
7.4 Project Measures and Mitigation Measures 7-53
7.4.1 Operational Impacts 7-53
7.4.2 Construction Impacts 7-54
7.4.3 Impacts After Mitigation 7-60
8 ALTERNATIVE 4 8-1
8.1 Alternative Description 8-1
8.1.1 Operating Characteristics 8-1
8.1.2 Construction Activities 8-16
8.2 Existing Conditions 8-21
8.2.1 Regional Setting 8-21

8.2.2 Hazardous Materials from Known Release Sites 8-21
8.2.3 Hazardous Materials from Roadway Corridors 8-30
8.2.4 Treated Wood Waste 8-30
8.2.5 Hazardous Building Materials 8-30
8.2.6 Other Potential Hazardous Materials 8-31
8.2.7 Methane Hazard Zones 8-31
8.2.8 Petroleum and Natural Gas Pipelines 8-34
8.2.9 Proximity to Schools 8-35
8.2.10 Proximity to Airports 8-36
8.3 Impacts Evaluation 8-39
8.3.1 Impact HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? 8-39
8.3.2 Impact HAZ-2: 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? 8-42
8.3.3 Impact HAZ-3: 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? 8-46
8.3.4 Impact HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? 8-47
8.3.5 Impact HAZ-5: 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? 8-48
8.4 Project Measures and Mitigation Measures 8-49
8.4.1 Operational Impacts 8-49
8.4.2 Construction Impacts 8-50
8.4.3 Impacts After Mitigation 8-56
9 ALTERNATIVE 5 9-1
9.1 Alternative Description 9-1
9.1.1 Operating Characteristics 9-1
9.1.2 Construction Activities 9-14
9.2 Existing Conditions 9-19
9.2.1 Regional Setting 9-19
9.2.2 Hazardous Materials from Known Release Sites 9-19
9.2.3 Hazardous Materials from Roadway Corridors 9-28
9.2.4 Treated Wood Waste 9-28

9.2.5 Hazardous Building Materials 9-28
9.2.6 Other Potential Hazardous Materials 9-29
9.2.7 Methane Hazard Zones 9-29
9.2.8 Petroleum and Natural Gas Pipelines 9-32
9.2.9 Proximity to Schools 9-33
9.2.10 Proximity to Airports 9-34
9.3 Impacts Evaluation 9-37
9.3.1 Impact HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? 9-37
9.3.2 Impact HAZ-2: 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? 9-40
9.3.3 Impact HAZ-3: 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? 9-44
9.3.4 Impact HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? 9-45
9.3.5 Impact HAZ-5: 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? 9-45
9.4 Project Measures and Mitigation Measures 9-47
9.4.1 Operational Impacts 9-47
9.4.2 Construction Impacts 9-48
9.4.3 Impacts After Mitigation 9-54
10 ALTERNATIVE 6 10-1
10.1 Alternative Description 10-1
10.1.1 Operating Characteristics 10-1
10.1.2 Construction Activities 10-10
10.2 Existing Conditions 10-12
10.2.1 Regional Setting 10-12
10.2.2 Hazardous Materials from Known Release Sites 10-13
10.2.3 Hazardous Materials from Roadway Corridors 10-21
10.2.4 Treated Wood Waste 10-21
10.2.5 Hazardous Building Materials 10-21
10.2.6 Other Potential Hazardous Materials 10-22
10.2.7 Methane Hazard Zones 10-22

10.2.8 Petroleum and Natural Gas Pipelines 10-25
10.2.9 Proximity to Schools 10-26
10.2.10 Proximity to Airports 10-27
10.3 Impacts Evaluation 10-30
10.3.1 Impact HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? 10-30
10.3.2 Impact HAZ-2: 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? 10-33
10.3.3 Impact HAZ-3: 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? 10-37
10.3.4 Impact HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? 10-38
10.3.5 Impact HAZ-5: 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? 10-39
10.4 Project Measures and Mitigation Measures 10-41
10.4.1 Operational Impacts 10-41
10.4.2 Construction Impacts 10-41
10.4.3 Impacts After Mitigation 10-47
11 PREPARERS OF THE TECHNICAL REPORT 11-1
12 REFERENCES 12-1

Attachments

Attachment 1. Sepulveda Environmental Data Resources Memoranda
Attachment 2. Hazardous Material Sites within 0.5 Mile of Alternatives

Figures

Figure 1-1. Sepulveda Transit Corridor Project Study Area 1-3
Figure 6-1. Alternative 1: Alignment 6-2
Figure 6-2. Typical Monorail Guideway Cross-Section 6-4
Figure 6-3. Typical Monorail Straddle-Bent Cross-Section 6-5
Figure 6-4. Typical Monorail Beam Switch Cross-Section 6-10
Figure 6-5. Alternative 1: Maintenance and Storage Facility Options 6-12
Figure 6-6. Alternative 1: Electric Bus Maintenance and Storage Facility 6-13
Figure 6-7. Alternative 1: Traction Power Substation Locations 6-15
Figure 6-8. Alternative 1: Roadway Changes 6-18
Figure 6-9. Alternative 1: Construction Staging Locations 6-21
Figure 6-10. Alternative 1: Hazardous Material Sites within 0.5 Mile (North) 6-28
Figure 6-11. Alternative 1: Hazardous Material Sites within 0.5 Mile (South) 6-29
Figure 6-12. Alternative 1: Methane Hazard Zones 6-34
Figure 6-13. Alternative 1: Pipelines 6-36
Figure 6-14. Alternative 1: Airport Influence Area 6-39
Figure 7-1. Alternative 3: Alignment 7-2
Figure 7-2. Typical Aerial Monorail Guideway Cross-Section 7-4
Figure 7-3. Typical Monorail Straddle-Bent Cross-Section 7-5
Figure 7-4. Typical Underground Monorail Guideway Cross-Section 7-7
Figure 7-5. Typical Monorail Beam Switch Cross-Section 7-12
Figure 7-6. Alternative 3: Maintenance and Storage Facility Options 7-14
Figure 7-7. Alternative 3: Traction Power Substation Locations 7-16
Figure 7-8. Alternative 3: Roadway Changes 7-18
Figure 7-9. Alternative 3: Construction Staging Locations 7-22
Figure 7-10. Alternative 3: Hazardous Material Sites within 0.5 Mile (North) 7-29
Figure 7-11. Alternative 3: Hazardous Material Sites within 0.5 Mile (South) 7-30
Figure 7-12. Alternative 3: Methane Hazard Zones 7-35
Figure 7-13. Alternative 3: Pipelines 7-37
Figure 7-14. Alternative 3: Airport Influence Area 7-40
Figure 8-1. Alternative 4: Alignment 8-2
Figure 8-2. Typical Underground Guideway Cross-Section 8-4
Figure 8-3. Typical Aerial Guideway Cross-Section 8-5
Figure 8-4. Typical Aerial Straddle-Bent Cross-Section 8-6
Figure 8-5. Alternative 4: Maintenance and Storage Facility Site 8-10
Figure 8-6. Alternative 4: Traction Power Substation Locations 8-12
Figure 8-7. Alternative 4: Roadway Changes 8-14

Figure 8-8. Alternative 4: Street Vacation at Del Gado Drive 8-15
Figure 8-9. Alternative 4: On-Site Construction Staging Locations....8-17
Figure 8-10. Alternative 4: Potential Off-Site Construction Staging Locations....8-20
Figure 8-11. Alternative 4: Hazardous Material Sites within 0.5 Mile (North) 8-27
Figure 8-12. Alternative 4: Hazardous Material Sites within 0.5 Mile (South) 8-28
Figure 8-13. Alternative 4: Methane Hazard Zones....8-33
Figure 8-14. Alternative 4: Pipelines....8-35
Figure 8-15. Alternative 4: Airport Influence Area 8-38
Figure 9-1. Alternative 5: Alignment....9-2
Figure 9-2. Typical Underground Guideway Cross-Section 9-4
Figure 9-3. Typical Aerial Guideway Cross-Section....9-5
Figure 9-4. Alternative 5: Maintenance and Storage Facility Site....9-9
Figure 9-5. Alternative 5: Traction Power Substation Locations 9-11
Figure 9-6. Alternative 5: Roadway Changes....9-13
Figure 9-7. Alternative 5: On-Site Construction Staging Locations....9-15
Figure 9-8. Alternative 5: Potential Off-Site Construction Staging Locations....9-18
Figure 9-9. Alternative 5: Hazardous Material Sites within 0.5 Mile (North) 9-25
Figure 9-10. Alternative 5: Hazardous Material Sites within 0.5 Mile of (South)....9-26
Figure 9-11. Alternative 5: Methane Hazard Zones....9-31
Figure 9-12. Alternative 5: Pipelines....9-33
Figure 9-13. Alternative 5: Airport Influence Area 9-36
Figure 10-1. Alternative 6: Alignment....10-2
Figure 10-2. Typical Underground Guideway Cross-Section 10-3
Figure 10-3. Alternative 6: Maintenance and Storage Facility Site 10-7
Figure 10-4. Alternative 6: Traction Power Substation Locations 10-9
Figure 10-5. Alternative 6: Mid-Mountain Construction Staging Site 10-12
Figure 10-6. Alternative 6: Hazardous Material Sites within 0.5 Mile (North) 10-18
Figure 10-7. Alternative 6: Hazardous Material Sites within 0.5 Mile (South) 10-19
Figure 10-8. Alternative 6: Methane Hazard Zones....10-24
Figure 10-9. Alternative 6: Pipelines....10-26
Figure 10-10. Alternative 6: Airport Influence Area 10-29

Tables

Table 4-1. Fixed Guideway Transit System in 2045 4-2
Table 6-1. Alternative 1: Station-to-Station Travel Times and Station Dwell Times....6-9
Table 6-2. Alternative 1: Traction Power Substation Locations....6-14
Table 6-3. Alternative 1: Roadway Changes 6-16
Table 6-4. Alternative 1: Construction Staging Locations....6-20
Table 6-5. Alternative 1: EDR Database Search Results....6-23
Table 6-6. Hazardous Waste Disposal Landfills and Potential Haul Routes....6-42
Table 7-1. Alternative 3: Station-to-Station Travel Times and Station Dwell Times....7-11
Table 7-2. Alternative 3: Traction Power Substation Locations....7-15
Table 7-3. Alternative 3: Roadway Changes 7-17
Table 7-4. Alternative 3: Construction Staging Locations....7-21
Table 7-5. Alternative 3: EDR Database Search Results....7-24
Table 7-6. Hazardous Waste Disposal Landfills and Potential Haul Routes....7-43
Table 8-1. Alternative 4: Station-to-Station Travel Times and Station Dwell Times....8-9
Table 8-2. Alternative 4: Traction Power Substation Locations....8-11
Table 8-3. Alternative 4: Roadway Changes 8-13
Table 8-4. Alternative 4: On-Site Construction Staging Locations....8-16
Table 8-5. Alternative 4: Potential Off-Site Construction Staging Locations....8-19
Table 8-6. Alternative 4: EDR Database Search Results....8-22
Table 8-7. Hazardous Waste Disposal Landfills and Potential Haul Routes....8-41
Table 9-1. Alternative 5: Station-to-Station Travel Times and Station Dwell Times....9-8
Table 9-2. Alternative 5: Traction Power Substation Locations....9-10
Table 9-3. Alternative 5: Roadway Changes 9-12
Table 9-4. Alternative 5: On-Site Construction Staging Locations....9-14
Table 9-5. Alternative 5: Potential Off-Site Construction Staging Locations....9-17
Table 9-6. Alternative 5: EDR Database Search Results....9-20
Table 9-7. Hazardous Waste Disposal Landfills and Potential Haul Routes....9-39
Table 10-1. Alternative 6: Station-to-Station Travel Times and Station Dwell Times....10-6
Table 10-2. Alternative 6: Traction Power Substation Locations....10-8
Table 10-3. Alternative 6: EDR Database Search Results....10-13
Table 10-4. Hazardous Waste Disposal Landfills and Potential Haul Routes....10-32

Abbreviations and Acronyms

AB	Assembly Bill
ABC	Accelerated Bridge Construction
ACM	asbestos-containing material
ADL	aerially deposited lead
AIA	airport influence area
ALUC	Airport Land Use Commission
ALUP	Airport Land Use Plan
APM	automated people mover
ASTM	American Society for Testing and Materials
BMP	best management practices
BRT	bus rapid transit
BTX	benzene, toluene, and xylene
CAA	Clean Air Act
Cal/OSHA	California Occupational Safety and Health Administration
CalARP	California Accidental Release Prevention Program
CalEPA	California Environmental Protection Agency
CalGEM	California Geologic Energy Management Division
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERS	California Environmental Reporting System
CFR	Code of Federal Regulations
CHP	California Highway Patrol
CIDH	cast-in-drilled-hole
CLUP	Comprehensive Land Use Plan
COPC	contaminant of potential concern
CPS	Cleanup Program Site
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
DCP	City of Los Angeles Department of City Planning
DTSC	Department of Toxic Substances Control
DTSC-SL	Department of Toxic Substances Control Screening Levels

EDR	EDR, Inc.
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	environmental site assessment
ExpressLanes project	Interstate 405 Sepulveda Pass ExpressLanes project
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FTIP	Federal Transportation Improvement Program
HASP	Health and Safety Plan
HAZ	Hazardous Materials
HMBP	Hazardous Materials Business Plan
HRT	heavy rail transit
HSWA	Hazardous and Solid Waste Amendments
HTA	HTA Partners
I-10	Interstate 10
I-405	Interstate 405
ID	Identification
kg	kilograms
LACFD	Los Angeles County Fire Department
LADBS	Los Angeles Department of Building and Safety
LADWP	City of Los Angeles Department of Water and Power
LAFD	Los Angeles Fire Department
LAMC	Los Angeles Municipal Code
LARWQCB	Los Angeles Regional Water Quality Control Board
LASRE	LA SkyRail Express
LAWA	Los Angeles World Airports
LAX	Los Angeles International Airport
LBP	lead-based paint
LOSSAN	Los Angeles-San Diego-San Luis Obispo
LRT	light rail transit
LUST	leaking underground storage tank
Metro	Los Angeles County Metropolitan Transportation Authority
MM	Mitigation Measure
MOW	maintenance-of-way
MRT	monorail transit

MSF	maintenance and storage facility
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPMS	National Pipeline Mapping System
NTD	National Transit Database
OAERP	Operational Area Emergency Response Plan
OSHA	Occupational Safety and Health Administration
OU	operable unit
OVA	optical vector analyzer
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
PHMSA	Pipeline and Hazardous Materials Safety Administration
PM	Project Measure
PRC	Public Resources Code
Project	Sepulveda Transit Corridor Project
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental conditions
RMP	Risk Management Plan
ROW	right-of-way
RSA	Resource Study Area
RSL	regional screening levels
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SC	Site Cleanup
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCORE	Southern California Optimized Rail Expansion
SEMS	Superfund Enterprise Management System
SIC	Standard Industrial Classification
SLIC	Spills, Leaks, Investigations, and Cleanups
SMBRP	Department of Toxic Substances Control Site Mitigation and Brownfields Reuse Program
STCP	Sepulveda Transit Corridor Partners
SR	State Route
SRWQCB	State Regional Water Quality Control Board

SWF/LF	SWIS or Solid Waste Information System
SWF/LS	Integrated Waste Board
SWIS	Solid Waste Information System
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TBM	tunnel boring machine
TCE	trichloroethylene
TPSS	traction power substation
TSCA	Toxic Substances Control Act
TSD	treatment, storage, and disposal
TSDF	treatment, storage, and disposal facilities
TWW	treated wood waste
U.S./US	United States
UCLA	University of California, Los Angeles
Unified Program	Unified Hazardous Waste and Hazardous Materials Management Regulatory Program
US-101	U.S. Highway 101
USDOT	United States Department of Transportation
UST	underground storage tank
VA	U.S. Department of Veterans Affairs
Valley	San Fernando Valley
VOC	volatile organic compounds
VSQG	very small quantity generators
Westside	Westside of Los Angeles

1 INTRODUCTION

1.1 Project Background

The Sepulveda Transit Corridor Project (Project) is intended to provide a high-capacity rail transit alternative to serve the large and growing travel market and transit needs currently channeled through the Sepulveda Pass and nearby canyon roads between the San Fernando Valley (Valley) and the Westside of Los Angeles (Westside). The Project would have a northern terminus with a connection to the Van Nuys Metrolink/Amtrak Station and a southern terminus with a connection to the Los Angeles County Metropolitan Transportation Authority's (Metro) E Line. In addition to providing local and regional connections to the existing and future Metro rail and bus network, the Project is anticipated to improve access to major employment, educational, and cultural centers in the greater Los Angeles area.

In 2019, Metro completed the Sepulveda Transit Corridor Feasibility Study and released the Project's *Final Feasibility Report* (Metro, 2019), which documented the transportation conditions and travel patterns in the Sepulveda corridor; identified mobility problems affecting travel between the Valley and the Westside; and defined the Purpose and Need, goals, and objectives of the Project. Using an iterative evaluation process, the Feasibility Study identified feasible transit solutions that met the Purpose and Need, goals, and objectives of the Project. The Feasibility Study determined that a reliable, high-capacity, fixed guideway transit system connecting the Valley to the Westside could be constructed along several different alignments. Such a transit system, operated as either heavy rail transit (HRT) or monorail transit (MRT), would serve the major travel markets in the Sepulveda Transit corridor and would provide travel times competitive with the automobile.

1.2 Project Alternatives

In November 2021, Metro released a Notice of Preparation (NOP) of an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act, for the Project that included six alternatives (Metro, 2021). Alternatives 1 through 5 included a southern terminus station at the Metro E Line Expo/Sepulveda Station, and Alternative 6 included a southern terminus station at the Metro E Line Expo/Bundy Station. The alternatives were described in the NOP as follows:

- Alternative 1: Monorail with aerial alignment in the Interstate 405 (I-405) corridor and an electric bus connection to the University of California, Los Angeles (UCLA)
- Alternative 2: Monorail with aerial alignment in the I-405 corridor and an aerial automated people mover connection to UCLA
- Alternative 3: Monorail with aerial alignment in the I-405 corridor and underground alignment between the Getty Center and Wilshire Boulevard
- Alternative 4: Heavy rail with underground alignment south of Ventura Boulevard and aerial alignment generally along Sepulveda Boulevard in the San Fernando Valley
- Alternative 5: Heavy rail with underground alignment including along Sepulveda Boulevard in the San Fernando Valley
- Alternative 6: Heavy rail with underground alignment including along Van Nuys Boulevard in the San Fernando Valley and a southern terminus station on Bundy Drive

The NOP also stated that Metro is considering a No Project Alternative that would not include constructing a fixed guideway line. Metro established a public comment period of 74 days, extending from November 30, 2021 through February 11, 2022. Following the public comment period, refinements to the alternatives were made to address comments received. Further refinements to optimize the designs and address technical challenges of the alternatives were made in 2023 following two rounds of community open houses.

In July 2024, following community meetings held in May 2024, Alternative 2 was removed from further consideration in the environmental process because it did not provide advantages over the other alternatives, and the remaining alternatives represent a sufficient range of alternatives for environmental review, inclusive of modes and routes (Metro, 2024a). Detailed descriptions of the No Project Alternative and the five remaining "build" alternatives are presented in Sections 5 through 10.

1.3 Project Study Area

Figure 1-1 shows the Project Study Area. It generally includes Transportation Analysis Zones from Metro's travel demand model that are within 1 mile of the alignments of the four "Valley-Westside" alternatives from the *Sepulveda Transit Corridor Project Final Feasibility Report* (Metro, 2019). The Project Study Area represents the area in which the transit concepts and ancillary facilities are expected to be located. The analysis of potential impacts encompasses all areas that could potentially be affected by the Project, and the EIR will disclose all potential impacts related to the Project.

1.4 Purpose of this Report and Structure

This technical report examines the environmental impacts of the Project as it relates to hazards and hazardous materials. It describes existing hazards and hazardous materials conditions in the Project Study Area, the regulatory setting, methodology for impact evaluation, and potential impacts from operation and construction of the project alternatives, including maintenance and storage facility site options.

The report is organized according to the following sections:

- Section 1 Introduction
- Section 2 Regulatory and Policy Framework
- Section 3 Methodology
- Section 4 Future Background Projects
- Section 5 No Project Alternative
- Section 6 Alternative 1
- Section 7 Alternative 3
- Section 8 Alternative 4
- Section 9 Alternative 5
- Section 10 Alternative 6
- Section 11 Preparers of the Technical Report
- Section 12 References

Figure 1-1. Sepulveda Transit Corridor Project Study Area



Source: HTA, 2024

2 REGULATORY AND POLICY FRAMEWORK

2.1 Federal

2.1.1 Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), also known as the "Superfund Act," provides a federal fund to identify, characterize, and remediate hazardous material sites. Through the Superfund Act, the U.S. Environmental Protection Agency (EPA) was granted the authority to identify and obtain the cooperation of parties responsible for hazardous material incidents and conditions.[1]

2.1.2 Superfund Amendments and Reauthorization Act

The Superfund Amendment and Reauthorization Act, Title III of 1986 is the Emergency Planning and Community Right-to-Know Act. Facilities are required to report the following items on EPA Form R, the Toxic Chemical Release Inventory Reporting Form: facility identification, off-site locations where toxic chemicals are transferred to in wastes, chemical-specific information, and supplemental information.

2.1.3 Resource Conservation and Recovery Act

At the federal level, the principal agency regulating the generation, transport, and disposal of hazardous substances is the EPA, under the authority of the Resource Conservation and Recovery Act of 1976 (RCRA). The RCRA established an all-encompassing federal regulatory program for hazardous substances that is administered by EPA by Title 40 of the Code of Federal Regulations (CFR), which governs the identification, classification, generation, management, treatment, transport, and disposal of non-hazardous and hazardous waste. Under the RCRA, EPA regulates the generation, transportation, treatment, storage, and disposal of hazardous substances. The RCRA was amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), which specifically prohibit the use of certain techniques to dispose of various hazardous substances. EPA has delegated much of the RCRA requirements to the California Department of Toxic Substances Control (DTSC).

2.1.4 Toxic Substances Control Act

The Toxic Substances Control Act of 1976 (TSCA) established the mechanisms by which EPA tracks, screens, and tests industrial chemicals currently produced or imported into the U.S. that may pose an environmental or human health hazard. The TSCA addresses the production, importation, use, and disposal of specific chemicals, including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint (LBP).

2.1.5 Clean Water Act

The Clean Water Act of 1972 (CWA) 33 (United States Code [U.S.C.]) Section 1251 et seq. is the primary federal law that establishes the basic structure for regulating discharges of pollutants into waters of the U.S. and gives the EPA the authority to implement pollution control programs such as setting

[1] In 2018, the Brownfields Utilization, Investment, and Local Development Act amended CERCLA by providing funds to assess and clean up brownfields.

wastewater standards for industries. In most states, including California, EPA has delegated this authority to state agencies.

2.1.6 Clean Air Act

The Federal Clean Air Act (CAA) 42 U.S.C. Section 7401 et seq. is the comprehensive federal law that regulates air emissions from stationery and mobile sources. Among other things, this law authorizes the EPA to establish National Ambient Air Quality Standards to protect public health and public welfare based on the latest science, and it requires states to adopt enforceable plans to achieve the standards. The EPA administers national programs to monitor concentrations of certain air pollutants and to control emissions from major sources. Through the CAA, the EPA regulates emission sources that are under the exclusive authority of the federal government, such as certain types of locomotives, and mandates various emission standards, including those for on-road vehicles. The CAA also contains specific provisions to address "hazardous" or "toxic" air pollutants that pose health risks such as cancer, or environmental threats such as bioaccumulation of heavy metals.

2.1.7 Pipeline and Hazardous Materials Safety Administration

The U.S. Department of Transportation (USDOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) regulates oil pipeline design, construction, testing, operation, and maintenance under Title 49 CFR Part 195, entitled "Transportation of Hazardous Liquids by Pipeline," authorized by the Pipeline Safety Act of 2011.

Pipeline facilities are subject to regular inspection and maintenance activities required by USDOT's PHMSA regulations. Activities include, but are not restricted to, regular inspections of the terminal and pipeline route to inspect for visible leaks and to evaluate aboveground equipment, including valve stations and pump and power stations; monthly inspections to ensure the integrity of pipeline corrosion protection; excavation and repair of pipeline segments experiencing degradation; and repair of pipeline anomalies identified during internal inspection or at locations damaged by third parties.

2.1.8 Federal Occupational Safety and Health Act

The Occupational Safety and Health Administration (OSHA) administers the Federal Occupational Safety and Health Act of 1970, which requires training employees who handle hazardous materials, notifying employees who work in the vicinity of hazardous materials, acquiring material safety data sheets that describe the proper use of hazardous materials, and training employees to remediate any hazardous material accidental releases.

The Federal Occupational Safety and Health Act regulates lead and asbestos with respect to employee safety through a set of notification and corrective action requirements, warning signs and labels, controlled access, use of protective equipment, demolition/renovation procedures, housekeeping controls, training, and in certain cases, air monitoring and medical surveillance to reduce potential exposure. This legislation also requires contractors who conduct LBP and asbestos-containing material (ACM) surveys and removal activities to be certified by the California Occupational Safety and Health Administration (Cal/OSHA).

2.1.9 Federal Aviation Regulations, Part 77

Federal Aviation Regulations (FAR) (U.S.C Title 14) Part 77, "Safe, Efficient Use, and Preservation of the Navigable Airspace" has been adopted as a means of monitoring and protecting the airspace required

for safe operation of aircraft and airports. Part 77 recognizes that certain safety hazards to aircraft and airport operations may occur where a land use would:

- Exceed certain specified height limits;
- Attract large concentrations of birds within approach/climb out areas;
- Produce smoke or flashing lights;
- Reflect light or generate electronic interference; or
- Use or store large quantities of flammable materials.

Part 77 establishes the following:

- The requirements to provide notice to the Federal Aviation Administration (FAA) of certain proposed construction activities, or the alteration of existing structures;
- The standards used to determine obstructions to air navigation, and navigational and communication facilities; and
- The process for aeronautical studies of obstructions to air navigation or navigational facilities to determine the effect on the safe and efficient use of navigable airspace, air navigation facilities, or equipment.

Objects that exceed certain specified height limits constitute airspace obstructions. FAR Section 77.9 requires that the FAA be notified of proposed construction or alteration of certain objects within a specified distance from an airport, among them the following:

- Construction or alteration of more than 200 feet in height above the ground level at its site; or
- Construction or alteration of greater height than an imaginary surface extending outward and upward at (a slope of) 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each (public-use airport, public-use airport under construction, or military airport) with at least one runway more than 3,200 feet in actual length, excluding heliports.

However, notice does not need to be filed with the FAA for constructing any object that would be shielded by existing, permanent, substantial structures or by topographic features (natural terrain) of equal or greater height, and that would be located in a congested area of a city, town, or settlement where the shielded object would not adversely affect air navigation safety.

2.2 State

2.2.1 California Environmental Quality Act

California Environmental Quality Act (CEQA; Section 21000 et seq.) and the 2024 CEQA Guidelines (Section 15000 et seq.) require state and local agencies to identify the significant environmental impacts of their actions, including potential significant impacts associated with hazards and hazardous materials, and to avoid or mitigate those impacts, when feasible.

2.2.2 Hazardous Waste Control Act

The Hazardous Waste Control Act is implemented by regulations contained in Title 26 of the California Code of Regulations (CCR) that describe requirements for the proper management of hazardous waste. This legislation created the state hazardous waste management program, which is similar to, but more stringent than, the federal RCRA program.

The program includes hazardous waste criteria for the following:

- Identification and classification
- Generation and transportation
- Design and permitting of recycling, treatment, storage, and disposal facilities (TSDFs)
- Treatment standards
- Operation of facilities and staff training
- Closure of facilities and liability requirements

The Hazardous Waste Control Act and Title 26 regulations list more than 800 potentially hazardous materials and establish criteria for identifying, packaging, and disposal of these materials. Under these regulations, the generator of hazardous waste must complete a manifest that accompanies the material from the point of generation through transport to the ultimate disposal location and must file copies of the manifest with DTSC.

2.2.3 State of California Occupational Safety and Health Act

Cal/OSHA regulates worker safety similar to federal OSHA but also requires preparation of an Injury and Illness Prevention Program, an employee safety program of inspections, procedures to correct unsafe conditions, employee training, and occupational safety communication. In addition, Cal/OSHA regulations indirectly protect the general public by requiring construction managers to post warning signs, limit public access to construction areas, and obtain permits for work considered to present a significant risk of injury, such as excavations greater than five feet.

2.2.4 Tanner Act

Although there are numerous state policies dealing with hazardous waste materials, the most comprehensive is the Tanner Act, Assembly Bill (AB) 2948, which was adopted in 1986. The Tanner Act governs the preparation of Hazardous Waste Management Plans and the storing of hazardous waste facilities in the State of California. The Tanner Act also mandates that each county adopt a Hazardous Waste Management Plan. To be in compliance with the Tanner Act, local or regional Hazardous Waste Management Plans need to include provisions that define: (1) the planning process for waste management, (2) the permit process for new and expanded facilities, and (3) the appeal process to the state available for certain local decisions.

2.2.5 Hazardous Materials Management Plans

In January 1996, the California Environmental Protection Agency (CalEPA) adopted regulations implementing a Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program). The six program elements of the Unified Program are 1) hazardous waste generators and hazardous waste on-site treatment, 2) underground storage tanks (USTs), 3) aboveground storage tanks, 4) Hazardous Material Release Response Plans and inventories, 5) risk management and prevention program, and 6) Uniform Fire Code Hazardous Materials Management Plans and inventories. The Unified Program is implemented at the local level by a local agency—Certified Unified Program Agency (CUPA). CUPA is responsible for consolidating the administration of the six program elements within its jurisdiction. The Los Angeles County Fire Department (LACFD) is the CUPA for the unincorporated portions of Los Angeles County as well as the Cities of Burbank, Pasadena, and Torrance; The Los Angeles Fire Department (LAFD) is the CUPA for the City of Los Angeles; and the City of Santa Monica is the CUPA for the City of Santa Monica.

State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or mitigate injury to health or the environment. California's Hazardous Materials Release Response Plans and Inventory Law, sometimes called the Business Plan Act, aims to minimize the potential for accidents involving hazardous materials and to facilitate an appropriate response to possible hazardous materials emergencies. The law requires businesses that use hazardous materials to provide inventories of those materials to designated emergency response agencies, to illustrate on a diagram where the materials are stored on site, to prepare an Emergency Response Plan, and to train employees to use the materials safely.

2.2.6 California Accidental Release Prevention Program

The California Accidental Release Prevention Program (CalARP) (CCR Title 19, Division 2, Chapter 4.5) covers certain businesses that store or handle more than a certain volume of specific regulated substances at their facilities. The CalARP program regulations became effective on January 1, 1997. These regulations include provisions of the Federal Accidental Release Prevention Program (Title 40, CFR Part 68), with additions specific to the state, pursuant to Article 2, Chapter 6.95 of the Health and Safety Code.

Regulated substances are listed in Article 8, Section 2770.5 of the CalARP program regulations. The businesses that use a regulated substance above the noted threshold quantity must implement an accidental release prevention program and some may be required to complete a Risk Management Plan (RMP). An RMP is a detailed engineering analysis of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential. The RMP's purpose is to decrease the risk of an off-site release of a regulated substance that might harm the surrounding environment and community. An RMP includes the following components: safety information, hazard review, operating procedures, training, maintenance, compliance audits, and incident investigation. The RMP must consider the proximity to sensitive populations located in schools, residential areas, general acute-care hospitals, long-term health care facilities, and child day-care facilities. The RMP must also consider external events such as seismic activity.

2.2.7 Hazardous Materials Transport

The California Highway Patrol (CHP), the California Department of Transportation (Caltrans), and DTSC have the responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies.

Regulations governing hazardous materials transport are included in the California Vehicle Code (Title 13 of the CCR); the State Fire Marshal Regulations (Title 19 of the CCR); and Title 22, Division 4.5, Chapter 13 of the CCR.

2.2.7.1 California Vehicle Code

Title 13 of the CCR establishes regulations for motor carrier transport of hazardous materials. All motor carrier transporters of hazardous materials are required to have a Hazardous Materials Transportation license issued by the CHP. In addition, placards identifying that hazardous materials are being transported must be displayed on the vehicle.

The California Vehicle Code Section 31303 requires that hazardous materials be transported via routes with the least overall travel time and prohibits the transportation of hazardous materials through

residential neighborhoods. The CHP is authorized to designate and enforce route restrictions for the transportation of hazardous materials.

2.2.7.2 California Code of Regulations Title 22

Transport of hazardous materials can only be conducted under a registration issued by DTSC as outlined by Chapter 13, Division 4.5 of Title 22.[2] Identification (ID) numbers are issued by DTSC or EPA for tracking hazardous waste transporters and TSD facilities for hazardous materials. The ID number is used to identify the hazardous waste handler and to track waste from point of origin to final disposal. Transporters of hazardous waste must register as a hazardous waste hauler with the DTSC. It is unlawful for any person to transfer custody of a hazardous waste to a transporter who does not hold a valid registration issued by DTSC. A hazardous waste registration is non-transferrable and is valid for one year.

Each truck, trailer, semitrailer, or container used for shipping hazardous waste must be designed and constructed, and its contents limited, such that under normal transportation conditions, no hazardous waste would be released to the environment. All material transport takes place under manifest, and compliance with Title 22 requires that transporters take immediate action to protect human health and the environment in the event of spill, release, or mishap.

2.2.8 Hazardous Waste and Substances Sites List

The Hazardous Waste and Substances Sites List (Cortese List) is a planning document that the State of California, local agencies, and developers use to comply with CEQA requirements to provide information about the location of hazardous materials release sites. Government Code Section 65962.5 requires CalEPA to develop (at least annually) an updated Cortese List. The DTSC is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

2.2.9 Airport Land Use Commission Law

The state regulates airports under the authority of the Los Angeles County Airport Land Use Commission (ALUC) Law, Section 21670 et seq. of the California Public Utilities Code. The ALUC Law is implemented through individual airport land use commissions, which are required in every county with a public use airport or with an airport served by a scheduled airline. Under the provisions of the law, each ALUC has certain responsibilities conferred upon it and specific duties to perform. Among these are preparing Airport Land Use Plans (ALUP) for each of the airports within its jurisdiction (California Public Utilities Code, Sections 21674[c] and 21675[a]).

2.2.10 Liquid Pipeline Safety Act

Petroleum pipelines have been subject to pipeline safety and maintenance regulations since 1979, including the federal Hazardous Liquid Pipeline Safety Act (49 CFR, Section 195.412) and state regulations (California Government Code, Sections 51010-51019.1). These regulations require that petroleum pipelines be designed with equipment, such as low-pressure alarms and safety shut-down devices, to minimize spill volume in the event of a leak.

[2] For additional detailed information regarding DTSC hazardous waste transporter requirements, including who to contact with waste transportation questions, refer to: *dtsc.ca.gov/hazardous-waste-transporter-requirements-fact-sheet/*.

2.2.11 Hazardous Materials Screening Levels

Screening levels related to protection of human health in the case of routine, long-term exposure by direct pathways (i.e., ingestion, inhalation and dermal contact) commonly include EPA Regional Screening Levels (RSL) and DTSC Screening Levels (DTSC-SL).[3, 4] RSLs and DTSC-SLs include inorganic constituent concentrations that are based on the protection of public health. In California, DTSC-SLs are commonly used in lieu of RSLs when DTSC uses toxicity criteria that are different than the toxicity criteria used by EPA. RSLs and DTSC-SLs can be used for the following:

- Prioritizing multiple sites or operable units (OU) or areas of concern within a facility or exposure units
- Setting risk-based detection limits for contaminant of potential concerns (COPC)
- Focusing future site investigation and risk assessment efforts (e.g., selecting COPCs for the baseline risk assessment)
- Identifying contamination which may warrant cleanup
- Identifying sites, or portions of sites, which warrant no further action or investigation
- Initial cleanup goals when site-specific data are lacking

The RSLs and DTSC-SLs are considered conservative. Under most circumstances, the presence of a chemical in site media at concentrations less than the corresponding RSL and DTSC-SL can be assumed not to pose a significant, long-term (chronic) threat to human health or the environment. Inorganic constituent concentrations may also be compared to local background levels.

2.2.12 Asbestos Abatement

Asbestos abatement efforts must be completed in compliance with 7 CCR Section 5208, 8 CCR Section 1529, and 8 CCR Sections 341.6 through 341.14. The regulations in 7 CCR Section 5208 implement worker exposure limits, require exposure monitoring, implement compliance programs, require employee protection and hazard communication, and require employee medical surveillance and reporting. Asbestos exposure for construction work is regulated by 8 CCR Section 1529, which includes exposure limits and procedures for handling and removal of asbestos. Requirements for transport and disposal are included in 8 CCR Sections 341.6 through 341.14.

Section 19827.5 of the Health and Safety Code, adopted January 1, 1991, prohibits local agencies from issuing demolition or alteration permits until the applicant has demonstrated compliance with applicable regulations. If there are 100 square feet or more of ACM present, renovation or demolition of buildings must be conducted by a licensed contractor and the work must comply with requirements included in 8 CCR Sections 1529 and 341.6 through 341.14. Cal/OSHA must be notified 10 days before the start of construction and demolition activities. Asbestos encountered during demolition of an existing building must be transported to and disposed of at an appropriate facility. The contractor and hauler of the material must file a hazardous-waste manifest that provides disposal details.

[3] For additional information on EPA RSLs, including generic tables refer to: *epa.gov/risk/regional-screening-levels-rsls.*

[4] For additional information on DTSC SLs, including screen levels for soil, water, and air contaminants refer to: *dtsc.ca.gov/wp-content/uploads/sites/31/2019/04/HHRA-Note-3-June-2020-A.pdf*.

2.2.13 Lead and Lead-Based Paint Abatement

Regulation of lead and lead-based paint is described in 29 CFR 1926.62 and 8 CCR Section 1532.1. These regulations cover the demolition, removal, cleanup, transportation, storage, and disposal of lead-containing material. The regulations outline the permissible exposure limit, protective measures, and monitoring requirements. Cal/OSHA's Lead in Construction Standard requires notification and a lead compliance plan with safe work practices and a detailed plan to protect workers from lead exposure.

2.3 Regional

2.3.1 South Coast Air Quality Management District Rules 1403 and 1166

South Coast Air Quality Management District (SCAQMD) *Rule 1403*, adopted by the SCAQMD on October 6, 1989, establishes *survey requirements* and *notification* work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities. Rule 1403 incorporates the federal asbestos requirements found in National Emission Standards for Hazardous Air Pollutants found in the CFR Title 40, Part 61, Subpart M.

According to Rule 1403, an asbestos survey is required prior to the start of any renovation or demolition project, *regardless of the age of the building or the size of the project*, in order to determine the presence of ACMs. Rule 1403 defines a "demolition" project as a project that includes removing any load-bearing component. In addition, Rule 1403 designates receptor locations outside the boundaries of a project site and sets emissions standards.

Rule 1166, "Volatile Organic Compound Emissions from Decontamination of Soil" sets requirements to control the emission of volatile organic compounds (VOC) from excavating, grading, handling, and treating VOC-contaminated soil.

2.3.2 Certified Unified Program Agency (Chapter 6.11 of the California Health and Safety Code)

The CUPA is responsible for implementing federal and state laws and regulations pertaining to hazardous materials management in the Project Study Area. The LAFD serves as the CUPA for the City of Los Angeles. The CUPA for areas outside of the City of Los Angeles is the LACFD Health Hazardous Materials Division.

The Unified Program consolidates six state environmental regulatory programs into one program under the authority of a CUPA. A CUPA is a local agency that CalEPA certifies to implement these six programs within the local agency's jurisdiction. The Unified Program was established under the amendments to the California Health and Safety Code made by Senate Bill 1082 in 1994 and regulated under Chapter 6.11 of the California Health and Safety Code. The six consolidated programs include the following:

- Hazardous Materials Release Response Plan and Inventory
- California Accidental Release Prevention
- Hazardous Waste (including Tiered Permitting)
- Underground Storage Tanks
- Aboveground Storage Tanks (Spill Prevention Control and Countermeasures requirements)
- Uniform Fire Code Article 80 Hazardous Material Management Program and Hazardous Material Identification System

2.3.3 Los Angeles Metropolitan Transportation Authority Public Transportation Agency Safety Plan

Los Angeles County Metropolitan Transportation Authority's (Metro) *Public Transportation Agency Safety Plan* (Metro, 2024d) is intended to establish safety guidelines for Metro's bus and rail systems. The plan has four components to implement the Safety Management System: Safety Management Policy, Safety Risk Management, Safety Assurance, and Safety Promotion. The purpose of the plan is to establish programs and processes to minimize injuries and accidents throughout Metro's bus and rail systems.

The plan identifies the following safety and security:

- Provide a level of safety and security in transit services that meets if not exceeds industry standards and practices;
- Identify, eliminate, minimize and/or control safety hazards and their associated risks;
- Improve safety by implementing practical and reasonable strategies to reduce the number and rates of accidents, injuries and assaults on transit workers based on data submitted to the National Transit Database (NTD);
- Comply with the applicable requirements of regulatory agencies;
- Maximize the safety of future operations by affecting the design and procurement processes;
- Continuously improve the safety culture by striving to incorporate innovative technologies; and
- Mitigate employee assaults and crime related incidents.

2.3.4 Los Angeles County Airport Land Use Plan

The Los Angeles County Regional Planning Commission has the responsibility of acting as ALUC and is responsible for the preparation of a Comprehensive Land Use Plan (CLUP) to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports. The CLUP establishes a set of compatibility criteria that are used to evaluate the compatibility of land use and airport proposals within the airport influence area (AIA). The countywide CLUP was adopted in 1991 and revised in 2004 (LA County Planning, 1991). The CLUP policies are applicable to the Van Nuys Airport and Santa Monica Airport.

Los Angeles County has eleven general aviation airports, which are defined by FAA as an airport that enplanes less than 2,500 annual passengers, is used exclusively by private and business aircraft, and does not provide commercial air carrier passenger service, and four scheduled air carrier airports. The Van Nuys Airport and Santa Monica Airport are both included in the CLUP.

The safety zones established for the CLUP have been patterned after the Approach Surface and Runway Protection Zone (formerly called clear zone) instituted by the FAA by Federal Aviation Regulations Part

77. The Approach Surface and Runway Protection Zone dimensions depend on the type of approach being made to a runway.[5]

2.3.5 Los Angeles County Operational Area Emergency Response Plan

The adopted *Los Angeles County Operational Area Emergency Response Plan* (OAERP) (Los Angeles County Chief Executive Office, 2023) applies to both the unincorporated county and all incorporated cities in the county. The OAERP establishes the coordinated emergency management system, which includes prevention, protection, response, recovery, and mitigation within the Operational Area.

The OAERP does not address normal day-to-day emergencies; the operational concepts reflected in the plan focus on potential large-scale disasters that can generate unique situations requiring an unusual or extraordinary emergency response. The plan outlines procedures for operations during emergencies such as earthquakes, floods, fires, and other natural disasters; hazardous materials spills; transportation emergencies; civil disturbance; and terrorism. The plan also identifies the location of critical emergency response facilities, such as emergency dispatch and operations centers, government structures, and hospitals or other major medical facilities.

2.4 Local

2.4.1 Local Certified Uniform Program Agencies

The LACFD is the CUPA for the unincorporated portions of Los Angeles County as well as the cities of Burbank, Pasadena, and Torrance; The LAFD is the CUPA for the City of Los Angeles; and the City of Santa Monica is the CUPA for the city. These departments monitor the storage of hazardous materials for compliance with local requirements. Specifically, businesses and facilities that store more than threshold quantities of hazardous materials as defined in Chapter 6.95 of the California Health and Safety Code are required to file an Accidental Risk Prevention Program. This program includes information such as emergency contacts, phone numbers, facility information, chemical inventory and hazardous materials handling and storage locations. These departments also have delegated authority to administer and enforce federal and state laws and local ordinances for USTs. Plans for the construction/installation, modification, upgrade and removal of USTs are reviewed by department Inspectors.

2.4.2 Division 71 of the City of Los Angeles Municipal Code Chapter IX (Methane Seepage Regulations)

The Methane Seepage Regulations, contained within the City of Los Angeles Municipal Code (LAMC) Chapter IX, Article 1, Division 71 (Sections 91.7101 through 91.7109), establish requirements for mitigation and other general building requirements to prevent potential environmental and harmful health effects that could be caused by the construction of buildings located in a defined Methane Hazard Zone within the City of Los Angeles. All new buildings and paved areas located in a Methane Hazard Zone or Methane Buffer Zone must comply with the requirements of LAMC Sections 91.7103 and 91.7104 and the Methane Mitigation Standards established by the Superintendent of Building. The

[5] The Approach Surface is an imaginary inclined plane beginning at the end of the primary surface and extending outward to distances of up to 10 miles, depending on runway use. The Runway Protection Zone begins at the end of the primary surface and has a size that varies with the designated use of the runway. The zone is the most critical safety area under the approach pad and should be kept free of all obstructions.

Methane Mitigation Standards identify installation procedures, design parameters and test protocols for the methane gas mitigation system. LAMC Chapter IX, Article 1, Division 71 was last amended in 2001 through Ordinance No. 175790 and Ordinance No. 180619 was adopted 2009.

These special building code provisions for Methane Potential Zones and Methane Buffer Zones within the city address this natural occurrence and recommend mitigations. More specifically, the Los Angeles Department of Building and Safety (LADBS) publishes a methane (and combustible gas) site testing standard that provides initial guidance to the Project. In addition, the Los Angeles Department of Building and Safety, Los Angeles Methane Zones Map showcases the location of subsurface methane gas hazard.

2.4.3 City of Los Angeles General Plan

The Safety Element of the *City of Los Angeles General Plan* has established the following goal, objective, and policies relevant to hazards (DCP, 2021):

- **Goal 1: Hazard Mitigation.** A city where potential injury, loss of life, property damage, and disruption of the social and economic life of the City due to hazards is minimized.
  - **Objective 1.1:** Implement comprehensive hazard mitigation plans and programs that are integrated with each other and with the City's comprehensive Emergency Response and Recovery Plans and programs.
    - **Policy 1.1.4: Health/Environmental Protection.** Protect the public and workers from the release of hazardous materials and protect City water supplies and resources from contamination resulting from release or intrusion resulting from a disaster event, including protection of the environment and public from potential health and safety hazards associated with program implementation.
    - **Policy 1.1.6: State and Federal Regulations.** Assure compliance with applicable State and federal planning and development regulations. Regularly adopt new provisions of the California Building Standards Code, Title 24, and California Fire Code into the LAMC to ensure that new development meets or exceeds Statewide minimums. Ensure new development in Very High Fire Hazard Severity Zones adheres to the California Building Code, the California Fire Code, Los Angeles Fire Code and California Public Resources Code. Facilitate compliance with new standards for existing non-conforming structures and evacuation routes.

2.4.4 Van Nuys Airport Plan

The *Van Nuys Airport Plan* was adopted in January 2006 and is an element of the City of Los Angeles General Plan (DCP, 2006). *The Van Nuys Airport Plan* provides a comprehensive long-term plan that encourages the orderly development of on-airport land uses, enhances the environment, and increases compatibility between the airport and surrounding communities.

The Van *Nuys Airport Plan* is intended to serve as an official guide for the development of the airport for use by the City Council, Mayor, City Planning Commission, Board of Airport Commissioners, and other concerned governmental agencies, as well as private organizations and concerned citizens. The *Van Nuys Airport Plan* will function as a reference in connection with actions taken on various airport development matters as required by the Los Angeles City Planning and Zoning Ordinance (DCP, 2006).

The intent of the *Van Nuys Airport Plan* is to promote an arrangement of airport land uses, circulation, and services, which together will contribute to the economic, social, health, safety, welfare, and convenience within the larger framework of the San Fernando Valley (Valley). In addition, the *Van Nuys Airport Plan* is a guide for development of the airport to meet existing and anticipated needs, enhance the environment, balance growth and stability, reflect economic potentialities of airport development, and protect public investment (DCP, 2006).

The *Van Nuys Airport Plan* map is not an official zone map. While it is a guide, it does not imply any implicit right to a particular zone or to the land uses permitted therein. Land uses shown on the *Van Nuys Airport Plan* are projected as much as 20 years into the future; the *Van Nuys Airport Plan* contains a designation of more land in some areas for different zones and land uses than may be desirable for many years. The *Van Nuys Airport Plan* will be reviewed and amended periodically as necessary to reflect changes in social, economic, and aviation conditions, as well as to ensure that land use projections remain consistent with the City of Los Angeles General Plan and Zoning Code standards.

3 METHODOLOGY

3.1 Definition of Terms

For purposes of this section, the term "hazardous materials" refers to both hazardous substances and hazardous wastes. A "hazardous material" is defined by federal regulations as "a substance or material that … is capable of posing an unreasonable risk to health, safety, and property when transported in commerce" (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

> *Hazardous material means any material that, because of its quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.*

Hazardous wastes are defined in California Health and Safety Code Section 25141(b) as wastes that:

> *…because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause, or significantly contribute to an increase in mortality or an increase in serious illness [, or] pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.*

3.2 Hazard versus Risk

Workers and general public health are potentially at risk whenever hazardous materials have been used or where there could be an exposure to such materials. Inherent in the setting and analyses presented in this section are the concepts of the "hazard" of these materials and the "risk" they pose to human health. Exposure to some chemical substances may harm internal organs or systems in the human body, ranging from temporary effects to permanent disability, or death. Hazardous materials that result in adverse effects are generally considered "toxic." Other chemical materials, however, may be corrosive, or react with other substances to form other hazardous materials, but they are not considered toxic because organs or systems are not affected. Because toxic materials can result in adverse health effects, they are considered hazardous materials, but not all hazardous materials are necessarily "toxic." For purposes of the information and analyses presented in this section, the terms hazardous substances or hazardous materials are used interchangeably and include materials that are considered toxic.

The risk to human health is determined by the probability of exposure to a hazardous material and the severity of harm such exposure would pose. That is to say, the likelihood and means of exposure, in addition to the inherent toxicity of a material, are used to determine the degree of risk to human health. For example, a high probability of exposure to a low-toxicity chemical would not necessarily pose an unacceptable human health or ecological risk, whereas a low probability of exposure to a very-high-toxicity chemical might. Various regulatory agencies, such as EPA, the State Water Resources Control Board (SWRCB), the DTSC, and state and federal OSHA are responsible for developing and/or enforcing risk-based standards to protect human health and the environment.

3.3 Operation and Construction

This analysis considers the range and nature of foreseeable transport, use, storage, and disposal of hazardous materials resulting from implementation of the Sepulveda Transit Corridor Project (Project), and it identifies the primary ways that these hazardous materials could expose individuals or the environment to health and safety risks.

The Resource Study Area (RSA) for hazards and hazardous materials resources encompasses a 0.5-mile buffer zone around the alternatives. Information related to known hazardous materials releases within the RSA was obtained from review of the following documents:

- *Phase I Initial Site Assessment* (Diaz Yourman & Associates, 2022)
- *Sepulveda Transit Corridor Phase 1 Environmental Site Assessment* (ESA) *Impact Report* (Metro, 2023a)
- *Sepulveda Environmental Data Resources Alternatives 1-3* (ICF, 2022a) (Attachment 1A)
- *Sepulveda Environmental Data Resources Alternatives 4-5* (ICF, 2022b) (Attachment 1B)
- *Sepulveda Environmental Data Resources Alternative 6* (ICF, 2023) (Attachment 1C)
- *Sepulveda Transit Corridor Project Draft Hazardous Materials Data Review Report* (Metro, 2024b)
- *Sepulveda Transit Corridor Project Draft Geotechnical Design Memorandum* (Metro, 2023b)
- *Sepulveda Transit Corridor Project Preliminary Geotechnical Design and Data Report* (Metro, 2024c)

A government agency database records search was requested by EDR Inc. (EDR) for the alternatives. The purpose of the records search is to obtain and review records that would help to evaluate recognized environmental conditions (RECs) in connection with the alternative alignments.[6] The records search was conducted in accordance with the search requirements of the U.S. Environmental Protection Agency (EPA) Standards and Practices for All Appropriate Inquiries (40 Code of Federal Regulations [CFR] Part 312), the American Society for Testing of Materials (ASTM) Standard Practice for Environmental Site Assessments (E1527-21). Federal, state, and local regulatory agencies publish databases or "lists" of businesses and properties that handle hazardous materials or hazardous waste or are the known location of a release of hazardous substances to soil and/or groundwater. A listing of the search distances, databases evaluated, dates the databases were last updated, and types of information contained in each database are included in the regulatory database search report provided in Appendices A1 through A3 of this report.

EDR utilizes a geographical information system to plot the locations of reported spills, leaks, and incidents. This information was reviewed to help establish if the alternative is listed in the databases and lists. Each listing was reviewed to assess whether the corresponding property details in EDR's report (ICF, 2022a; ICF, 2022b; ICF, 2023) revealed a potential environmental impact to construction or operation of the Project. Many listings in the report were concluded to pose no potential risks based on the following, or a combination thereof:

[6] As defined in the American Society for Testing and Materials (ASTM) Standard, an REC is: "1) The presence of hazardous substances or petroleum products due to a release to the environment; (2) likely presence of hazardous substances or petroleum products due to a release or likely release to the environment; or (3) presence of hazardous materials or petroleum products under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions." As defined in the ASTM Standard, a de minimis condition is: "A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

- The listed property is located at a distance from the project alternatives where the facility poses no risk of encountering hazardous materials during construction or operation of any of the project alternatives.
- The listed property is located in a down-gradient or cross-gradient direction from a project alternative based on the anticipated direction of groundwater flow and depth of groundwater[7] at the property being evaluated, and it is located at a distance such that it is unlikely for a project alternative to encounter contaminated groundwater.
- The listed property is identified in the underground storage tank (UST) or small quantity generator databases and does not immediately adjoin any of the project alternatives' construction footprints and is furthermore not listed in other databases that report a release of a hazardous substance or petroleum product, and/or is not listed as having environmental violations.
- The quantity of the hazardous substances or petroleum product released from an off-site, non-adjoining property was not judged to have resulted in contamination above the most stringent criteria requiring regulatory action. Therefore, no impact is anticipated to result from any of the project alternatives.

The remaining property listings, if applicable, were reviewed to assess whether these properties had environmental releases that may have resulted in RECs. These consisted of publicly available environmental risk databases maintained under Government Code Section 65962.5 (i.e., the Cortese List), including searches of the EPA Envirofacts website, the State Water Resources Control Board (SWRCB) GeoTracker website, and DTSC's EnviroStor website. In addition, the United States Department of Transportation (USDOT) National Pipeline Mapping System was reviewed to identify high-pressure pipelines and the California Geologic Energy Management Division (CalGEM) Well Finder online database was reviewed to identify oil and gas wells.

The information obtained from these sources was reviewed and summarized to establish existing conditions and to evaluate the significance of potential environmental effects, based on the thresholds of significance presented in Section 3.4. It should be noted that information obtained from these sources have been collected over several years and on-the-ground conditions may vary.

In determining the level of significance, this analysis assumes that development in the RSA would comply with relevant federal, state, regional, and local ordinances and regulations. Where a potentially significant impact would be anticipated, project measures (PMs) and mitigation measures (MMs) to address these potential effects were developed.

[7] Groundwater levels are highly variable along the extent of the RSA. Groundwater in the southerly portion of the project alignment is at approximately 40 feet below grade, extending from the southern terminus to approximately halfway between Wilshire and Sunset Boulevards. From this point north, the groundwater becomes shallower at around 30 feet below grade, extending to approximately just north of Wilshire Boulevard, and then deepens to 40 feet at the base of the Santa Monica Mountains. Groundwater measures between 40 and 70 feet below grade within the areas south of the Santa Monica Mountains. From U.S. Highway 101 (US-101) north along the corridor, the groundwater increases in depth progressively northward along the project alignment up to approximately 90 feet below grade (Metro, 2023b).

3.4 CEQA Thresholds of Significance

For the purposes of the Environmental Impact Report, impacts are considered significant if the Project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- 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.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.
- For a project located within an Airport Land Use Plan or, where such a plan has not been adopted, within 2 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.

4 FUTURE BACKGROUND PROJECTS

This section describes planned improvements to highway, transit, and regional rail facilities within the Project Study Area and the region that would occur whether or not the Project is constructed. These improvements are relevant to the analysis of the No Project Alternative and the project alternatives because they are part of the future regional transportation network within which the Project would be incorporated. These improvements would not be considered reasonably foreseeable consequences of not approving the Project as they would occur whether or not the Project is constructed.

The future background projects include all existing and under-construction highway and transit services and facilities, as well as the transit and highway projects scheduled to be operational by 2045 according to the *Measure R Expenditure Plan* (Metro, 2008), the *Measure M Expenditure Plan* (Metro, 2016), the Southern California Association of Governments (SCAG) *Connect SoCal, 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS) (SCAG, 2020a, 2020b), and the Federal Transportation Improvement Program (FTIP), with the exception of the Sepulveda Transit Corridor Project (Project). The year 2045 was selected as the analysis year for the Project because it was the horizon year of SCAG's adopted RTP/SCS at the time Metro released the NOP for the Project.

4.1 Highway Improvements

The only major highway improvement in the Project Study Area included in the future background projects is the Interstate 405 (I-405) Sepulveda Pass ExpressLanes project (ExpressLanes project). This would include the ExpressLanes project as defined in the *2021 FTIP Technical Appendix, Volume II of III* (SCAG, 2021a), which is expected to provide for the addition of one travel lane in each direction on I-405 between U.S. Highway 101 (US-101) and Interstate 10 (I-10). Metro is currently studying several operational and physical configurations of the ExpressLanes project, which may also be used by commuter or rapid bus services, as are other ExpressLanes in Los Angeles County.

4.2 Transit Improvements

Table 4-1 lists the transit improvements that would be included in the future background projects. This list includes projects scheduled to be operational by 2045 as listed in the *Measure R and Measure M Expenditure Plans* (with the exception of the Project) as well as the Inglewood Transit Connector and LAX APM. In consultation with the Federal Transit Administration, Metro selected 2045 as the analysis year to provide consistency across studies for Measure M transit corridor projects. The Inglewood Transit Connector, a planned automated people mover (APM), which was added to the FTIP with *Consistency Amendment #21-05* in 2021, would also be included in the future background projects (SCAG, 2021b). These projects would also include the Los Angeles International Airport (LAX) APM, currently under construction by Los Angeles World Airports. The APM will extend from a new Consolidated Rent-A-Car Center to the Central Terminal Area of LAX and will include four intermediate stations. In addition, the new Airport Metro Connector Transit Station at Aviation Boulevard and 96th Street will also serve as a direct connection from the Metro K Line and Metro C Line to LAX by connecting with one of the APM stations.

During peak hours, heavy rail transit (HRT) services would generally operate at 4-minute headways (i.e., the time interval between trains traveling in the same direction), and light rail transit (LRT) services would operate at 5- to 6-minute headways. During off-peak hours, HRT services would generally operate at 8-minute headways and LRT services at 10- to 12-minute headways. Bus rapid transit (BRT) services would generally operate at peak headways between 5 and 10 minutes and off-peak headways between

10 and 14 minutes. The Inglewood Transit Connector would operate at a headway of 6 minutes, with more frequent service during major events. The LAX APM would operate at 2-minute headways during peak and off-peak periods.

Table 4-1. Fixed Guideway Transit System in 2045

Transit Line	Mode	Alignment Description[a]
Metro A Line	LRT	Claremont to downtown Long Beach via downtown Los Angeles
Metro B Line	HRT	Union Station to North Hollywood Station
Metro C Line	LRT	Norwalk to Torrance
Metro D Line	HRT	Union Station to Westwood/VA Hospital Station
Metro E Line	LRT	Downtown Santa Monica Station to Lambert Station (Whittier) via downtown Los Angeles
Metro G Line	BRT	Pasadena to Chatsworth[b]
Metro K Line	LRT	Norwalk to Expo/Crenshaw Station
East San Fernando Valley Light Rail Transit Line	LRT	Metrolink Sylmar/San Fernando Station to Metro G Line Van Nuys Station
Southeast Gateway Line	LRT	Union Station to Artesia
North San Fernando Valley Bus Rapid Transit Network Improvements	BRT	North Hollywood to Chatsworth[c]
Vermont Transit Corridor	BRT	Hollywood Boulevard to 120th Street
Inglewood Transit Connector	APM	Market Street/Florence Avenue to Prairie Avenue/Hardy Street
Los Angeles International Airport APM	APM	Aviation Boulevard/96th Street to LAX Central Terminal Area

Source: HTA, 2024

[a]Alignment descriptions reflect the project definition as of the date of the Project's Notice of Preparation (Metro, 2021).

[b]As defined in Metro Board actions of July 2018 and May 2021, the Metro G Line will have an eastern terminus near Pasadena City College and will include aerial stations at Sepulveda Boulevard and Van Nuys Boulevard.

[c]The North San Fernando Valley network improvements are assumed to be as approved by the Metro Board in December 2022.

4.3 Regional Rail Projects

The future background projects would include the Southern California Optimized Rail Expansion (SCORE) program, which is Metrolink's Capital Improvement Program that will upgrade the regional rail system (including grade crossings, stations, and signals) and add tracks as necessary to be ready in time for the 2028 Olympic and Paralympic Games. The SCORE program will also help Metrolink to move toward a zero emissions future. The following SCORE projects planned at Chatsworth and Burbank Stations will upgrade station facilities and allow 30-minute all-day service in each direction by 2045 on the Metrolink Ventura County Line:

1. Chatsworth Station: This SCORE project will include replacing an at-grade crossing and adding a new pedestrian bridge and several track improvements to enable more frequent and reliable service.
2. Burbank Station: This SCORE project will include replacing tracks, adding a new pedestrian crossing, and realigning tracks to achieve more frequency, efficiency, and shorter headways.

In addition, the Link Union Station project will provide improvements to Los Angeles Union Station that will transform the operations of the station by allowing trains to arrive and depart in both directions,

rather than having to reverse direction to depart the station. Link Union Station will also prepare Union Station for the arrival of California High-Speed Rail, which will connect Union Station to other regional multimodal transportation hubs such as Hollywood Burbank Airport and the Anaheim Regional Transportation Intermodal Center.

5 NO PROJECT ALTERNATIVE

The only reasonably foreseeable transportation project under the No Project Alternative would be improvements to Metro Line 761, which would continue to serve as the primary transit option through the Sepulveda Pass with peak-period headways of 10 minutes in the peak direction and 15 minutes in the other direction. Metro Line 761 would operate between the Metro E Line Expo/Sepulveda Station and the Metro G Line Van Nuys Station, in coordination with the opening of the East San Fernando Valley Light Rail Transit Line, rather than to its current northern terminus at the Sylmar Metrolink Station.

5.1 Existing Conditions

The California Environmental Quality Act (CEQA) Guidelines Section 15126.6I requires the analysis of a No Project Alternative. In accordance with Section 15126.6(e)(3)(B), the No Project Alternative is the circumstance under which the proposed Project does not proceed. The No Project Alternative may signify a "no build" alternative in which the existing environmental setting is maintained, or in instances where failure to proceed with the Project would likely result in the development of some other project on the property, the No Project Alternative may describe the development that would be reasonably expected to occur in the foreseeable future based on current Land Use Plans and site zoning. The No Project Alternative includes all existing and under-construction highway and transit services and facilities and would increase demand for fire and emergency services when compared to the existing conditions.

5.2 Impact Evaluation

5.2.1 Impact HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

5.2.1.1 Operational Impacts

The No Project Alternative would not include construction and operation of the Project, and impacts associated with the Project would not occur. In absence of the Project, the only reasonably foreseeable transit improvement in the Project Study Area would involve changes to Metro Line 761. Operation of the rerouted Metro Line 761 would likely involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. Cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label direction. With adherence to existing federal, state and local regulations, operation of the No Project Alternative is not anticipated to create significant hazards to the public or the environment through routine transport, storage, use, and disposal of hazardous materials during operation and the impact would be less than significant.

5.2.1.2 Construction Impacts

The No Project Alternative would not include construction and operation of the Project, and impacts associated with the Project would not occur. Construction activities associated with rerouting Metro Line 761 would involve minor alterations to the street ROW for potential new bus stops. The No Project Alternative would be subject to the same comprehensive federal, state, regional, and local framework described in Section 2, which is independent of the CEQA process and is intended to reduce the risks

associated with the use, transport, and disposal of hazardous materials. The use and disposal of hazardous materials is heavily regulated at both the federal and state level; these regulations are promulgated and enforced by agencies such as the U.S. Environmental Protection Agency (EPA), State Water Resources Control Board (SWRCB), Department of Toxic Substances Control (DTSC), California Division of Occupational Safety and Health (Cal/OSHA), and South Coast Air Quality Management District (SCAQMD).

Transportation of hazardous materials would comply with state regulations governing hazardous materials transport included in the California Vehicle Code (Title 13 of the California Code of Regulations [CCR]), the State Fire Marshal Regulations (Title 19 of the CCR), and Title 22 of the CCR.

Adherence to federal and state regulations reduces the risk of exposure to hazardous materials used during construction. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a more coordinated, quicker response to emergencies. With adherence to existing federal, state and local regulations, the No Project Alternative is not anticipated to create significant hazards to the public or the environment through routine transport, storage, use, and disposal of hazardous materials during construction and the impact would be less than significant.

5.2.2 Impact HAZ-2: 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?

5.2.2.1 Operational Impacts

The No Project Alternative would not include construction and operation of the Project, and impacts associated with the Project would not occur. Metro Line 761 is an existing bus line that is maintained at existing Metro bus maintenance facilities. Activities associated with maintaining Metro Line 761would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal and state regulatory requirements that are intended to prevent or manage hazards, and if a spill does occur, it would be remediated accordingly. With adherence to existing federal, state and local regulations, the No Project Alternative is not anticipated to create a significant hazard related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials during operation and the impact would be less than significant.

5.2.2.2 Construction Impacts

The No Project Alternative would not include construction and operation of the Project, and impacts associated with the proposed Project would not occur. Construction activities associated with Metro Line 761 would involve minor work in the street ROW that would not create a hazard to the public or environment through the release of hazardous materials into the environment. No activities are proposed that would result in the use or discharge of unregulated hazardous materials.

Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal and state regulatory requirements that are intended to prevent or manage hazards, and if a spill does occur, it would be remediated accordingly. With adherence to existing federal, state and local

regulations, the No Project Alternative is not anticipated to create a significant hazard related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials during construction and the impact would be less than significant.

5.2.3 Impact HAZ-3: 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?

5.2.3.1 Operational Impacts

The No Project Alternative would not include construction and operation of the Project, and impacts associated with the proposed Project would not occur. Metro Line 761 is an existing bus line that is maintained at existing Metro bus maintenance facilities. Activities associated with maintaining Metro Line 761 involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. Cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions. With adherence to existing federal, state and local regulations, the No Project Alternative is not anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school during operation and the impact would be less than significant.

5.2.3.2 Construction Impacts

Construction of the No Project Alternative would involve handling of hazardous materials and use of diesel-powered equipment. Such activities, if not appropriately managed, could result in hazardous emissions that would potentially affect nearby schools.

The No Project Alternative would be subject to the same comprehensive federal, state, regional, and local framework, which is independent of the CEQA process and is intended to reduce the risks associated with the use, transport, and disposal of hazardous materials. The use and disposal of hazardous materials is heavily regulated at both the federal and state level; these regulations are promulgated and enforced by agencies such as EPA, SWRCB, DTSC, Cal/OSHA, and SCAQMD.

Transportation of hazardous materials would comply with state regulations governing hazardous materials transport included in the California Vehicle Code (Title 13 of CCR), the State Fire Marshal Regulations (Title 19 of the CCR), and Title 22 of the CCR.

Adherence to federal and state regulations reduces the risk of exposure to hazardous materials used during construction. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a more coordinated, quicker response to emergencies. With adherence to existing federal, state and local regulations, the No Project Alternative is not anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school during construction and the impact would be less than significant.

5.2.4 Impact HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

5.2.4.1 Operational Impacts

The No Project Alternative would not include construction and operation of the Project, and impacts associated with the proposed Project would not occur. Each of these projects would need to undergo their own environmental impact analysis to determine the hazardous site conditions related to Government Code Section 65962.5, commonly known as the Cortese List. Rerouting Metro Line 761 would involve operation of an existing bus line along existing roads and highways and has no potential to affect Cortese-listed hazardous materials sites. During operations no ground-disturbing activities would occur at the Cortese-listed hazardous materials sites such that hazardous releases of contaminated soils could create a significant hazard to the public or the environment. With adherence to existing federal, state and local regulations, the No Project Alternative is not anticipated to create a significant hazard to the public or the environment during operation and the impact would be less than significant.

5.2.4.2 Construction Impacts

The No Project Alternative would not include construction and operation of the Project, and impacts associated with the proposed Project would not occur. Each of these projects would need to undergo their own environmental impact analysis to determine the hazardous site conditions related to Government Code Section 65962.5, commonly known as the Cortese List. Rerouting Metro Line 761 would involve an existing bus line along existing roads and highways and has no potential to affect Cortese-listed hazardous materials sites. Construction of any infrastructure related to Metro Line 761 would be done on the street (painting) or on sidewalks (new bus shelters). During construction no ground-disturbing activities would occur at the Cortese-listed hazardous materials sites such that hazardous releases of contaminated soils could create a significant hazard to the public or the environment. With adherence to existing federal, state and local regulations, the No Project Alternative is not anticipated to create a significant hazard to the public or the environment during construction and the impact would be less than significant.

5.2.5 Impact HAZ-5: 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?

5.2.5.1 Operational Impacts

The No Project Alternative would not include construction and operation of the Project, and impacts associated with the proposed Project would not occur. Each of these projects would need to undergo their own environmental impact analysis to determine whether the project was within an Airport Land Use Plan (ALUP). The Metro Line 761 would travel within 2 miles of the Van Nuys Airport and the Santa Monica Airport generally along Sepulveda Boulevard south of US 101 and along Van Nuys Boulevard north of US 101. Both the *Van Nuys Airport Plan* (DCP, 2006) and Los Angeles County ALUP indicate that the potential bus route streets are located outside the airports' AIA, which is the area where current or future airport-related noise, overflight, safety, or airspace protection factors may substantially affect land uses or necessitate restrictions on those uses. With adherence to existing federal, state and local

regulations, the No Project Alternative would not result in a safety hazard or excessive noise related airports during operation and the impact would be less than significant.

5.2.5.2 Construction Impacts

The No Project Alternative would not include construction and operation of the Project, and impacts associated with the proposed Project would not occur. Each of these projects would need to undergo their own environmental impact analysis to determine whether the project was within an ALUP. Construction activities associated with Metro Line 761 are not anticipated to occur within any ALUPs. With adherence to existing federal, state and local regulations, the No Project Alternative would not result in a safety hazard or excessive noise related airports during construction and the impact would be less than significant.

6 ALTERNATIVE 1

6.1 Alternative Description

Alternative 1 is an entirely aerial monorail alignment that would run along the Interstate 405 (I-405) corridor and would include eight aerial monorail transit (MRT) stations and a new electric bus route from the Los Angeles County Metropolitan Transportation Authority's (Metro) D Line Westwood/VA Hospital Station to the University of California, Los Angeles (UCLA) Gateway Plaza via Wilshire Boulevard and Westwood Boulevard. This alternative would provide transfers to five high-frequency fixed guideway transit and commuter rail lines, including the Metro E, Metro D, and Metro G Lines, the East San Fernando Valley Light Rail Transit Line, and the Metrolink Ventura County Line. The length of the alignment between the terminus stations would be approximately 15.1 miles. The length of the bus route would be 1.5 miles.

The eight aerial MRT stations and three bus stops would be as follows:

1. Metro E Line Expo/Sepulveda Station (aerial)
2. Santa Monica Boulevard Station (aerial)
3. Wilshire Boulevard/Metro D Line Station (aerial)
    a. Wilshire Boulevard/VA Medical Center bus stop
    b. Westwood Village bus stop
    c. UCLA Gateway Plaza bus stop
4. Getty Center Station (aerial)
5. Ventura Boulevard/Sepulveda Boulevard Station (aerial)
6. Metro G Line Sepulveda Station (aerial)
7. Sherman Way Station (aerial)
8. Van Nuys Metrolink Station (aerial)

6.1.1 Operating Characteristics

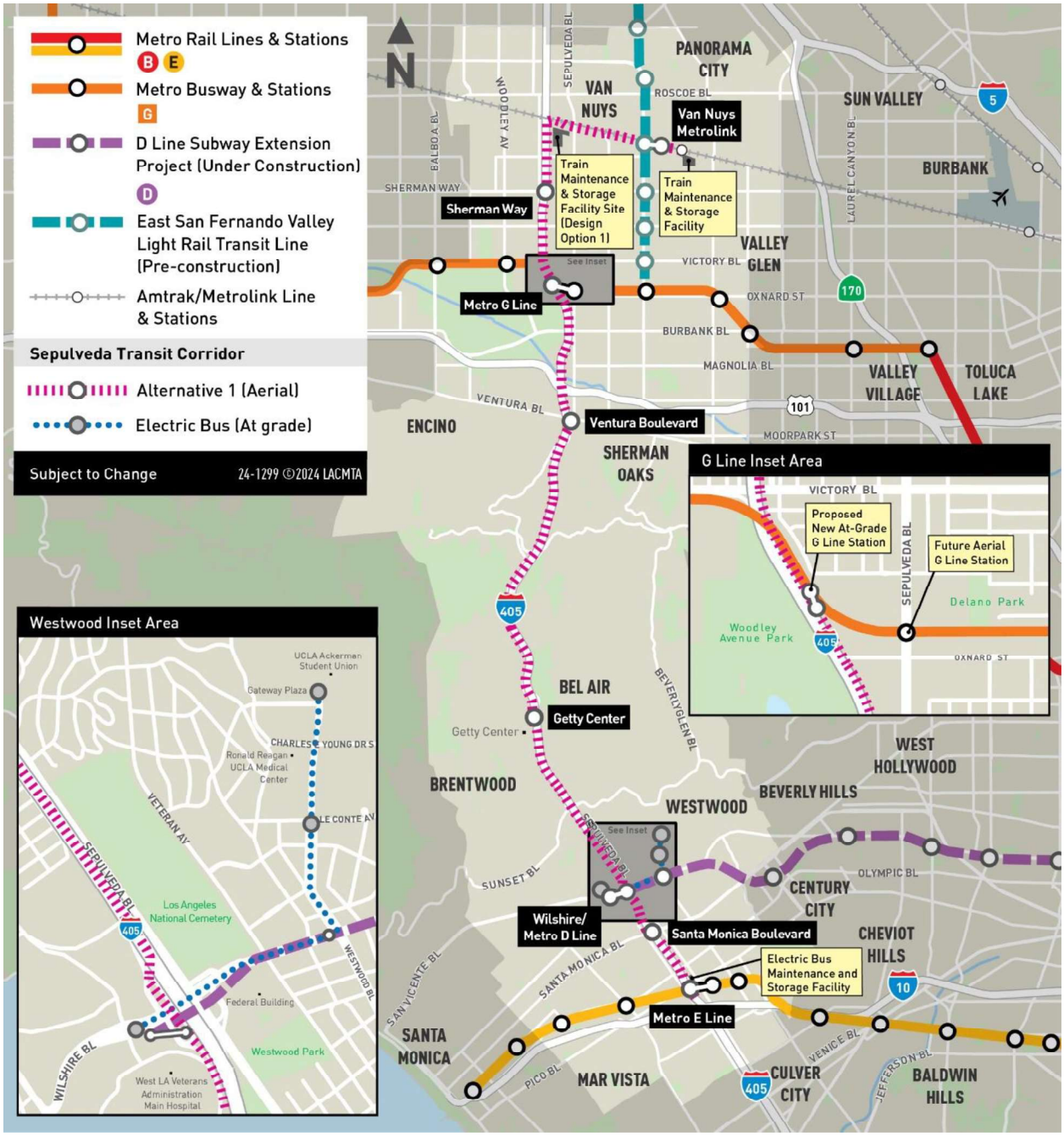
6.1.1.1 Alignment

As shown on Figure 6-1, from its southern terminus at the Metro E Line Expo/Sepulveda Station, the alignment of Alternative 1 would generally follow I-405 to the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor near the alignment's northern terminus at the Van Nuys Metrolink Station. At several points, the alignment would transition from one side of the freeway to the other or to the median. North of U.S. Highway 101 (US-101), the alignment would be on the east side of the I-405 right-of-way and would then curve eastward along the south side of the LOSSAN rail corridor to Van Nuys Boulevard.

The proposed southern terminus station would be located west of the existing Metro E Line Expo/Sepulveda Station and east of I-405, between Pico Boulevard and Exposition Boulevard. Tail tracks would extend just south of the station adjacent to the eastbound Interstate 10 (I-10) to northbound I-405 connector over Exposition Boulevard. North of the Metro E Line Expo/Sepulveda Station, a storage track would be located off the main alignment north of Pico Boulevard, between I-405 and Cotner Avenue. The alignment would continue north along the east side of I-405 until just south of Santa Monica Boulevard, where a proposed station would be located between the I-405 northbound travel lanes and Cotner Avenue. The alignment would cross over the northbound and southbound freeway lanes north of Santa Monica Boulevard and travel along the west side of I-405, before reaching a

proposed station within the I-405 southbound-to-eastbound loop off-ramp to Wilshire Boulevard, near the Metro D Line Westwood/VA Hospital Station.

Figure 6-1. Alternative 1: Alignment



Source: LASRE, 2024; HTA, 2024

An electric bus would serve as a shuttle between the Wilshire Boulevard/Metro D Line Station and UCLA Gateway Plaza. From the Wilshire Boulevard/Metro D Line Station, the bus would travel east on Wilshire Boulevard and turn north on Westwood Boulevard to UCLA Gateway Plaza and make an intermediate stop in Westwood Village near the intersection of Le Conte Avenue and Westwood Boulevard.

North of Wilshire Boulevard, the monorail alignment would transition over the southbound I-405 freeway lanes to the freeway median, where it would continue north over the Sunset Boulevard overcrossing. The alignment would remain in the median to Getty Center Drive, where it would cross over the southbound freeway lanes to the west side of I-405, just north of the Getty Center Drive undercrossing, to the proposed Getty Center Station located north of the Getty Center tram station. The alignment would return to the median for a short distance before curving back to the west side of I-405, south of the Sepulveda Boulevard undercrossing north of the Getty Center Drive interchange. After crossing over Bel Air Crest Road and Skirball Center Drive, the alignment would return to the median and run under the Mulholland Drive Bridge, then continue north within the I-405 median to descend into the San Fernando Valley (Valley).

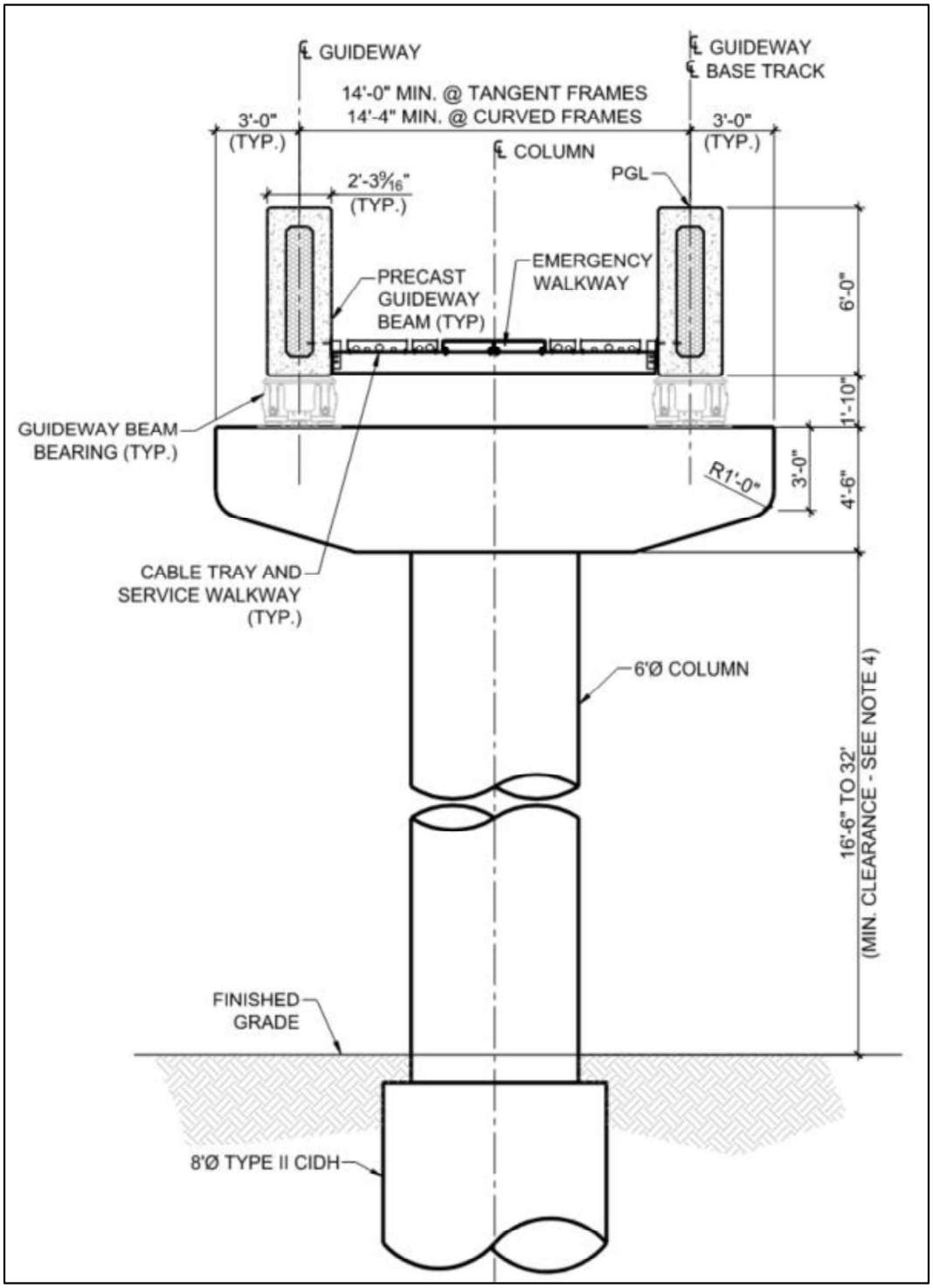
Near Greenleaf Street, the alignment would cross over the northbound freeway lanes and northbound on-ramps toward the proposed Ventura Boulevard Station on the east side of I-405. This station would be located above a transit plaza and would replace an existing segment of Dickens Street adjacent to I-405, just south of Ventura Boulevard. Immediately north of the Ventura Boulevard Station, the alignment would cross over northbound I-405 to the US-101 connector and continue north between the connector and the I-405 northbound travel lanes. The alignment would continue north along the east side of I-405—crossing over US-101 and the Los Angeles River—to a proposed station on the east side of I-405 near the Metro G Line Busway. A new at-grade station on the Metro G Line would be constructed for Alternative 1 adjacent to the proposed monorail station. These proposed stations are shown on the Metro G Line inset area on Figure 6-1.

The alignment would then continue north along the east side of I-405 to the proposed Sherman Way Station. The station would be located inside the I-405 northbound loop off-ramp to Sherman Way. North of the station, the alignment would continue along the eastern edge of I-405, then curve to the southeast parallel to the LOSSAN rail corridor. The alignment would remain aerial along Raymer Street east of Sepulveda Boulevard and cross over Van Nuys Boulevard to the proposed terminus station adjacent to the Van Nuys Metrolink/Amtrak Station. Overhead utilities along Raymer Street would be undergrounded where they would conflict with the guideway or its supporting columns. Tail tracks would be located southeast of this terminus station.

6.1.1.2 Guideway Characteristics

The monorail alignment of Alternative 1 would be entirely aerial, utilizing straddle-beam monorail technology, which allows the monorail vehicle to straddle a guide beam that both supports and guides the vehicle. Northbound and southbound trains would travel on parallel beams supported by either a single-column or a straddle-bent structure. Figure 6-2 shows a typical cross-section of the aerial monorail guideway.

Figure 6-2. Typical Monorail Guideway Cross-Section



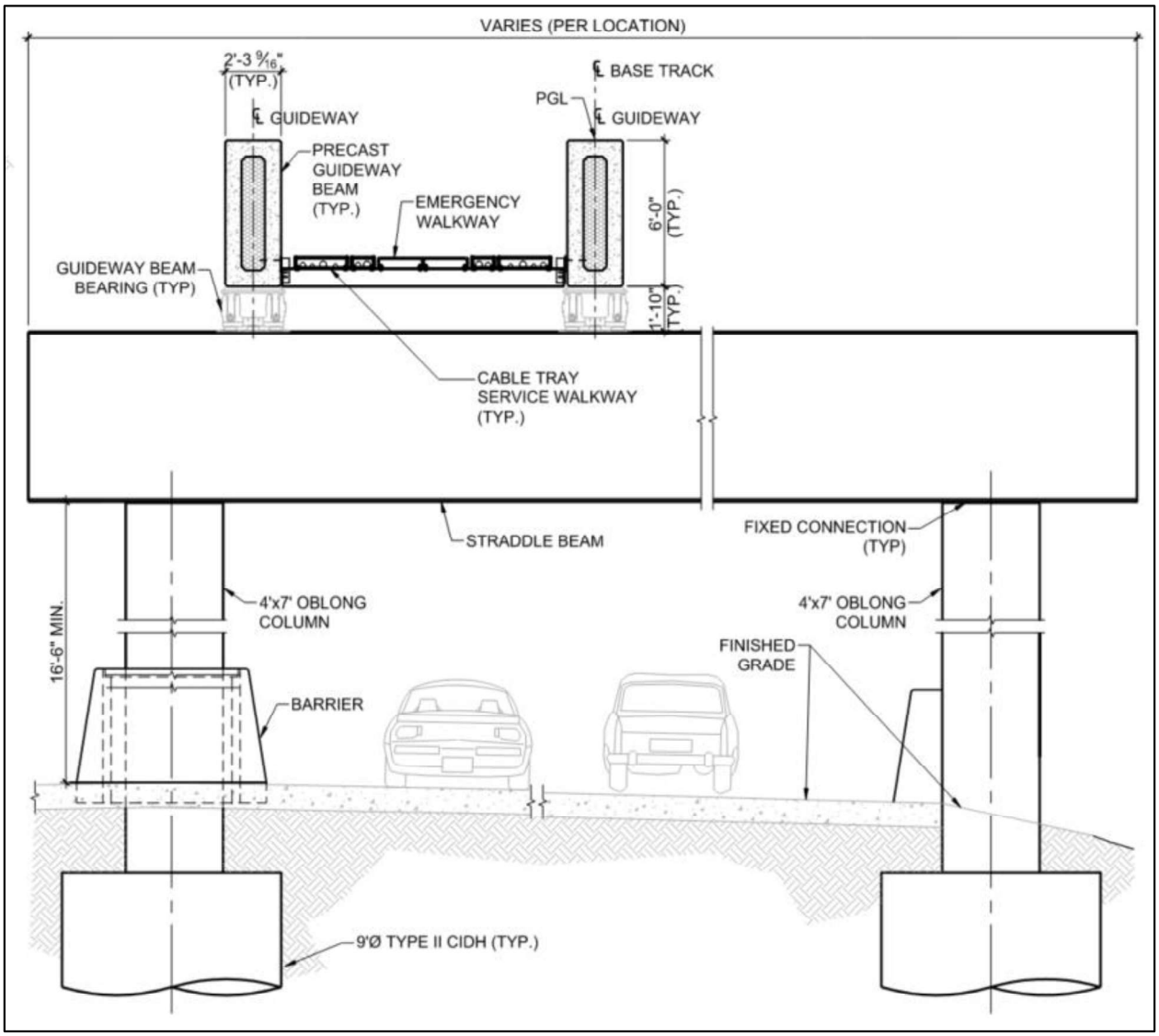
Source: LASRE, 2024

On a typical guideway section (i.e., not at a station), guide beams would rest on 20-foot-wide column caps (i.e., the structure connecting the columns and the guide beams), with typical spans (i.e., the

distance between columns) ranging from 70 to 190 feet. The bottom of the column caps would typically be between 16.5 feet and 32 feet above ground level.

Over certain segments of roadway and freeway facilities, a straddle-bent configuration, as shown on Figure 6-3, consisting of two concrete columns constructed outside of the underlying roadway would be used to support the guide beams and column cap. Typical spans for these structures would range between 65 and 70 feet. A minimum 16.5-foot clearance would be maintained between the underlying roadway and the bottom of the column caps.

Figure 6-3. Typical Monorail Straddle-Bent Cross-Section



Source: LASRE, 2024

Structural support columns would vary in size and arrangement by alignment location. Columns would be 6 feet in diameter along main alignment segments adjacent to I-405 and be 4 feet wide by 6 feet long in the I-405 median. Straddle-bent columns would be 4 feet wide by 7 feet long. At stations, six rows of dual 5-foot by 8-foot columns would support the aerial guideway. Beam switch locations and long-span

structures would also utilize different sized columns, with dual 5-foot columns supporting switch locations and 9-foot or 10-foot-diameter columns supporting long-span structures. Crash protection barriers would be used to protect the columns. Columns would have a cast-in-drilled-hole (CIDH) pile foundation extending 1 foot in diameter beyond the column width, with varying depths for appropriate geotechnical considerations and structural support.

6.1.1.3 Vehicle Technology

Alternative 1 would utilize straddle-beam monorail technology, which allows the monorail vehicle to straddle a guide beam that both supports and guides the vehicle. Rubber tires would sit both atop and on each side of the guide beam to provide traction and guide the train. Trains would be automated and powered by power rails mounted to the guide beam, with planned peak-period headways of 166 seconds and off-peak-period headways of 5 minutes. Monorail trains could consist of up to eight cars. Alternative 1 would have a maximum operating speed of 56 miles per hour; actual operating speeds would depend on the design of the guideway and distance between stations.

Monorail train cars would be 10.5 feet wide, with two double doors on each side. End cars would be 46.1 feet long with a design capacity of 97 passengers, and intermediate cars would be 35.8 feet long and have a design capacity of 90 passengers.

The electric bus connecting the Wilshire Boulevard/Metro D Line Station, Westwood Village, and UCLA Gateway Plaza would be a battery electric, low-floor transit bus, either 40 or 60 feet in length. The buses would run with headways of 2 minutes during peak periods. The electric bus service would operate in existing mixed-flow travel lanes.

6.1.1.4 Stations

Alternative 1 would include eight aerial MRT stations with platforms approximately 320 feet long, elevated 50 feet to 75 feet above the existing ground level. The Metro E Line Expo/Sepulveda, Santa Monica Boulevard, Ventura Boulevard/Sepulveda Boulevard, Sherman Way, and Van Nuys Metrolink Stations would be center-platform stations where passengers would travel up to a shared platform that would serve both directions of travel. The Wilshire Boulevard/Metro D Line, Getty Center, and Metro G Line Sepulveda Stations would be side-platform stations where passengers would select and travel up to one of two station platforms, depending on their direction of travel. Each station, regardless of whether it has side or center platforms, would include a concourse level prior to reaching the train platforms. Each station would have a minimum of two elevators, two escalators, and one stairway from ground level to the concourse.

Station platforms would be approximately 320 feet long and would be supported by six rows of dual 5-foot by 8-foot columns. Station platforms would be covered, but not enclosed. Side-platform stations would be 61.5 feet wide to accommodate two 13-foot-wide station platforms with a 35.5-foot-wide intermediate gap for side-by-side trains. Center-platform stations would be 49 feet wide, with a 25-foot-wide center platform.

Monorail stations would include automatic, bi-parting fixed doors along the edges of station platforms. These doors would be integrated into the automatic train control system and would not open unless a train is stopped at the platform.

The following information describes each station, with relevant entrance, walkway, and transfer information. Bicycle parking would be provided at each station.

Metro E Line Expo/Sepulveda Station

- This aerial station would be located near the existing Metro E Line Expo/Sepulveda Station, just east of I-405, between Pico Boulevard and Exposition Boulevard.
- A transit plaza and station entrance would be located on the east side of the station.
- An off-street passenger pick-up/drop-off loop would be located south of Pico Boulevard, west of Cotner Avenue.
- An elevated pedestrian walkway would connect the concourse level of the proposed station to the Metro E Line Expo/Sepulveda Station within the fare paid zone.
- Passengers would be able to park at the existing Metro E Line Expo/Sepulveda Station parking facility, which provides 260 parking spaces. No additional automobile parking would be provided at the proposed station.

Santa Monica Boulevard Station

- This aerial station would be located just south of Santa Monica Boulevard, between the I-405 northbound travel lanes and Cotner Avenue.
- Station entrances would be located on the southeast and southwest corners of Santa Monica Boulevard and Cotner Avenue. The entrance on the southeast corner of the intersection would be connected to the station concourse level via an elevated pedestrian walkway spanning Cotner Avenue.
- No dedicated station parking would be provided at this station.

Wilshire Boulevard/Metro D Line Station

- This aerial station would be located west of I-405 and south of Wilshire Boulevard within the southbound I-405 loop off-ramp to eastbound Wilshire Boulevard.
- An elevated pedestrian walkway spanning the adjacent I-405 ramps would connect the concourse level of the proposed station to a station plaza adjacent to the Metro D Line Westwood/VA Hospital Station within the fare paid zone. The station plaza would be the only entrance to the proposed station.
- The station plaza would include an electric bus stop and provide access to the Metro D Line Station via a new station entrance and concourse constructed using a knock-out panel provided in the Metro D Line Station.
- The passenger pick-up/drop-off facility at the Metro D Line Station would be reconfigured, maintaining the original capacity.
- No dedicated station parking would be provided at this station.

Getty Center Station

- This aerial station would be located on the west side of I-405 near the Getty Center, approximately 1,000 feet north of the Getty Center tram station.
- An elevated pedestrian walkway would connect the concourse level of the proposed station to the Getty Center tram station. The proposed connection would occur outside the fare paid zone.
- The pedestrian walkway would provide the only entrance to the proposed station.

- No dedicated station parking would be provided at this station.

Ventura Boulevard/Sepulveda Boulevard Station

- This aerial station would be located east of I-405, just south of Ventura Boulevard.
- A transit plaza, including two station entrances, would be located on the east side of the station. The plaza would require the closure of a 0.1-mile segment of Dickens Street between Sepulveda Boulevard and Ventura Boulevard, with a passenger pick-up/drop-off loop and bus stops provided south of the station, off Sepulveda Boulevard.
- No dedicated station parking would be provided at this station.

Metro G Line Sepulveda Station

- This aerial station would be located near the Metro G Line Sepulveda Station, between I-405 and the Metro G Line Busway.
- Entrances to the MRT station would be located on both sides of a proposed new Metro G Line bus rapid transit (BRT) station.
- An elevated pedestrian walkway would connect the concourse level of the proposed station to the proposed new Metro G Line BRT station outside of the fare paid zone.
- Passengers would be able to park at the existing Metro G Line Sepulveda Station parking facility, which has a capacity of 1,205 parking spaces. Currently, only 260 parking spaces are used for transit parking. No additional automobile parking would be provided at the proposed station.

Sherman Way Station

- This aerial station would be located inside the I-405 northbound loop off-ramp to Sherman Way.
- A station entrance would be located on the north side of Sherman Way.
- An on-street passenger pick-up/drop-off area would be provided on the north side of Sherman Way, west of Firmament Avenue.
- No dedicated station parking would be provided at this station.

Van Nuys Metrolink Station

- This aerial station would be located on the east side of Van Nuys Boulevard, just south of the LOSSAN rail corridor, incorporating the site of the current Amtrak ticket office.
- A station entrance would be located on the east side of Van Nuys Boulevard just south of the LOSSAN rail corridor. A second entrance would be located north of the LOSSAN rail corridor with an elevated pedestrian walkway connecting to both the concourse level of the proposed station and the platform of the Van Nuys Metrolink/Amtrak Station.
- Existing Metrolink station parking would be reconfigured, maintaining approximately the same number of spaces, but 180 parking spaces would be relocated north of the LOSSAN rail corridor. Metrolink parking would not be available to Metro transit riders.

6.1.1.5 Station-to-Station Travel Times

Table 6-1 presents the station-to-station distance and travel times for Alternative 1. The travel times include both run time and dwell time. Dwell time is 30 seconds per station. Northbound and

southbound travel times vary slightly because of grade differentials and operational considerations at end-of-line stations.

Table 6-1. Alternative 1: Station-to-Station Travel Times and Station Dwell Times

From Station	To Station	Distance (miles)	Northbound Station-to-Station Travel Time (seconds)	Southbound Station-to-Station Travel Time (seconds)	Dwell Time (seconds)
Metro E Line Station					*30*
Metro E Line	Santa Monica Boulevard	0.9	122	98	—
Santa Monica Boulevard Station					*30*
Santa Monica Boulevard	Wilshire/Metro D Line	0.7	99	104	—
Wilshire/Metro D Line Station					*30*
Wilshire/Metro D Line	Getty Center	2.9	263	266	—
Getty Center Station					*30*
Getty Center	Ventura Boulevard	4.7	419	418	—
Ventura Boulevard Station					*30*
Ventura Boulevard	Metro G Line	2.0	177	184	—
Metro G Line Station					*30*
Metro G Line	Sherman Way	1.5	135	134	—
Sherman Way Station					*30*
Sherman Way	Van Nuys Metrolink	2.4	284	284	—
Van Nuys Metrolink Station					*30*

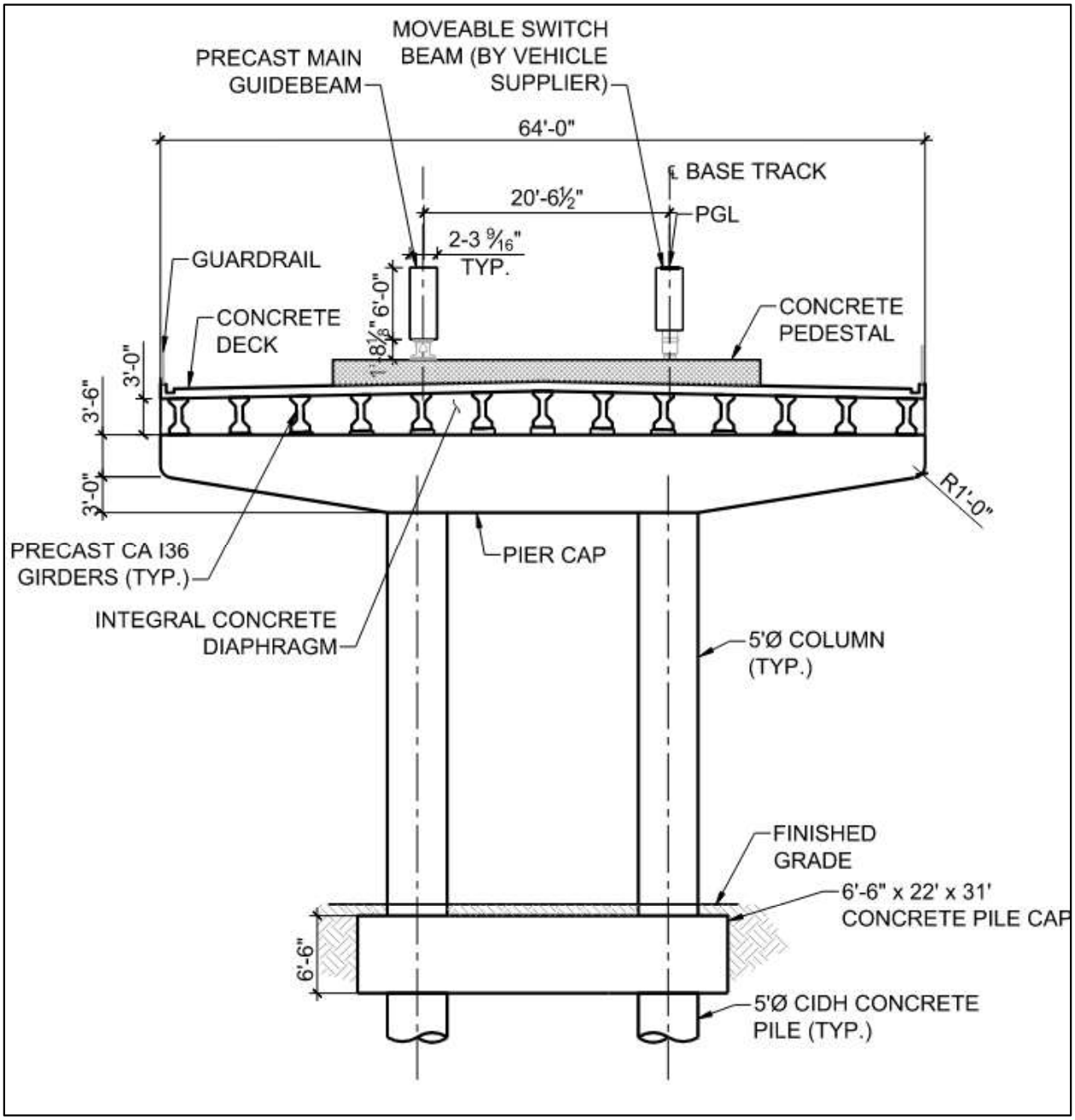
Source: LASRE, 2024

6.1.1.6 Special Trackwork

Alternative 1 would include five pairs of beam switches to enable trains to cross over to the opposite beam. From south to north, the first pair of beam switches would be located just north of the Metro E Line Expo/Sepulveda Station. The second pair of beam switches would be located near the Wilshire Boulevard/Metro D Line Station on the north side of Wilshire Boulevard, within the Wilshire Boulevard westbound to I-405 southbound loop on-ramp. A third pair of beam switches would be located in the Sepulveda Pass, just south of Mountaingate Drive and Sepulveda Boulevard. A fourth pair of beam switches would be located south of the Metro G Line Station, between the I-405 northbound lanes and the Metro G Line Busway. The final pair would be located near the Van Nuys Metrolink Station.

At beam switch locations, the typical cross-section of the guideway would increase in column and column cap width. The column cap at these locations would be 64 feet wide, with dual 5-foot-diameter columns. Underground pile caps for additional structural support would also be required at beam switch locations. Figure 6-4 shows a typical cross-section of the monorail beam switch.

Figure 6-4. Typical Monorail Beam Switch Cross-Section



Source: LASRE, 2024

6.1.1.7 Monorail Maintenance and Storage Facility

MSF Base Design

In the maintenance and storage facility (MSF) Base Design for Alternative 1, the MSF would be located on City of Los Angeles Department of Water and Power (LADWP) property east of the Van Nuys Metrolink Station. The MSF Base Design site would be approximately 18 acres and would be designed to accommodate a fleet of 208 monorail vehicles. The site would be bounded by the LOSSAN rail corridor

to the north, Saticoy Street to the south, and property lines extending north of Tyrone and Hazeltine Avenues to the east and west, respectively.

Monorail trains would access the site from the main alignment's northern tail tracks at the northwest corner of the site. Trains would travel parallel to the LOSSAN rail corridor before curving southeast to maintenance facilities and storage tracks. The guideway would remain in an aerial configuration within the MSF Base Design, including within maintenance facilities.

The site would include the following facilities:

- Primary entrance with guard shack
- Primary maintenance building that would include administrative offices, an operations control center, and a maintenance shop and office
- Train car wash building
- Emergency generator
- Traction power substation (TPSS)
- Maintenance-of-way (MOW) building
- Parking area for employees

MSF Design Option 1

In the MSF Design Option 1, the MSF would be located on industrial property, abutting Orion Avenue, south of the LOSSAN rail corridor. The MSF Design Option 1 site would be approximately 26 acres and would be designed to accommodate a fleet of 224 monorail vehicles. The site would be bounded by I-405 to the west, Stagg Street to the south, the LOSSAN rail corridor to the north, and Orion Avenue and Raymer Street to the east. The monorail guideway would travel along the northern edge of the site.

Monorail trains would access the site from the monorail guideway east of Sepulveda Boulevard, requiring additional property east of Sepulveda Boulevard and north of Raymer Street. From the northeast corner of the site, trains would travel parallel to the LOSSAN rail corridor before turning south to maintenance facilities and storage tracks parallel to I-405. The guideway would remain in an aerial configuration within the MSF Design Option 1, including within maintenance facilities.

The site would include the following facilities:

- Primary entrance with guard shack
- Primary maintenance building that would include administrative offices, an operations control center, and a maintenance shop and office
- Train car wash building
- Emergency generator
- TPSS
- MOW building
- Parking area for employees

Figure 6-5 shows the locations of the MSF Base Design and MSF Design Option 1 for Alternative 1.

Figure 6-5. Alternative 1: Maintenance and Storage Facility Options



Source: LASRE, 2024; HTA, 2024

6.1.1.8 Electric Bus Maintenance and Storage Facility

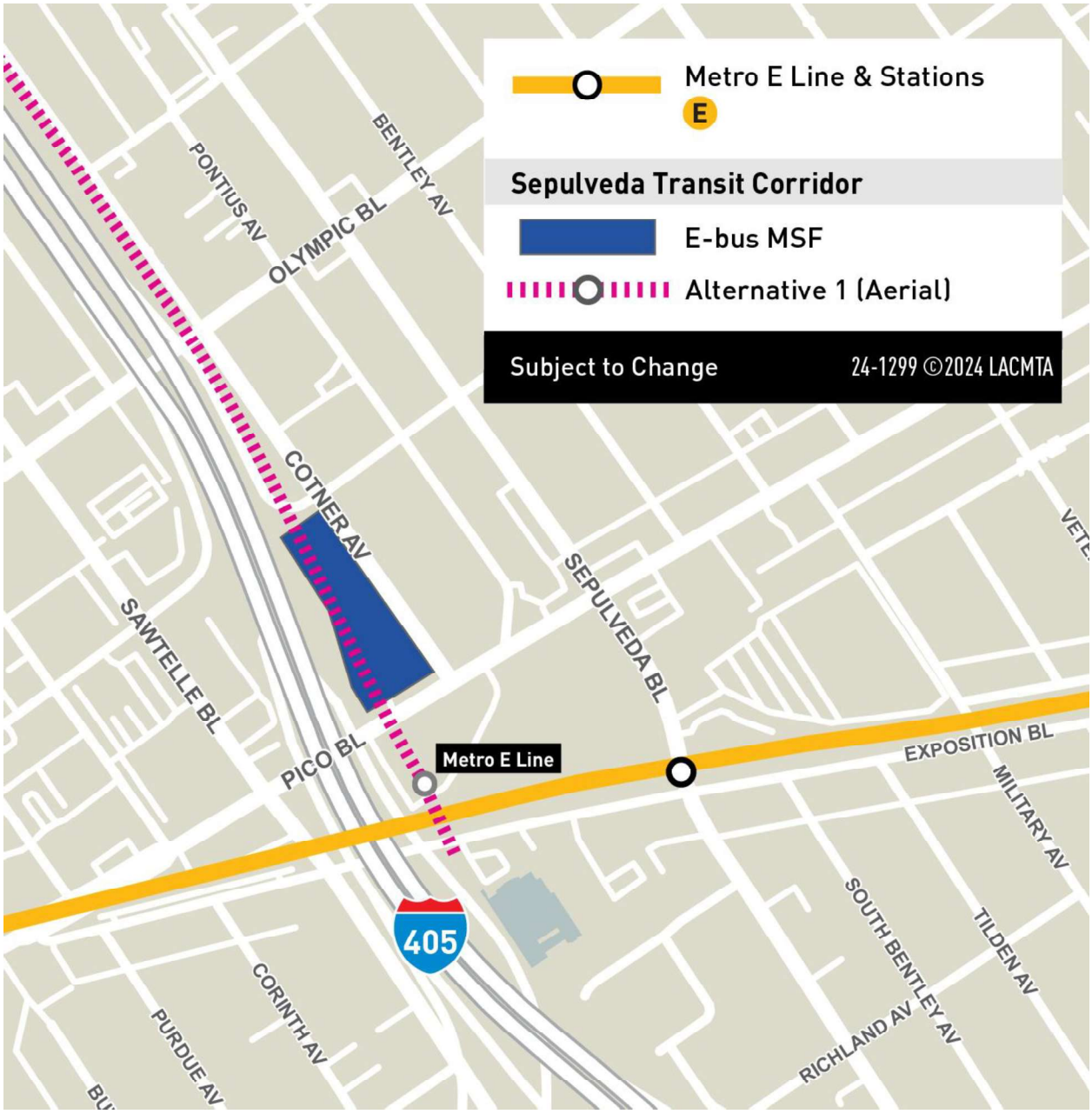
An electric bus MSF would be located on the northwest corner of Pico Boulevard and Cotner Avenue and would be designed to accommodate 14 electric buses. The site would be approximately 2 acres and would comprise six parcels bounded by Cotner Avenue to the east, I-405 to the west, Pico Boulevard to the south, and the I-405 northbound on-ramp to the north.

The site would include approximately 45,000 square feet of buildings and include the following facilities:

- Maintenance shop and bay
- Maintenance office
- Operations center
- Bus charging equipment
- Parts storeroom with service areas
- Parking area for employees

Figure 6-6 shows the location of the proposed electric bus MSF.

Figure 6-6. Alternative 1: Electric Bus Maintenance and Storage Facility



Source: LASRE, 2024; HTA, 2024

6.1.1.9 Traction Power Substations

TPSSs transform and convert high voltage alternating current supplied from power utility feeders into direct current suitable for transit operation. A TPSS on a site of approximately 8,000 square feet would be located approximately every 1 mile along the alignment. Table 6-2 lists the TPSS locations proposed for Alternative 1.

Figure 6-7shows the TPSS locations along the Alternative 1 alignment.

Table 6-2. Alternative 1: Traction Power Substation Locations

TPSS No.	TPSS Location Description	Configuration
1	TPSS 1 would be located east of I-405, just south of Exposition Boulevard and the monorail guideway tail tracks.	At-grade
2	TPSS 2 would be located west of I-405, just north of Wilshire Boulevard, inside the Westbound Wilshire Boulevard to I-405 Southbound Loop On-Ramp.	At-grade
3	TPSS 3 would be located west of I-405, just north of Sunset Boulevard, inside the Church Lane to I-405 Southbound Loop On-Ramp.	At-grade
4	TPSS 4 would be located east of I-405 and Sepulveda Boulevard, just north of the Getty Center Station.	At-grade
5	TPSS 5 would be located west of I-405, just east of the intersection between Promontory Road and Sepulveda Boulevard.	At-grade
6	TPSS 6 would be located between I-405 and Sepulveda Boulevard, just north of the Skirball Center Drive Overpass.	At-grade
7	TPSS 7 would be located east of I-405, just south of Ventura Boulevard Station, between Sepulveda Boulevard and Dickens Street.	At-grade
8	TPSS 8 would be located east of I-405, just south of the Metro G Line Sepulveda Station.	At-grade
9	TPSS 9 would be located east of I-405, just east of the Sherman Way Station, inside the I-405 Northbound Loop Off-Ramp to Sherman Way westbound.	At-grade
10	TPSS 10 would be located east of I-405, at the southeast quadrant of the I-405 overcrossing with the LOSSAN rail corridor.	At-grade
11	TPSS 11 would be located east of I-405, at the southeast quadrant of the I-405 overcrossing with the LOSSAN rail corridor.	At-grade (within MSF Design Option)
12	TPSS 12 would be located between Van Nuys Boulevard and Raymer Street, south of the LOSSAN rail corridor.	At-grade
13	TPSS 13 would be located south of the LOSSAN rail corridor, between Tyrone Avenue and Hazeltine Avenue.	At-grade (within MSF Base Design)

Source: LASRE, 2024; HTA, 2024

Figure 6-7. Alternative 1: Traction Power Substation Locations



Source: LASRE, 2024; HTA, 2024

6.1.1.10 Roadway Configuration Changes

Table 6-3 lists the roadway changes necessary to accommodate the guideway of Alternative 1. Figure 6-8 shows the location of these roadway changes in the Sepulveda Transit Corridor Project (Project) Study Area, except for I-405 configuration changes, which would occur throughout the corridor.

Table 6-3. Alternative 1: Roadway Changes

Location	From	To	Description of Change
Cotner Avenue	Nebraska Avenue	Santa Monica Boulevard	Roadway realignment to accommodate aerial guideway columns and station access
Beloit Avenue	Massachusetts Avenue	Ohio Avenue	Roadway narrowing to accommodate aerial guideway columns
I-405 Southbound On-Ramp, Southbound Off-Ramp, and Northbound On-Ramp at Wilshire Boulevard	Wilshire Boulevard	I-405	Ramp realignment to accommodate aerial guideway columns and I-405 widening
Sunset Boulevard	Gunston Drive	I-405 Northbound Off-Ramp at Sunset Boulevard	Removal of direct eastbound to southbound on-ramp to accommodate aerial guideway columns and I-405 widening. Widening of Sunset Boulevard bridge with additional westbound lane
I-405 Southbound On-Ramp and Off-Ramp at Sunset Boulevard and North Church Lane	Sunset Boulevard	Not Applicable	Ramp realignment to accommodate aerial guideway columns and I-405 widening
I-405 Northbound On-Ramp and Off-Ramp at Sepulveda Boulevard near I-405 Exit 59	Sepulveda Boulevard near I-405 Northbound Exit 59	Sepulveda Boulevard / I-405 Undercrossing (near Getty Center)	Ramp realignment to accommodate aerial guideway columns and I-405 widening
Sepulveda Boulevard	I-405 Southbound Skirball Center Drive Ramps (north of Mountaingate Drive)	Skirball Center Drive	Roadway realignment into existing hillside to accommodate aerial guideway columns and I-405 widening
I-405 Northbound On-Ramp at Mulholland Drive	Mulholland Drive	Not Applicable	Roadway realignment into the existing hillside between the Mulholland Drive Bridge pier and abutment to accommodate aerial guideway columns and I-405 widening
Dickens Street	Sepulveda Boulevard	Ventura Boulevard	Vacation and permanent removal of street for Ventura Boulevard Station construction. Pick-up/drop-off area would be provided along Sepulveda Boulevard at the truncated Dickens Street
Sherman Way	Haskell Avenue	Firmament Avenue	Median improvements, passenger drop-off and pick-up areas, and bus pads within existing travel lanes
Raymer Street	Sepulveda Boulevard	Van Nuys Boulevard	Curb extensions and narrowing of roadway width to accommodate aerial guideway columns
I-405	Sunset Boulevard	Bel Terrace	I-405 widening to accommodate aerial guideway columns in the median

Location	From	To	Description of Change
I-405	Sepulveda Boulevard Northbound Off-Ramp (Getty Center Drive interchange)	Sepulveda Boulevard Northbound On-Ramp (Getty Center Drive interchange)	I-405 widening to accommodate aerial guideway columns in the median
I-405	Skirball Center Drive	I-405 Northbound On-Ramp at Mulholland Drive	I-405 widening to accommodate aerial guideway columns in the median

Source: LASRE, 2024; HTA, 2024

Figure 6-8. Alternative 1: Roadway Changes



Source: LASRE, 2024; HTA, 2024

In addition to the changes made to accommodate the guideway, as listed in Table 6-3, roadways and sidewalks near stations would be reconstructed, which would result in modifications to curb ramps and driveways.

6.1.1.11 Fire/Life Safety – Emergency Egress

Continuous emergency evacuation walkways would be provided along the guideway. The walkways would typically consist of structural steel frames anchored to the guideway beams to support non-slip

walkway panels. The walkways would be located between the two guideway beams for most of the alignment; however, where the beams split apart, such as entering center-platform stations, short portions of the walkway would be located on the outside of the beams.

6.1.2 Construction Activities

Construction activities for Alternative 1 would include constructing the aerial guideway and stations, widening I-405, and constructing ancillary facilities. Construction of the transit through substantial completion is expected to have a duration of 6½ years. Early works, such as site preparation, demolition, and utility relocation, could start in advance of construction of the transit facilities.

Aerial guideway construction would begin at the southern and northern ends of the alignment and connect in the middle. Constructing the guideway would require a combination of freeway and local street lane closures throughout the work limits to provide sufficient work area. The first stage of I-405 widening would include a narrowing of adjacent freeway lanes to a minimum width of 11 feet (which would eliminate shoulders) and placing K-rail on the outside edge of the travel lanes to create outside work areas. Within these outside work zones, retaining walls, drainage infrastructure, and outer pavement widenings would be constructed to allow for I-405 widening. The reconstruction of on- and off-ramps would be the final stage of I-405 widening.

A median work zone along I-405 for the length of the alignment would be required for erection of the guideway structure. In the median work zone, demolition of the existing median and drainage infrastructure would be followed by the installation of new K-rail and installation of guideway structural components, which would include full directional freeway closures when guideway beams must be transported into the median work areas during late-night hours. Additional night and weekend directional closures would be required for installation of long-span structures over I-405 travel lanes where the guideway would transition from the median.

Aerial station construction is anticipated to last the duration of construction activities for Alternative 1 and would include the following general sequence of construction:

- Site clearing
- Utility relocation
- Construction fencing and rough grading
- CIDH pile drilling and installation
- Elevator pit excavation
- Soil and material removal
- Pile cap and pier column construction
- Concourse level and platform level falsework for cast-in-place structural concrete
- Guideway beam installation
- Elevator and escalator installation
- Completion of remaining concrete elements such as pedestrian bridges
- Architectural finishes and mechanical, electrical, and plumbing installation

Alternative 1 would require construction of a concrete casting facility for columns and beams associated with the elevated guideway. A specific site has not been identified; however, it is expected that the facility would be located on industrially zoned land adjacent to a truck route in either the Antelope Valley or Riverside County. When a site is identified, the contractor would obtain all permits and approvals necessary from the relevant jurisdiction, the appropriate air quality management entity, and other regulatory entities.

TPSS construction would require additional lane closures. Large equipment, including transformers, rectifiers, and switchgears, would be delivered and installed through prefabricated modules where possible in at-grade TPSSs. The installation of transformers would require temporary lane closures on Exposition Boulevard, Beloit Avenue, Sepulveda Boulevard just north of Cashmere Street, and the I-405 northbound on-ramp at Burbank Boulevard.

Table 6-4 and Figure 6-9 show the potential construction staging areas for Alternative 1. Staging areas would provide the necessary space for the following activities:

- Contractors' equipment
- Receiving deliveries
- Storing materials
- Site offices
- Work zone for excavation
- Other construction activities (including parking and change facilities for workers, location of construction office trailers, storage, staging and delivery of construction materials and permanent plant equipment, and maintenance of construction equipment)

Table 6-4. Alternative 1: Construction Staging Locations

No.	Location Description
1	Public Storage between Pico Boulevard and Exposition Boulevard, east of I-405
2	South of Dowlen Drive and east of Greater LA Fisher House
3	At 1400 N Sepulveda Boulevard
4	At 1760 N Sepulveda Boulevard
5	East of I-405 and north of Mulholland Drive Bridge
6	Inside of I-405 Northbound to US-101 Northbound Loop Connector, south of US-101
7	ElectroRent Building south of Metro G Line Busway, east of I-405
8	Inside the I-405 Northbound Loop Off-Ramp at Victory Boulevard
9	Along Cabrito Road east of Van Nuys Boulevard

Source: LASRE, 2024; HTA, 2024

Figure 6-9. Alternative 1: Construction Staging Locations



Source: LASRE, 2024; HTA, 2024

6.2 Existing Conditions

6.2.1 Regional Setting

The Resource Study Area (RSA) consists of portions of the City of Los Angeles neighborhoods, including West Los Angeles, Westwood, Brentwood, Sherman Oaks, and Van Nuys. Existing land uses within the RSA include those typically found in mature urban and suburban communities such as residential, office, commercial, retail, mixed-use development, education facilities, museums, parks, and open space. The majority of single-family residential land uses within the RSA are located in Brentwood, Bel-Air, Encino, and Sherman Oaks, while multi-family residential land uses are concentrated in the Westwood, Sawtelle, and Van Nuys neighborhoods. Businesses and industrial parks are concentrated within Van Nuys along Van Nuys Boulevard. Commercial uses within the RSA range from local neighborhood/commercial main street retail operations to large regional malls and shopping centers within West Los Angeles, Westwood, Santa Monica, Van Nuys, Brentwood and Sherman Oaks. Activity centers within the RSA include the Fox 11 Los Angeles, UCLA, the Getty Museum, Los Angeles National Cemetery, Ronald Reagan Medical Center, West Los Angeles U.S. Department of Veterans Affairs (VA) Medical Center, Hammer Museum, Sherman Oaks Hospital, Sherman Oaks Galleria, Valley Presbyterian Hospital, the Bad News Bears Park, Southern California Behavioral Health Hospital, and the Department of Public Social Services. (Refer to the *Sepulveda Transit Corridor Project Land Use and Development Technical Report* [Metro, 2025] for additional information related to existing land uses in the RSA).

6.2.2 Hazardous Materials from Known Release Sites

In June 2023, several publicly available databases maintained under Government Code Section 65962.5 (i.e., the Cortese List) were searched to determine whether any known hazardous materials are present in the RSA. The Hazardous Waste and Substances Site List (EnviroStor database [DTSC, 2023]) is maintained by the DTSC as part of the requirements of Government Code Section 65962.5. SWRCB maintains the GeoTracker database, an information management system for tracking leaking underground storage tank (LUSTs) cleanup sites, permitted underground storage tanks (USTs), Cleanup Program Sites, Military Cleanup sites, Land Disposal sites, Waste Discharge Requirement sites, and Oil and Gas Monitoring sites (SWRCB, 2023).[8]

On October 24, 2022, EDR conducted a government database search for listings within the appropriate American Society for Testing and Materials (ASTM) minimum search distance (Attachment 1A). The search radius (distance from Alternative 1) depends on the applicable standards for each database and is identified in Table 6-5 for each of the respective database listings. A variety of identified sites within the vicinity of Alternative 1 are listed in the databases, as shown in Table 6-5. Many of the facilities are permitted for more than one hazardous material use and, therefore, could be listed in more than one database.

[8] Cleanup Program Sites (CPSs), also known as Site Cleanups (SCs), are formerly known as Spills, Leaks, Investigations, and Cleanups (SLIC) sites. Cleanup Program Sites include all "non-federally owned" sites that are regulated under the State Water Resources Control Board's Site Cleanup Program and/or similar programs conducted by each of the nine Regional Water Quality Control Boards. These CPSs are highly variable, and hazardous materials found at them include, but are not limited to, hydrocarbon solvents, pesticides, perchlorate, nitrate, heavy metals, and petroleum constituents. LUST Cleanup Sites include all UST sites that have had an unauthorized release (i.e., leak or spill) of a hazardous substance (usually fuel hydrocarbons) and are being (or have been) cleaned up. In GeoTracker, LUST sites consist almost entirely of fuel-contaminated LUST sites (also known as "Leaking Underground Fuel Tank" or "LUFT" sites), which are regulated pursuant to Title 23 of the California Code of Regulations, Chapter 16, Article 11.

Table 6-5. Alternative 1: EDR Database Search Results

Agency Database (* Indicates that Alternative 1 ROW is listed in this database)	Survey Distance	Number of Sites Identified
AST—Aboveground Petroleum Storage Tank Facilities: A listing of aboveground storage tank petroleum storage tank locations.	0.25 mile	34
CERS HAZ WASTE—California Environmental Reporting System (CERS) Hazardous Waste: A list of sites in the California Environmental Protection Agency Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and Resource Conservation and Recovery Act Large Quantity Hazardous Waste Generator programs.	0.25 mile	268*
CERS TANKS—California Environmental Reporting System (CERS) Tanks: A list of sites in the California Environmental Protection Agency Regulated Site Portal that fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.	0.25 mile	73*
CERS—California Environmental Reporting System: Provides an overview of regulated hazardous materials and waste; state and federal cleanups; impacted ground and surface waters; and toxic materials activities across the spectrum of environmental programs for any given location in California.	0.25 mile	443*
CHMIRS—California Hazardous Material Incident Report System: California Hazardous Material Incident Report System contains information on reported hazardous material incidents (accidental releases or spills).	0.25 mile	121*
CIWQS—California Integrated Water Quality System: The California Integrated Water Quality System is a computer system used by the state and Regional Water Quality Control Board to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.	0.25 mile	149*
CORTESE—Hazardous Waste & Substances Sites List: Identifies public drinking water wells with detectable levels of contamination; hazardous substance sites selected for remedial action; sites with known toxic material identified through the abandoned site assessment program; sites with underground storage tanks (USTs) having a reportable release; and all solid waste disposal facilities from which there is known migration. The sites for the list are designated by State Water Resources Control Board leaking underground storage tank (LUST), Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).	0.25 mile	64*
HIST CORTESE: Identifies historical public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action; sites with known toxic material identified through the abandoned site assessment program; sites with USTs having a reportable release; and all solid waste disposal facilities from which there is known migration. The sites for the list are designated by State Water Resources Control Board LUST, Integrated Waste Board [SWF/LS], and Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.	0.5 mile	61*
CPS-SLIC—Statewide Spills, Leaks, Investigations, and Cleanup Cases (GEOTRACKER): Cleanup Program Sites (CPSs) (also known as Site Cleanups [SCs] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Regional Water Quality Control Board data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.	0.5 mile	8

Agency Database (* Indicates that Alternative 1 ROW is listed in this database)	Survey Distance	Number of Sites Identified
DRYCLEANERS—Cleaner Facilities: A list of drycleaner-related facilities that have U.S. Environmental Protection Agency (EPA) Identification (ID) numbers. These are facilities with certain Standard Industrial Classification (SIC) codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; dry-cleaning plants, except rugs; carpet and upholstery cleaning; industrial launderers; laundry and garment services.	0.25 mile	95
EMI—Emissions Inventory Data: Toxics and criteria pollutant emissions data collected by the California Air Resources Board (CARB) and local air pollution agencies.	0.25 mile	209*
ENVIROSTOR—EnviroStor Database: The Department of Toxic Substances Control's Site Mitigation and Brownfields Reuse Program's (SMBRP) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List [NPL]); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to that which was available in Cal-Sites and provides additional site information, including, but not limited to: identification of formerly contaminated properties that have been released for reuse; properties where environmental deed restrictions have been recorded to prevent inappropriate land uses; and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.	1 mile	17
FID UST—Facility Inventory Database Underground Storage Tank: Contains a historical listing of active and inactive UST locations from the State Water Resources Control Board. Refer to local/county sources for current data.	0.25 mile	222
HAULERS—Registered Waste Tire Haulers Listing: A listing of registered waste tire haulers.	0.25 mile	52
HAZNET—Facility and Manifest Data: The data is extracted from the copies of hazardous waste manifests received each year by the Department of Toxic Substances Control. The annual volume of manifests is typically 700,000 to 1,000,000 annually, representing approximately 350,000 to 500,000 shipments. Data are from the manifests submitted without correction; therefore, many contain some invalid values for data elements such as generator ID, treatment, storage, and disposal (TSD) ID, waste category, and disposal method. This database begins with calendar year 1993.	0.25 mile	2,933*
HIST Cal-Sites—CalSites Database: The CalSites database contains potential or confirmed hazardous substance release properties. In 1996, California Environmental Protection Agency reevaluated and significantly reduced the number of sites in the CalSites database. It is no longer updated by the state agency. It has been replaced by ENVIROSTOR.	1 mile	1
HWP—EnviroStor Permitted Facilities Listing: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.	1 mile	1
HWTS— Hazardous Waste Tracking System: The Department of Toxic Substances Control maintains the Hazardous Waste Tracking System, which stores ID number information since the early 1980s and manifest data since 1993. The system collects manifest copies from both the generator and destination facility.	0.25 mile	4,441*
UST— Active Underground Storage Tank Facilities: Active UST facilities gathered from the local regulatory agencies.	0.25 mile	449*

Agency Database (* Indicates that Alternative 1 ROW is listed in this database)	Survey Distance	Number of Sites Identified
LUST—Leaking Underground Fuel Tank Report (GEOTRACKER): LUSTs included in GeoTracker. GeoTracker is Regional Water Quality Control Board data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.	0.5 mile	102
SWEEPS UST—Statewide Environmental Evaluation and Planning System Underground Storage Tank: This UST listing was updated and maintained by a company contacted by the State Water Resources Control Board in the early 1990s. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.	0.25 mile	226
HIST UST—Hazardous Substances Storage Contained Database: Facilities on a historic list of UST sites.	0.25 mile	172
NPDES— National Pollutant Discharge Elimination System Permits Listing: A listing of NPDES permits, including stormwater.	0.25 mile	78*
SWF/LF (SWIS)—Solid Waste Information System: Active, Closed, and Inactive Landfills. Solid Waste Information System records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet Resource Conservation and Recovery Act Section 4004 criteria for solid waste landfills or disposal sites.	0.5 mile	7
WDS—Waste Discharge System: Sites which have been issued waste discharge requirements.	0.25 mile	2
ECHO—Enforcement & Compliance History Information: Enforcement & Compliance History Information provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.	0.125 mile	1,211*
EDR Exclusive Historical Auto Stations: EDR has searched selected national collections of business directories and has compiled listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, and service station.	0.125 mile	222
EDR Exclusive Historical Cleaners: EDR has searched selected national collections of business directories and has compiled listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, and wash & dry.	0.125 mile	114*
FINDS—Facility Index System/Facility Registry System: Contains both facility information and "pointers" to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCBs Activity Data System).	0.125 mile	1,370*

Agency Database (* Indicates that Alternative 1 ROW is listed in this database)	Survey Distance	Number of Sites Identified
RCRA NonGen/NLR— Resource Conservation and Recovery Act Non-Generators/No Longer Regulated: RCRA Info is the Environmental Protection Agency's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act of 1976 and the Hazardous and Solid Waste Amendments of 1984. The database includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act. Non-Generators do not presently generate hazardous waste.	0.25 mile	951*
RCRA-LQG—Resource Conservation and Recovery Act Information System Large Quantity Generators: Sites that generate, transport, store, treat, and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Facilities permitted to generate more than 1,000 kilograms (kg) of hazardous waste or over 1 kg of acutely hazardous waste per month.	0.25 mile	45
RCRA-SQG—Resource Conservation and Recovery Act Information System Small Quantity Generators: Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Facilities permitted to generate more than 100 kg per month but less than 1,000 kg per month of non-acutely hazardous materials.	0.25 mile	203
RCRA-TSDF—Resource Conservation and Recovery Act Information System Small Quantity Generators: Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. Treatment, storage, and disposal facilities (TSDFs) treat, store, or dispose of the waste.	0.5 mile	1
RCRA-VSQG— Resource Conservation and Recovery Act- Very Small Quantity Generators (Formerly known as Conditionally Exempt Small Quantity Generators): Sites that generate, transport, store, treat, and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Very small quantity generators generate less than 100 kg of hazardous waste or less than 1 kg of acutely hazardous waste per month.	0.25 mile	2
SEMS—Superfund Enterprise Management System: Hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of the EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to Superfund Enterprise Management System by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the EPA by states, municipalities, private companies, and private persons, pursuant to Section 103 of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are already on or proposed to be on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.	0.5 mile	1
SEMS-ARCHIVE—Superfund Enterprise Management System Archive: Sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to Superfund Enterprise Management System ARCHIVE by the Environmental Protection Agency in 2015.	0.5 mile	5

Source: ICF, 2022a

As stated in Section 3, many listings in the report were identified as not having the potential to impact the Project. Thus, this discussion focuses on the potential for recognized environmental conditions (REC), LUST, and Cortese list sites that could potentially result in a hazard to the public and/or environment during construction and operation.

There are 51 closed LUST cases, six Cleanup Program Sites, one State Response, one Corrective Action, and seven Tiered Permit sites within 0.5 mile of Alternative 1 (Attachment 2, Table B-1).[9] No Brownfields sites were identified within or in the vicinity of Alternative 1. All 51 closed LUST cases are on the Cortese list. Table B-1 summarizes the identified affected properties, including business addresses, summarizes the status of each property, and proximity of the property to the Alternative 1 alignment. The site numbers identified for each property in Table B-1 correspond with the numbers that appear on Figure 6-10 and Figure 6-11.

[9] Tiered Permit: Sites with permits granted by the Resource Conservation and Recovery Act.

Figure 6-10. Alternative 1: Hazardous Material Sites within 0.5 Mile (North)



Source: DTSC, 2023; SWRCB, 2023, ICF 2022a

Figure 6-11. Alternative 1: Hazardous Material Sites within 0.5 Mile (South)



Source: DTSC, 2023; SWRCB, 2023, ICF 2022a

6.2.2.1 San Fernando Valley Superfund Sites

The Area 4 Pollock Operable Unit (OU) is one of the four San Fernando Valley (Valley) Superfund Site areas. The Valley (Area 4) Superfund site is located south of Los Feliz Avenue to State Route 110, east of the RSA. The four Valley Superfund Site area are designated as the following:

- Area 1 North Hollywood (North Hollywood and Burbank OU)
- Area 2 Glendale (Crystal Springs Well Field)
- Area 3 Glendale (Verdugo Study Area) (Note Area 3 was removed from Superfund site list in 2004)
- Area 4 Pollock OU (Pollock Well Field)

The Valley (Area 4) Pollock OU Superfund site could affect the Project by exposing construction workers to contaminated groundwater or the general public through the intrusion of volatile organic compounds (VOCs) into stations. The Pollock OU is a 5,860-acre area with areas of contaminated groundwater near the LADWP Pollock Well Field in the City of Los Angeles. Historical manufacturing work in the Valley groundwater basin, dating back to World War II, contaminated the groundwater in the region with VOCs, including trichloroethylene (TCE) and tetrachloroethylene (PCE). The Valley groundwater basin provides drinking water to residents of the Cities of Los Angeles, Burbank, and Glendale as well as the La Crescenta Water District. In 2022, LADWP stated that the San Fernando Basin provides approximately 10 percent of the City of Los Angeles's water supply annually but has the potential to provide up to 21 percent in an average year.

Affected groundwater associated with the San Fernando Valley Superfund Site could potentially extend near the northern portions of Alternative 1 north of Saticoy Street. In addition, the eastern portion of the plume is depicted as moving south, just east of Alternative 1 (ICF, 2022a).

Use of contaminated groundwater poses the greatest risk. The Valley Area 4 groundwater contamination is being addressed through the coordination of federal, state, and municipal agencies, including EPA, DTSC, State Regional Water Quality Control Board (SRWQCB), and the Los Angeles Regional Water Quality Control Board (LARWQCB).

EPA completed an interim investigation of the Pollock Well Field in 1994. EPA did not select a remedy for the site, because the LADWP constructed a wellhead treatment project to clean the groundwater in the Valley Basin. Since 1999, LADWP's Granular Activated Carbon Groundwater Treatment Plant at the Pollock Well Field has been treating groundwater to meet drinking water standards and return it to the public water supply system.

Because the LADWP built a VOC treatment facility to treat groundwater, EPA determined that further cleanup was not immediately necessary. EPA is evaluating the effectiveness of the Pollock wellhead treatment project as part of its ongoing basin-wide studies and will determine the need for additional cleanup actions at the site. While the site awaits further investigation on the nature and extent of contamination in this area, the Pollock wellhead treatment operation continues to treat groundwater to meet drinking water standards and reduce the potential of exposure to contaminated water.

EPA Remedial Investigation field activities at the Pollock OU began in 2017 and have included the following:

- Groundwater assessment and sampling of existing monitoring wells
- Soil sampling during the installation of new monitoring wells
- Installation and sampling of soil gas monitoring probes
- Indoor air sampling to evaluate vapor intrusion

EPA conducted an initial round of indoor air sampling of homes in the Atwater Village area, which is outside of the RSA, in February 2022. Results from the first sampling event indicated that indoor air in the homes sampled was not impacted by VOCs migrating from the groundwater into homes. To verify that VOCs from the contaminated groundwater are not impacting indoor air quality in the area, an additional round of indoor air sampling of homes, businesses, and schools in the Atwater Village neighborhood was conducted in winter 2023 (EPA, 2023a). Results from the initial sampling indicate that VOCs would not affect proposed stations under Alternative 1.

6.2.3 Hazardous Materials from Roadway Corridors

Yellow-thermoplastic and yellow-painted traffic stripe and pavement markings that were applied to roadways before 1997 contained as much as 2.6 percent lead (Caltrans, 2019). Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably paint. The use of lead as an additive to paint was discontinued in 1978, because the EPA and OSHA determined that exposure to lead presents an adverse human health risk. Residue from removing this yellow-thermoplastic and yellow-painted traffic stripe and pavement markings contains heavy metals such as lead chromate in concentrations that exceed thresholds established by the California Health and Safety Code and Title 22 of the California Code of Regulations (CCR) Division 4.5 (Caltrans, 2019).

Aerially deposited lead (ADL) can be present along major roadway corridors, such as I-405, Van Nuys Boulevard, Sepulveda Boulevard, and I-405. Lead alkyl compounds were first added to gasoline in the 1920s to boost octane levels and improve engine performance. Beginning in 1973, EPA ordered a gradual phase-out of lead from gasoline, substantially reducing the use of leaded gasoline by the mid-1980s. However, the EPA estimated that prior to the 1970s, vehicles emitted approximately 75 percent of the lead consumed in leaded gasoline as particulate matter through tailpipe exhaust (DTSC, 2004). A portion of this particulate matter settled into soils near major roadways. DTSC regulations specify the levels at which lead in soil is considered to be a risk to human health. In areas where road construction would occur, the California Department of Transportation (Caltrans) has found lead within 30 feet of the edge of the pavement and within the top six inches of soil. In some cases, lead has been found as deep as 2 to 3 feet below the surface. Therefore, soils in major roadway corridors, including those within the Alternative 1 alignment, have the potential to be contaminated with ADL from car emissions that occurred prior to the elimination of lead in gasoline (DTSC, 2016).

6.2.4 Treated Wood Waste

Wood utility poles may be treated with preserving chemicals that, if removed, can result in a substance called treated wood waste (TWW). TWW contains hazardous chemicals that pose a risk to human health and the environment. Arsenic, chromium, copper, creosote, and pentachlorophenol are among the chemicals added to preserve wood. These chemicals are known to be toxic or carcinogenic. Harmful exposure to these chemicals may result from dermal contact with TWW or from inhalation or ingestion of TWW particulate (DTSC, 2024).

6.2.5 Hazardous Building Materials

Asbestos is designated as a hazardous substance when the fibers have potential to come in contact with air, because the fibers are small enough to inhale and become lodged in the lung tissue, which can cause health problems. The presence of asbestos-containing material (ACM) in buildings, natural gas pipelines, and cementitious water pipelines poses an inhalation threat only if the ACMs are found to be in a friable state. If the ACMs are not friable, no inhalation hazard is present, because asbestos fibers remain bound in the material matrix. Emissions of asbestos fibers to the ambient air, which can occur during activities

such as renovation or demolition of structures made with ACMs (e.g., insulation), are regulated in accordance with Section 112 of the Federal Clean Air Act.

Lead is a highly toxic metal that EPA and OSHA have determined to be an adverse health risk, particularly to young children. In 1978, the federal government required the reduction of lead in house paint to less than 0.06 percent (600 parts per million). Because of its toxic properties, lead is regulated as a hazardous material. Excessive exposure to lead can result in the accumulation of lead in the blood, soft tissues, and bones. Primary sources of lead exposure include the following: deteriorating lead-based paint, including painted curbs, poles, protective bollards, bridges, and fire hydrants along the right-of-way (ROW) and existing buildings within the alternative alignment; lead-contaminated dust; and lead-contaminated soil. Buildings that have been constructed prior to 1978 and that contain lead-based paints could require abatement prior to construction activities.

Polychlorinated biphenyls (PCBs) are organic chemicals, usually in the form of an oil, that were historically used in electrical equipment. PCBs are most commonly associated with pole-mounted electrical transformers, but they were also used in insulators and capacitors in building electrical equipment. PCBs were commonly used in the small capacitor within fluorescent light ballasts. Ballasts manufactured through 1979 may contain PCBs. On-site fluorescent light features and electrical transformers that were manufactured prior to and throughout 1979, or reasonably suspected to have been manufactured before or throughout 1979, shall be assumed to contain PCBs. PCBs-containing florescent light bulbs would be of concern if they are leaking as they may expose workers handling the fixtures to a variety of adverse health effects. According to EPA TSCA regulations, the material must be incinerated. The entire lighting fixture does not need special handling and disposal as long as the ballast (electrical box) is not leaking. The non-leaking ballasts can be removed and recycled or disposed of properly. PCBs are considered hazardous materials because of their toxicity; they have been shown to cause cancer in animals, along with effects on the immune, reproductive, nervous, and endocrine systems, and studies have shown evidence of similar effects in humans (EPA, 2013).

6.2.6 Other Potential Hazardous Materials

6.2.6.1 Residual Pesticides

Chemicals used in agricultural activities could result in residual concentrations of persistent pesticides in the soil. Persistent pesticides, such as organochlorine pesticides (e.g., dichlorodiphenyltrichloroethane, Toxaphene, and Dieldrin), leave residues that remain in the environment without breaking down.

Lead arsenate is used as an herbicide, insecticide, or rodenticide. Lead arsenates were historically used by railroad companies as a means of weed control along a railroad ROW. Pesticide residues from lead arsenate bind tightly to the surface soil layer, where they can remain for decades. As a result, such residues, if present, could pose a human health risk when the soil is excavated. Lead and arsenic are the primary constituents of lead arsenate pesticide. Both lead and arsenic could be toxic at high concentrations in soil and are highly toxic to humans.

6.2.6.2 Household Hazardous Waste

EPA defines household hazardous waste as “leftover products such as paints, cleaners, oils, batteries, and pesticides that contain potentially hazardous ingredients that could be corrosive, toxic, ignitable, or reactive.” According to EPA, Americans generate approximately 1.6 million tons of household hazardous waste per year, with the average home accumulating as much as 100 pounds of household hazardous waste annually. Improper disposal of household hazardous wastes commonly includes pouring them down the drain, on the ground, or into storm sewers, and in some cases, putting them out with the

trash. Though the dangers of such disposal methods might not be immediately obvious, improper disposal of these wastes can pollute the environment and pose a threat to human health.

6.2.7 Methane Hazard Zones

Methane gas, commonly known as natural gas, may underlay the site. Potential hazards associated with methane include fire or explosion due to methane gas accumulations, since it is a highly flammable substance, and human health risks associated with natural gas poisoning. Exposure to high concentrations of methane can result in long-term health effects such as respiratory, cardiovascular, and neurological issues, though this is generally a concern in confined spaces rather than outdoor environments. Methane and other flammable or toxic gases, notably hydrogen sulfide, are often associated with naturally occurring petroleum deposits or active and former oil fields. These areas may have a potential for subsurface accumulations of methane and other volatile gases. Both methane and hydrogen sulfide are highly flammable and, in high concentrations, pose explosion hazards to the public. Exposure to high levels of hydrogen sulfide can also cause long-term health effects, including impaired cognitive function, respiratory irritation, and neurological impacts.

In the City of Los Angeles, two types of methane hazard zones exist: methane zones and methane buffer zones. A methane zone is the area closest to the source of the subsurface methane gas, whereas a methane buffer zone surrounds the outer limits of a methane zone. Both of these zones are typically a result of naturally surfacing tar and crude oil. These subsurface hazards can also be caused by soil contamination issues, such as historical oil wells (Geo Forward, 2021).

As shown on Figure 6-12, methane hazard zones exist within the Alternative 1 alignment. The Sawtelle Methane Hazard Zone begins at the base of the southern slope of the Santa Monica Mountains and follows I-405 south to approximately Santa Monica Boulevard. According to gas data collected from monitoring wells and soil vapor probes, methane and hydrogen sulfide were detected at high concentrations within existing monitoring wells and vapor probes, particularly near the Westfield Mall area (Metro, 2024c). Relatively low concentrations of methane and hydrogen sulfide were detected in soil gas vapor probes installed in Metro Purple Line monitoring wells, which are located along and adjacent to Wilshire Boulevard in the Westwood neighborhood and at the VA (Metro, 2024c). In addition, the methane zones map shows the methane zone and methane buffer zone near the southern end of the alignment (Geo Forward, 2021).

Figure 6-12. Alternative 1: Methane Hazard Zones



Source: Geo Forward, 2021

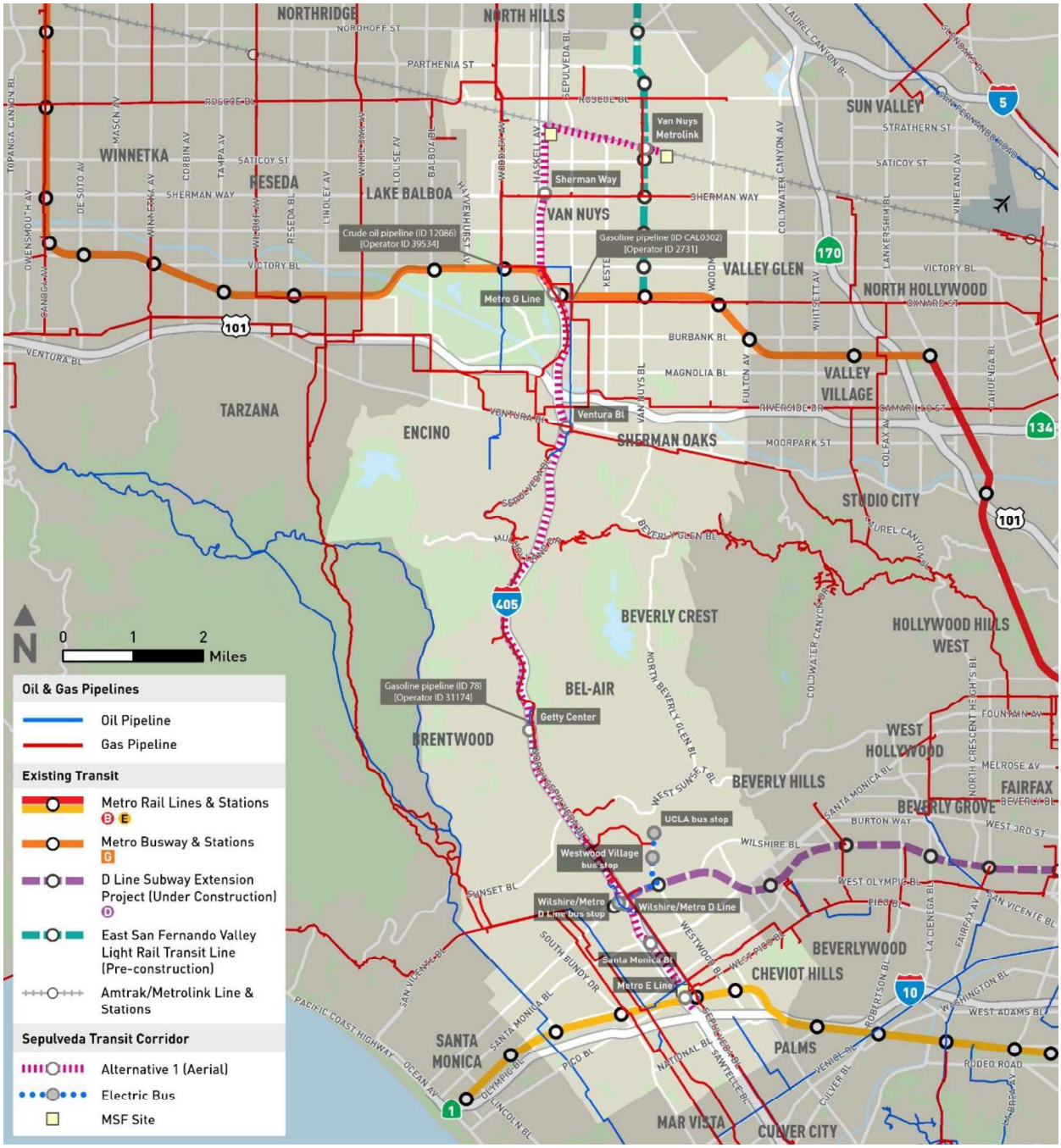
6.2.8 Petroleum and Natural Gas Pipelines

The Pipeline and Hazardous Materials Safety Administration (PHMSA) Public Map Viewer (USDOT PHMSA, 2023) identifies the following three high-pressure hazardous liquid pipelines within the vicinity of Alternative 1 as shown on Figure 6-13: [10]

- Torrance Valley Pipeline Company (Operator Identification [ID] 39534) operates a crude oil pipeline (ID 12086) as part of the Saticoy-Slauson system. As of May 20, 2022, the pipeline was reported active and filled. The 13.34-mile pipeline originates east of the Van Nuys Airport at Woodley Avenue. It travels south to the intersection of Woodley Avenue and Victory Boulevard, then turns east to travel along Victory Boulevard to the intersection of Victory Boulevard and Sepulveda Boulevard. The pipeline parallels Sepulveda Boulevard to its terminus at the intersection of Sepulveda Boulevard and Montana Avenue.
- Shell Pipeline Company (Operator ID 31174) operates a gasoline pipeline (ID 78) as part of the Ventura Products Line system. As of June 15, 2022, the pipeline was reported active and filled. The 12.25-mile pipeline originates near the intersection of Sepulveda Boulevard and Bellagio Road, where it travels south, parallel to Sepulveda Boulevard, continuing south beyond I-10.
- Chevron Pipeline Company (Operator ID 2731) operates a gasoline pipeline (ID CAL0302) as part of the El Segundo-Van Nuys Production subsystem. As of August 3, 2022, the pipeline was reported active and filled. The 17.14-mile pipeline originates near the intersection of Oxnard Street and Sepulveda Boulevard. The pipeline travels south, parallel to Sepulveda Boulevard, and continues south beyond I-10.

[10] In accordance with PHMSA's security policy, the scale of the Public Map Viewer is restricted to 1:24,000, and the minimum accuracy of the mapped pipeline locations is 500 feet.

Figure 6-13. Alternative 1: Pipelines



Source: USDOT PHMSA, 2023

6.2.9 Proximity to Schools

The following schools are located within one-quarter mile of Alternative 1:

- Cohasset Street Elementary located at 15810 Saticoy Street in Van Nuys
- Bassett Street Elementary located at 15756 Bassett Street in Van Nuys

- Hesby Oaks Leadership Charter located at 15530 Hesby Street in Sherman Oaks
- Ivy Bound Academy of Math, Science, and Technology Charter Middle located at 15355 Morrison Street in Sherman Oaks
- Nora Sterry Elementary located at 1730 Corinth Avenue in West Los Angeles
- UCLA located at 405 Hilgard Avenue in Westwood (the UCLA campus also houses two university-affiliated schools, the Geffen Academy for students in grades 6-12 and the Lab School for children ages 4-12)

6.2.10 Proximity to Airports

Concentration of people and facilities in the vicinity of airports raises concerns about safety and aircraft hazards. Potential aircraft accidents pose a hazard if a proposed project is located near an airport or in the immediate area of the landing and approach zones. In addition, people can be exposed to excessive noise and aircraft pollution. The Van Nuys Airport and Santa Monica Municipal Airport are within 2 miles of Alternative 1 and thus could result in safety hazards to the general public. These airports are discussed further in Section 6.2.10.1 and Section 6.2.10.2.

6.2.10.1 Van Nuys Airport

The Van Nuys Airport is located at 16461 Sherman Way in Van Nuys. Van Nuys Airport is a 740-acre general aviation facility owned and operated by Los Angeles World Airports (LAWA). The airport is located in the west-central portion of the City of Los Angeles's incorporated boundaries, approximately 25 miles northwest of downtown Los Angeles in the center of the Valley. In general, the airport is bounded by Roscoe Boulevard on the north, Victory Boulevard on the south, Balboa Boulevard on the west, and Woodley Avenue on the east.

The airport houses 720 aircraft and operates two north-south parallel asphalt runways, one of which is 4,013 feet long (16L-24R) and the other which is 8,001 feet long (16R-34L). As of May 2023, the airport is averaging 615 flights per day (AirNav, 2023a).

The land development surrounding the airport is a combination of residential, commercial, industrial, and public uses, with single-family residential being the predominant land use. Much of the land immediately surrounding the airport is developed with light industrial and commercial manufacturing uses, with golf courses and public parks located immediately to the south.

Alternative 1 would be approximately 0.9 mile east of the Van Nuys Airport. The *Van Nuys Airport Plan* indicates that Alternative 1 would be located approximately 0.4 mile outside the airport's airport influence area (AIA)[11] (Figure 6-14) (DCP, 2006; Los Angeles County Airport Land Use Commission [ALUC], 2003a, 2023).

6.2.10.2 Santa Monica Municipal Airport

The Santa Monica Municipal Airport is located at 3223 Donald Douglas Loop-South in the City of Santa Monica. The airport is approximately 2 miles east of the Pacific Ocean and 6 miles north of the City of Los Angeles. The airport houses various types of businesses, including art studios, office space, and

[11] Airport influence area (AIA) is the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may substantially affect land uses or necessitate restrictions on those uses. The AIA constitutes the area within which certain land use actions are subject to review to determine consistency with the Airport Land Use Compatibility Plan policies.

event venues. In general, the airport is bounded by Ocean Park Boulevard on the north, Airport Avenue on the south, 23rd Street on the west, and Bundy Drive on the east. It includes recreational space for a city park, a restaurant, a theater, and an interim open space. The Santa Monica City Council approved a plan to formally close the Santa Monica Airport in 2028.

The airport houses 84 aircraft and operates two northeast-northwest parallel asphalt runways, both of which are 3,500 feet long, and a 1,600-square foot asphalt helipad. As of May 2023, the airport is averaging 452 flights per day (AirNav, 2023b).

The southern terminus of Alternative 1 would be approximately 1.2 miles northeast of the Santa Monica Municipal Airport. The *Los Angeles County Airport Land Use Plan* indicates that Alternative 1 would be located approximately 1 mile outside the airport's AIA (Figure 6-14) (LA County Planning, 1991; ALUC, 2003a, 2023).

Figure 6-14. Alternative 1: Airport Influence Area



Source: ALUC, 2003a, 2003b, 2023

6.3 Impacts Evaluation

6.3.1 Impact HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

6.3.1.1 Operational Impacts

It is not anticipated that substantial quantities of hazardous materials would be routinely transported, used, stored, or disposed of during operation of Alternative 1. Operation of stations and the guideway would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous.[12] As mandated by Project Measure (PM) HAZ-1, cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage, and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions and standard industry practices.

Compliance with existing regulations mandated by PM HAZ-1 would assure proper transportation, use, storage and disposal of hazardous materials, and the operational impacts of Alternative 1 would be less than significant.

6.3.1.2 Construction Impacts

Construction of Alternative 1 could expose the public or the environment to hazardous materials if the following situations occurred: improper handling or use of hazardous materials or hazardous wastes, (particularly if used or handled by untrained personnel); transportation accident; environmentally unsound disposal methods; or fire, explosion, or other emergencies. The severity of potential effects varies with the activity conducted; the concentration of, quantity of, and type of hazardous material or wastes present; and the proximity of sensitive receptors.

As described throughout Section 2 there is an established, comprehensive federal, state, regional, and local framework independent of the CEQA process that is intended to reduce the risks associated with the use, transport, and disposal of hazardous materials. Transportation of hazardous materials on area roadways is regulated by the California Highway Patrol (CHP) and Caltrans. The use and disposal of hazardous materials is heavily regulated at both the federal and state level; these regulations are declared and enforced by agencies such as the EPA, SWRCB, DTSC, California Occupational Safety and Health Administration (Cal/OSHA), and the South Coast Air Quality Management District (SCAQMD). Metro would be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases. In accordance with the SWRCB and PM HAZ-2, Metro would obtain and comply with a National Pollutant Discharge Elimination System (NPDES) permit. In addition, coverage under the SWRCB's Construction General Permit would be obtained. As part of the Construction General Permit, the contractor would be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP), which would include best management practices (BMP) as mandated by PM HAZ-2, including measures to minimize the risk of accidental spills of hazardous materials during construction.

[12] Acutely hazardous materials are defined as waste containing chemicals so dangerous they could pose a threat to human health and the environment, even when properly managed.

The types and amounts of hazardous materials would vary according to the nature of the construction activity. Construction of Alternative 1 would require the use of typical construction equipment (e.g., gasoline- or diesel-powered machinery) and vehicles containing fuel, oil, and grease, as well as the use and transport of these materials. Limited quantities of certain hazardous materials such as paints, solvents, and glues would be used during construction. Construction staging and laydown would occur at multiple locations along the alignment and station sites and could include storage of excavated or demolished materials, construction offices, equipment storage, mechanical shops, and plants (grout, water treatment, foam, etc.) (Metro, 2024c). There is low likelihood that substantial quantities of hazardous materials would be stored during construction. Moreover, these hazardous materials would not include acutely hazardous materials or substances listed in 40 CFR 355 *Appendix A: Extremely Hazardous Substances and Their Threshold Planning Quantities* that could harm construction workers or the general public.

Whether a person exposed to a hazardous substance suffers adverse health effects as a result of that exposure depends upon a complex interaction of factors, including the following: the exposure pathway (the route by which a hazardous material enters the body); the amount of material to which the person is exposed; the physical form of the hazardous material (e.g., liquid or vapor) and its characteristics (e.g., toxicity and corrosivity); the frequency and duration of exposure; and the individual's unique biological characteristics, such as age, gender, weight, and general health. Adverse health effects from exposure to hazardous materials may be short-term (acute) or long-term (chronic). Acute effects can include damage to organs or systems in the body and possibly death. Chronic adverse effects, which may result from acute short-term or long-term exposure to a hazardous material, can also include organ or systemic damage, but chronic effects of particular concern include birth defects, genetic damage, and cancer.

Transportation of hazardous materials, such as contaminated soils; hazardous building materials, including asbestos, lead, and PCBs; and other hazardous wastes (i.e., TWW, roadway demolition debris, and hazardous building materials), would occur along designated truck routes within the Alternative 1 corridor and/or along major streets connecting to construction staging areas and the nearest freeways (e.g., I-405, I-10, US-101). Consistent with local plans, truck routes that may be used for transporting and hauling hazardous materials include Van Nuys Boulevard, Ventura Boulevard, Beverly Glen Boulevard, Santa Monica Boulevard, and Bundy Drive. As mandated by PM HAZ-2, transportation of hazardous materials would comply with State regulations governing hazardous materials transport as stated in the California Vehicle Code (Title 13 of the CCR), the State Fire Marshal Regulations (Title 19 of the CCR), and Title 22 of the CCR. Restrictions on haul routes can be incorporated into the construction specifications according to local permitting requirements.

Contaminated soils and hazardous building materials and wastes would be disposed of in accordance with federal, state, and local requirements at the following landfills:

- South Yuma County Landfill located at 19536 South Avenue 1E, Yuma, AZ
- Clean Harbors Buttonwillow Landfill located at 2500 West Lokern Road, Buttonwillow, CA
- U.S. Ecology located at Highway 95 South, Beatty, NV (EPA, 2023b)

The Los Angeles County Public Health Department manages enforcement and permitting for facilities that receive and dispose of solid waste, including hazardous waste. Table 6-6 provides a representative list of the hazardous waste disposal landfills and potential haul routes.

Table 6-6. Hazardous Waste Disposal Landfills and Potential Haul Routes

Landfill Site Name	Hazardous Waste Accepted	General Potential Haul Route
South Yuma County Landfill 19536 South Avenue 1E Yuma, AZ	Contaminated soil, PCBs, asbestos	I-405 South to SR-91 East to I-15 South to I-8 East to Yuma Arizona
Clean Harbors Buttonwillow 2500 West Lokern Road Buttonwillow, CA	Acutely hazardous materials[a], contaminated soil, PCBs, asbestos, RCRA waste with heavy metals	I -405 North to I-5 North to SR-58 West to Lokern Road
U.S. Ecology Highway 95 South Beatty, NV	Contaminated soil, PCBs, asbestos	I-405 South to I-10 East to I-15 North to US-95 North to Beatty, Nevada

Source: HTA, 2024

[a]Acutely hazardous materials are defined as waste containing dangerous chemicals that could pose a threat to human health and the environment even when properly managed.

PCB = polychlorinated biphenyl
RCRA = Resource Conservation and Recovery Act

Adherence to federal and state regulations stipulated by PM HAZ-2, reduces the risk of exposure to hazardous materials used during construction. Each of these regulations is specifically designed to protect the public health through improved procedures for handling hazardous materials, better technology in the equipment used to transport these materials, and a faster, more coordinated response to emergencies. With compliance with existing regulations, impacts related to the creation of significant hazards to the public or the environment through the routine transport, use, and disposal of hazardous materials during construction of Alternative 1 would be less than significant.

6.3.1.3 Maintenance and Storage Facilities Impacts

MSF Base Design

The types and amounts of hazardous materials would vary according to the nature of the activity. Construction of the MSF Base Design would require use of typical construction equipment (e.g., gasoline- or diesel-powered machinery) and vehicles containing fuel, oil, and grease, as well as use and transport of these materials. Limited quantities of certain hazardous materials such as paints, solvents, and glues would be used during construction.

Maintenance of monorail vehicles and equipment would occur at an MSF. Multiple buildings would be constructed, including a multi-level MOW building, track storage area, wash bays, ancillary storage buildings, and a TPSS structure. Operation of the MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, common household-type cleaning materials, and pesticides/herbicides. Cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions. The types and amounts of hazardous materials used at the MSF Base Design would not pose any greater risk than the existing uses at other similar development elsewhere in the vicinity of the MSF Base Design. The types and amounts of hazardous materials used at the MSF Base Design would not pose any greater risk than the existing uses at other similar development elsewhere in the vicinity of the MSF Base Design. Operation of the MSF Base Design would not require the use, handling, or storage of quantities of hazardous materials in

excess of regulatory thresholds.[13] If the quantity of hazardous materials used, handled, or stored on-site would exceed the regulatory thresholds, there is an established comprehensive regulatory framework independent of the CEQA process that would be followed, including preparation and submittal of a Hazardous Materials Business Plan (HMBP), as mandated by PM HAZ-1.

As previously discussed, adherence to federal and state regulations stipulated by PM HAZ-2 reduces the risk of exposure to hazardous materials used during construction and operation. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a faster, more coordinated response to emergencies. With compliance to existing regulations, impacts related to the creation of significant hazards to the public or the environment through the routine transport, storage, use, and disposal of hazardous materials, including training of handling hazardous materials for employees during construction of the MSF Base Design, would be less than significant.

MSF Design Option 1

The types and amounts of hazardous materials would vary according to the nature of the activity. Construction of the MSF Design Option 1 would require the use of typical construction equipment (e.g., gasoline- or diesel-powered machinery) and vehicles containing fuel, oil, and grease, as well as the use and transport of these materials. Limited quantities of certain hazardous materials such as paints, solvents, and glues would be used during construction.

Maintenance of monorail vehicles and equipment would occur at an MSF. Multiple buildings would be constructed, including a multi-level MOW building, track storage area, wash bays, ancillary storage buildings, and TPSS structure. Operation of the MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, common household-type cleaning materials, and pesticides/herbicides. Cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions. The types and amounts of hazardous materials used at the MSF Design Option 1 facility would not pose any greater risk than the existing uses at other similar development elsewhere in the vicinity of the MSF Design Option 1. Operation of the MSF Design Option 1 facility would not require the use, handling, or storage of quantities of hazardous materials in excess of regulatory thresholds.[14] If the quantity of hazardous materials used, handled, or stored on-site would exceed the regulatory thresholds, an established comprehensive regulatory framework independent of the CEQA process would be followed, including preparation and submittal of an HMBP, as mandated by PM HAZ-1.

As previously discussed, adherence to federal and state regulations stipulated by PM HAZ-2 reduces the risk of exposure to hazardous materials used during construction and operation. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials,

[13]The thresholds are 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance, per Chapter 6.95 California Health and Safety Code.

[14]The thresholds are 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance, per Chapter 6.95 California Health and Safety Code.

and a faster, more coordinated response to emergencies. With compliance to existing regulations, impacts related to the creation of significant hazards to the public or the environment through the routine transport, storage, use, and disposal of hazardous materials, including training of handling hazardous materials for employees during construction of the MSF Design Option 1, would be less than significant.

Electric Bus MSF

The types and amounts of hazardous materials would vary according to the nature of the activity. Construction of the Electric Bus MSF would require the use of typical construction equipment (e.g., gasoline- or diesel-powered machinery) and vehicles containing fuel, oil, and grease, as well as the use and transport of these materials. Limited quantities of certain hazardous materials such as paints, solvents, and glues would be used during construction.

Maintenance of electric buses and equipment would occur at an MSF. Multiple buildings would be constructed, including a multi-level MOW building, track storage area, wash bays, ancillary storage buildings, and TPSS structure. Operation of the MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, common household-type cleaning materials, and pesticides/herbicides. Cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions. The types and amounts of hazardous materials used at the Electric Bus MSF would not pose any greater risk than the existing uses at other similar development elsewhere in the vicinity of the Electric Bus MSF. Operation of the Electric Bus MSF would not require the use, handling, or storage of quantities of hazardous materials in excess of regulatory thresholds.[15] If the quantity of hazardous materials used, handled, or stored on-site would exceed the regulatory thresholds, there is an established comprehensive regulatory framework independent of the CEQA process that would be followed, including preparation and submittal of an HMBP, as mandated by PM HAZ-1.

As previously discussed, adherence to federal and state regulations stipulated by PM HAZ-2 reduces the risk of exposure to hazardous materials used during construction and operation. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a faster, more coordinated response to emergencies. With compliance of existing regulations, impacts related to the creation of significant hazards to the public or the environment through the routine transport, storage, use, and disposal of hazardous materials, including training of handling hazardous materials for employees during construction of the Electric Bus MSF, would be less than significant.

[15]The thresholds are 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance, per Chapter 6.95 California Health and Safety Code.

6.3.2 Impact HAZ-2: 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?

6.3.2.1 Operational Impacts

As discussed in Section 6.3.1, operation of stations, the guideway, and an MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal and state regulatory requirements as mandated by PM HAZ-1, which are intended to prevent or manage hazards. If a spill does occur, it would be remediated accordingly. Therefore, operational impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials under Alternative 1 would be less than significant.

6.3.2.2 Construction Impacts

Construction activities for the proposed Project, such as grading and excavation, could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. Exposure to unanticipated hazardous substances could occur from previously unidentified soil contamination caused by the contaminants originating at nearby listed sites (e.g., roadways and industrial uses). Or from construction-related soil contamination caused by spillage and/or mixing of construction trash and debris into the soil. EDR searched various regulatory databases and identified several sites in the surrounding area as being contaminated or having the potential to become contaminated from the release of hazardous substances. A summary of these sites is presented in Table 6-5 and detailed in Attachment 1A and in Table B-1 of Attachment 2. Exposure to hazardous materials during construction activities could occur as a result of any of the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

If any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons.

The Santa Monica Boulevard Station and the Wilshire/Metro D Line Station would be within the methane hazard zone. Under Alternative 1, all stations would be above street level and there would be no potential hazards associated with methane and/or hydrogen sulfide. In addition, the proposed Project would be required to comply with PM HAZ-3 that requires BMPs for activities within methane hazard zones to address potential impacts associated with methane gas and/or hydrogen sulfide.

The Area 4 Pollock OU could potentially extend near the northern portions of Alternative 1 north of Saticoy Street (ICF, 2022a). A historical manufacturing work in the Valley groundwater basin, dating back to World War II, contaminated the groundwater in the region with volatile organic compounds (VOCs), including trichloroethylene (TCE) and tetrachloroethylene (PCE). Use of contaminated groundwater

poses the greatest risk at this site. The Valley Area 4 groundwater contamination is being addressed through the coordination of federal, state and municipal agencies including EPA, DTS, SRWQCB, and Los Angeles Regional Water Quality Control Board (LARWQCB). EPA conducted rounds of indoor sampling in the Atwater Village area (outside of the RSA) and determined that the VOCs migrating from the groundwater did not impact the area. Based on these results, it can be inferred that VOCs would not affect proposed stations under Alternative 1.

Several high-pressure pipelines containing crude oil traverse the RSA (refer to Figure 6-13). A review of the PHMSA Pipeline Map Viewer (PHMSA, 2023) indicated there have been no recorded pipeline releases within the RSA. However, Project-related excavation and earthmoving activities could encounter buried pipelines, resulting in accidental rupture or leaks, which could cause a human health and environmental hazard. For security reasons, the PHMSA Pipeline Map Viewer (PHMSA, 2023) cannot be used for field verification of exact high-pressure pipeline locations, and the potential presence of other pipelines is unknown. In addition, it is possible buried underground utility lines may be within the RSA (such as stormwater, sewer, electrical, or communication cables).

Construction would require demolition of existing structures. Demolition of structures could potentially expose construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as ACM, lead-based paint (LBP), or PCBs. Both the federal OSHA and Cal/OSHA regulate worker exposure during construction activities that disturb LBP. Any ACMs, if present, would need appropriate abatement of the identified asbestos prior to demolition, pursuant to the SCAQMD Rule 1403 and PM HAZ-4.

Additional effects from construction activities, such as excavation, demolition, and grading, could include potential exposure of construction workers and/or the public to chemical compounds present in soils or soil gases. These activities may also result in the localized spread of contamination if disturbed soils or materials are improperly handled, leading to the migration of contaminants to previously uncontaminated areas. In addition, airborne chemical compounds released from construction or demolition areas, such as dust containing hazardous substances, could pose inhalation risks to workers, nearby residents, and the environment. Transportation of contaminated slurry or soils off-site for disposal could also result in accidental releases, such as spills or leaks, if proper containment measures are not implemented. Therefore, construction impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be potentially significant.

Alternative 1 would be required to implement MM HAZ-1 through MM HAZ-5, which would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling, transporting, and disposing of hazardous materials. Implementation of MM HAZ-1 through MM HAZ-5 would minimize potential exposure to construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as ACM, LBP, or PCBs during demolition activities. Therefore, implementation of MM HAZ-1 through MM HAZ-5 and adherence to applicable local, state, and federal regulations would reduce impacts related to the upset and accidental release of hazardous materials to a less than significant level.

6.3.2.3 Maintenance and Storage Facilities

MSF Base Design

Operation of stations, guideway, and MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal and state regulatory requirements as mandated by PM HAZ-1, that are intended to prevent or manage hazards, and if a spill does occur, it would be remediated accordingly.

Construction activities for the proposed Project, such as grading and excavation, could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. Exposure to unanticipated hazardous substances could occur from previously unidentified soil contamination caused by the contaminants originating at nearby listed sites (e.g., roadways and industrial uses). Or from construction-related soil contamination caused by spillage and/or mixing of construction trash and debris into the soil. EDR searched various regulatory databases identified several sites in the surrounding area as being contaminated or having the potential to become contaminated from the release of hazardous substances. A summary of these sites identified by EDR are presented in Table 6-5 and detailed in Attachment 2, Table B-1. Exposure to hazardous materials during construction activities could occur as a result of any of the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

If any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons.

Construction would require demolition of existing structures. Demolition of structures could potentially expose construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials (such as ACM, LBP, or PCBs). Both the federal OSHA and Cal/OSHA regulate worker exposure during construction activities that disturb LBP. Any ACMs, if present, would need appropriate abatement of identified asbestos before demolition begins, pursuant to the SCAQMD Rule 1403 and PM HAZ-4.

Additional effects could include the potential exposure of construction workers and/or the public to chemical compounds in soils, soil gases, and groundwater; potential localized spread of contamination; potential exposure of workers, the public, and the environment to airborne chemical compounds migrating from the construction or demolition areas; and potential accidents during transportation of contaminated slurry, soils. Therefore, construction impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be potentially significant.

The MSF Base Design would be required to implement MM HAZ-1 through MM HAZ-4, which would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling hazardous materials.

Implementation of MM HAZ-1 through MM HAZ-4 would minimize potential exposure to construction workers and the public to hazardous conditions through the disturbance or improper handling, transporting, and/or disposal of hazardous building materials. Therefore, implementation of MM HAZ-1 through MM HAZ-4, and adherence to applicable local, state, and federal regulations would reduce impacts related to the upset and accidental release of hazardous materials to a less than significant level.

MSF Design Option 1

Operation of stations, guideway, and MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal and state regulatory requirements as mandated by PM HAZ-1, that are intended to prevent or manage hazards, and if a spill does occur, it would be remediated accordingly.

Construction activities for the proposed Project, such as grading and excavation, could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. Exposure to unanticipated hazardous substances could occur from previously unidentified soil contamination caused by the contaminants originating at nearby listed sites (e.g., roadways and industrial uses). Or from construction-related soil contamination caused by spillage and/or mixing of construction trash and debris into the soil. EDR searched various regulatory databases identified several sites in the surrounding area as being contaminated or having the potential to become contaminated from the release of hazardous substances. A summary of these sites identified by EDR are presented in Table 6-5 and detailed in Attachment 1A. Exposure to hazardous materials during construction activities could occur as a result of any of the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

If any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons. The risks are particularly heightened during tunneling activities, which would involve deeper excavation and may encounter legacy contamination or naturally occurring hazardous materials that are less likely to be present near the surface.

Construction would require demolition of existing structures. Demolition of structures could potentially expose construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials (such as ACM, LBP, or PCBs). Both the federal OSHA and Cal/OSHA regulate worker exposure during construction activities that disturb LBP. Any ACMs, if present, would need appropriate abatement of the identified asbestos before demolition begins pursuant to the SCAQMD Rule 1403 and PM HAZ-4.

Additional effects could include the potential exposure of construction workers and/or the public to chemical compounds in soils, soil gases, and groundwater; potential localized spread of contamination; potential exposure of workers, the public, and the environment to airborne chemical compounds

migrating from the construction or demolition areas; and potential accidents during transportation of contaminated slurry, soils, or groundwater. Therefore, construction impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be potentially significant.

The MSF Design Option 1 would be required to implement MM HAZ-1 through MM HAZ-4, which would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling hazardous materials. Implementation of MM HAZ-1 through MM HAZ-4 would minimize potential exposure to construction workers and the public to hazardous conditions through the disturbance or improper handling, transporting, and/or disposal of hazardous building materials. Therefore, implementation of MM HAZ-1 through MM HAZ-4, and adherence to applicable local, state, and federal regulations would reduce impacts related to the upset and accidental release of hazardous materials to a less than significant level.

Electric Bus MSF

Operation of stations, guideway, and MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal and state regulatory requirements as mandated by PM HAZ-1, that are intended to prevent or manage hazards, and if a spill does occur, it would be remediated accordingly.

Construction activities for the proposed Project, such as grading and excavation, could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. Exposure to unanticipated hazardous substances could occur from previously unidentified soil contamination caused by the contaminants originating at nearby listed sites (e.g., roadways and industrial uses). Or from construction-related soil contamination caused by spillage and/or mixing of construction trash and debris into the soil. EDR searched various regulatory databases identified several sites in the surrounding area as being contaminated or having the potential to become contaminated from the release of hazardous substances. A summary of these sites identified by EDR are presented in Table 6-5 and detailed in Attachment 2, Table B-1. Exposure to hazardous materials during construction activities could occur as a result of any of the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

If any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons.

Construction would require demolition of existing structures. Demolition of structures could potentially expose construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as ACM, LBP, or PCBs. Both the federal OSHA and Cal/OSHA regulate worker exposure during construction activities that disturb LBP.

Any ACMs, if present, would need appropriate abatement of identified asbestos prior to demolition pursuant to the SCAQMD Rule 1403 and PM HAZ-4.

Additional effects could include the potential exposure of construction workers and/or the public to chemical compounds in soils, soil gases, and groundwater; potential localized spread of contamination; potential exposure of workers, the public, and the environment to airborne chemical compounds migrating from the construction or demolition areas; and potential accidents during transportation of contaminated slurry or soils or groundwater. Therefore, construction impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be potentially significant.

The Electric Bus MSF would be required to implement MM HAZ-1 through MM HAZ-4, which would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling hazardous materials. Implementation of MM HAZ-1 through MM HAZ-4 would minimize potential exposure to construction workers and the public to hazardous conditions through the disturbance or improper handling, transporting, and/or disposal of hazardous building materials. Therefore, implementation of MM HAZ-1 through MM HAZ-4, and adherence to applicable local, state, and federal regulations would reduce impacts related to the upset and accidental release of hazardous materials to a less than significant level.

6.3.3 Impact HAZ-3: 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?

6.3.3.1 Operational Impacts

As discussed in Section 6.3.1, operation of the aboveground stations and guideway would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials and generate particulate matter within 0.25 mile of schools (refer to Section 6.2.9). As mandated by PM HAZ-1, cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage, and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions. Therefore, impacts associated with handling hazardous materials within 0.25 mile of an existing school under Alternative 1 would be less than significant.

6.3.3.2 Construction Impacts

Construction of Alternative 1 would involve handling of hazardous materials and use of diesel-powered equipment within 0.25 mile of schools (refer to Section 6.2.9). Such activities, if not appropriately managed, could result in hazardous emissions that would potentially affect nearby schools.

As described throughout Section 3, there is an established, comprehensive federal, state, regional, and local framework independent of the CEQA process that is intended to reduce the risks associated with handling of hazardous materials, including transport, use, storage, and disposal. The use and disposal of hazardous materials is heavily regulated at both the federal and state level; these regulations are promulgated and enforced by agencies such as the EPA, the SWRCB and DTSC, Cal/OSHA, and the SCAQMD. By implementing the SWPPP and associated BMPs, as mandated by the SWRCB Construction General Permit and described in PM HAZ-2, construction-related hazardous substances, such as oil,

greases, and small quantities of solvents, would be managed through appropriate material handling and BMPs. In addition, transportation of hazardous materials would comply with state regulations governing hazardous materials transport included in the California Vehicle Code (Title 13 of the CCR), the State Fire Marshal Regulations (Title 19 of the CCR), and Title 22 of the CCR. Cooperation with the corridor cities would occur throughout the construction process, and the public would be notified of road closures. Restrictions on haul routes would be incorporated into the construction specifications according to local permitting requirements as set forth in PM HAZ-2.

Adherence to federal and state regulations reduces the risk of exposure to hazardous materials used during construction. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a faster, more coordinated response to emergencies. By adhering to existing regulations, construction of Alternative 1 would have less than significant impacts associated with the transportation, use, storage, and handling of acutely hazardous materials within 0.25 mile of an existing school.

6.3.3.3 Maintenance and Storage Facilities

MSF Base Design

The MSF Base Design is not located within 0.25 mile of a school. Therefore, the MSF Base Design would have no impact related to emissions or handling of acutely hazardous materials within 0.25 mile of a school.

MSF Design Option 1

MSF Design Option 1 is not located within 0.25 mile of a school. Therefore, the MSF Design Option 1 would have no impact related to emissions or handling of acutely hazardous materials within 0.25 mile of a school.

Electric Bus MSF

The Electric Bus MSF is not located within 0.25 mile of a school. Therefore, the Electric Bus MSF would have no impact related to emissions or handling of acutely hazardous materials within 0.25 mile of a school.

6.3.4 Impact HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

6.3.4.1 Operational Impacts

Alternative 1 includes 51 LUST sites that are identified on the Cortese List. All 51 LUST sites have a case closed status. The status of the LUST cases reported as “case closed” indicates that remedial action is completed, or was deemed unnecessary, by the local regulatory agency. Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the proposed Project site. In addition, operations, no ground-disturbing activities would occur at the Cortese-listed hazardous materials sites such that hazardous releases of contaminated soils could create a significant hazard to the public or the environment. Alternative 1 is located on a site that is included on one or more hazardous materials lists compiled in accordance with Government Code Section 65962.5. With adherence to existing regulations, operation of the Alternative 1 would not create or result in a significant hazard to people or the environment, and Alternative 1 during operation would result in a less than significant impact.

6.3.4.2 Construction Impacts

Alternative 1 includes 51 sites that are identified on the Cortese list as having confirmed releases of hazardous materials, including petroleum hydrocarbons, VOCs, and metals to soil and groundwater. These sites are identified in Table B-1 and on Figure 6-10 and Figure 6-11. The LUST sites have been remediated and are classified as "Closed" by the regulatory agency, which signifies that they have been remediated to the satisfaction of the agency with oversight. Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the project site. Alternative 1 is located on a site that is included on one or more hazardous materials lists compiled in accordance with Government Code Section 65962.5. With adherence to existing regulations, Alternative 1 would not create or result in a significant hazard to people or the environment, and the Alternative 1 would result in a less than significant impact.

6.3.4.3 Maintenance and Storage Facilities

MSF Base Design

The hazardous site conditions for the MSF Base Design related to Government Code Section 65962.5, commonly known as the Cortese List, are associated with contaminated soils, and these sites are listed as "Closed," which signifies that they have been remediated to the satisfaction of the agency with oversight (refer to Section 6.3.4.2). Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the project site. With adherence to existing regulations, MSF Base Design would not create or result in a significant hazard to people or the environment, and the MSF Base Design would result in a less than significant impact.

MSF Design Option 1

The hazardous site conditions for the MSF Design Option 1 related to Government Code Section 65962.5, commonly known as the Cortese List, are associated with contaminated soils, and these sites are listed as "Closed," which signifies that they have been remediated to the satisfaction of the agency with oversight (refer to Section 6.3.4.2). Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the project site. With adherence to existing regulations, MSF Design Option 1 would not create or result in a significant hazard to people or the environment, and the MSF Design Option 1 would result in a less than significant impact.

Electric Bus MSF

The hazardous site conditions for the Electric Bus MSF related to Government Code Section 65962.5, commonly known as the Cortese List, are associated with contaminated soils, and these sites are listed as "Closed," which signifies that they have been remediated to the satisfaction of the agency with oversight (refer to Section 6.3.4.2). Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the project site. With adherence to existing regulations, Electric Bus MSF would not create or result in a significant hazard to people or the environment, and the Electric Bus MSF would result in a less than significant impact.

6.3.5 Impact HAZ-5: 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?

6.3.5.1 Operational Impacts

Alternative 1 is 0.9 mile from the Van Nuys Airport and 1.2 miles from the Santa Monica Municipal Airport. The *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport implements relevant policies and guidelines for land-use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA, airport safety zones, and noise impact zones. These plans also address airport land-use compatibility concerns regarding exposure to aircraft noise, land use safety with respect both to people and property on the ground and the occupants of the aircraft, protection of airport airspace, and general concerns related to aircraft overflights. According to the *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport, Alternative 1 is located outside the AIA for both airports (Figure 6-14) Alternative 1 is not located within the safety zone or the noise impact zone for the airports. (DCP, 2006; LA County Planning, 1991; ALUC, 2003a, 2003b, 2023).

Alternative 1 would not interfere with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval. The Alternative 1 is not within the AIA, Safety Zones, and Noise Impact Zones. Adherence to existing local, state, and federal regulations would ensure that during operation of the Alternative 1, impacts associated with potential aviation hazards would be less than significant.

6.3.5.2 Construction Impacts

Alternative 1 is 0.9 mile from the Van Nuys Airport and 1.2 miles from the Santa Monica Municipal Airport. The *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport implements relevant policies and guidelines for land-use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA, airport safety zones, and noise impact zones. These plans also address airport land-use compatibility concerns regarding exposure to aircraft noise, land use safety with respect both to people and property on the ground and the occupants of the aircraft, protection of airport airspace, and general concerns related to aircraft overflights. According to the *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport, Alternative 1 is located outside the AIA for both airports (Figure 6-14) Alternative 1 is not located within the safety zone or the noise impact zone for the airports. (DCP, 2006; LA County Planning, 1991; ALUC, 2003a, 2003b, 2023).

Alternative 1 would not interfere with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval. The Alternative 1 is not within the AIA, Safety Zones, and Noise Impact Zones. Adherence to existing local, state, and federal regulations would ensure that during construction of the Alternative 1, impacts associated with potential aviation hazards would be less than significant.

6.3.5.3 Maintenance and Storage Facilities

MSF Base Design

The MSF Base Design is approximately 2.6 miles from the Van Nuys Airport. The MSF Base Design is not located within the AIA, Safety Zones, and Noise Impact Zones. With adherence to existing federal, state and local regulations, the MSF Base Design would not result in a safety hazard or excessive noise related airports during operation and the impact would be less than significant.

MSF Design Option 1

MSF Design Option 1 is 0.9 mile from the Van Nuys Airport. The *Van Nuys Airport Plan* for the Van Nuys Airport implements relevant policies and guidelines for land-use within the AIA, airport safety zones, and noise impact zones. These plans also address airport land-use compatibility concerns regarding exposure to aircraft noise, land use safety with respect both to people and property on the ground and the occupants of the aircraft, protection of airport airspace, and general concerns related to aircraft overflights. According to the *Van Nuys Airport Plan* for the Van Nuys Airport, MSF Design Option 1 is located outside the AIA. MSF Design Option 1 would not interfere with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval. With adherence to existing federal, state and local regulations, the MSF Design Option 1 would not result in a safety hazard or excessive noise related airports during operation and the impact would be less than significant.

Electric Bus MSF

The Electric Bus MSF is not within 2 miles of an airport. The Electric Bus MSF is not located within the AIA, Safety Zones, and Noise Impact Zones. With adherence to existing federal, state and local regulations, the Electric Bus MSF would not result in a safety hazard or excessive noise related airports during operation and the impact would be less than significant.

6.4 Project Measures and Mitigation Measures

6.4.1 Operational Impacts

6.4.1.1 Project Measures

The following PMs are design features, BMPs, or other measures required by law and/or permit approvals. These measures are components of the Project and are applicable to Alternative 1.

PM HAZ-1: *Operational (post Project) BMPs shall be implemented by the Project and include but not be limited to:*

- *Cleaning and maintenance products shall be required to be labeled with appropriate cautions and instructions for handling, storage, and disposal. Staff shall be trained and required to use, store, and dispose of these materials properly in accordance with label directions.*
- *If the quantity of hazardous materials used, handled, or stored on-site at the maintenance and storage facility exceeds the regulatory thresholds of 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance per Chapter 6.95 of the California Health and Safety Code, the Project shall prepare a Hazardous Materials Business Plan in accordance with all related requirements of the California Health and Safety Code (Chapter 6.95, Articles 1 and 2). The plan shall be reviewed and recertified every year and amended as required by the California Health and Safety Code (Chapter 6.95, Articles 1 and 2).*
- *Storage and disposal of hazardous materials and waste shall be conducted in accordance with all applicable federal and state regulatory requirements, such as the Resource Conservation and Recovery Act; the Comprehensive Environmental Response, Compensation, and Liability Act; the Hazardous Materials Release*

Response Plans and Inventory Law; and the Hazardous Waste Control Act, and if a spill does occur, it shall be remediated in accordance with all applicable federal and state regulatory requirements and in coordination with the Department of Toxic Substances Control and/or Los Angeles Regional Water Quality Control Board.

- *Compliance with applicable Los Angeles County and City of Los Angeles requirements pertaining to emergency vehicle access as well as the California Building Code and California Fire Code standards shall ensure that sufficient ingress and egress routes are maintained and provided to the new stations.*

6.4.1.2 Mitigation Measures

No mitigation measures are required.

6.4.2 Construction Impacts

6.4.2.1 Project Measures

The following PMs are design features, BMPs, or other measures required by law and/or permit approvals. These measures are components of the Project and are applicable to Alternative 1.

PM HAZ-2: *Construction BMPs shall include but not be limited to:*

- *The Project shall be required to obtain permits before construction begins and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases in accordance with the U.S. Environmental Protection Agency, State Water Resources Control Board, Department of Toxic Substances Control, California Division of Occupational Safety and Health, and the South Coast Air Quality Management District.*
- *The Project shall develop a Stormwater Pollution Prevention Plan in accordance with the State Water Resources Control Board's Construction Clean Water Act Section 402 General Permit conditions, and subject to regular inspections by applicable jurisdiction(s) to ensure compliance. The Stormwater Pollution Prevention Plan shall include specifications for, but not be limited to, the following:*
  - *Maintain proper working conditions for vehicles and equipment to minimize potential fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials.*
  - *Conduct servicing, refueling, and staging of construction equipment only at designated areas where a spill would not flow to drainages. Conduct equipment washing, if needed, only in designated locations where water would not flow into drainage channels.*
  - *Implement drainage best management practices to protect water quality (such as oil/water separators, catch basin inserts, storm drain inserts, media filtration, and catch basin screens).*
  - *Report hazardous spills to the designated Certified Unified Program Agency (i.e., Los Angeles County Fire Department Health Hazardous Materials*

Division or Santa Fe Springs Department of Fire and Rescue) and implement clean up immediately and proper disposal of contaminated soil at a licensed facility.

- *Establish properly designed, centralized storage areas to keep hazardous materials fully contained.*
- *Keep spill cleanup materials (e.g., rags, absorbent materials, and secondary containment) properly stored and maintained at the work site when handling materials.*
- *Implement monitoring program by the construction site supervisor that includes both dry and wet weather inspections.*

- *Transportation of hazardous materials by the Project shall comply with state regulations governing hazardous materials transport included in the California Vehicle Code (Title 13 of the California Code of Regulations), the State Fire Marshal Regulations (Title 19 of the California Code of Regulations), and Title 22 of the California Code of Regulations. These regulations include the following:*
  - *Require all motor carrier transporters of hazardous materials to have a Hazardous Materials Transportation license issued by the California Highway Patrol.*
  - *Require the transport of hazardous materials via routes with the least overall travel time.*
  - *Prohibit the transport of hazardous materials through residential neighborhoods.*
  - *Require transporters to take immediate action to protect human health and the environment in the event of spill, release, or mishap.*
  - *Incorporate restrictions on haul routes into the construction specifications according to local permitting requirements.*
- *Contaminated soils and hazardous building materials and wastes shall be disposed of in accordance with federal, state, and local requirements at landfills serving Los Angeles County. The removal and disposal of hazardous building materials shall be the responsibility of a California Division of Occupational Safety and Health-certified contractor in accordance with South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities).*
- *Traffic control during construction shall follow local jurisdiction guidelines. For specialized construction tasks, it may be necessary to work during nighttime hours to minimize traffic disruptions.*

PM HAZ-3: *Construction best management practices for activities within methane hazard zones, including tunneling operations and underground station construction shall include, but not be limited to, the following:*

- *Pursuant to Section 91.7104.1 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619), site testing of subsurface geological formations shall be conducted by a Project-approved testing agency under the supervision of a licensed architect or registered engineer or geologist. Testing shall address, but necessarily be limited to, methane concentrations and surface conditions along tunneling routes and at underground stations locations. The licensed architect or registered engineer or geologist shall indicate the testing instruments used and testing procedure followed. The testing procedure shall meet the Methane Mitigation Standards established by the Superintendent of Building.*
- *All paving work, building construction, tunneling and underground station construction within the methane zone or methane buffer zone as defined by Los Angeles Department of Building and Safety shall be required to comply with Methane Mitigation Standards established by the Superintendent of Building as well as the requirements outlined in Sections 91.7103 and 91.7104 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619).*
- *All building and underground structures, including tunneling and stations, located in the Methane Zone shall provide a methane mitigation system as required by Los Angeles Municipal Code Table 71 in Section 91.7104.2 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619) based on the appropriate Site Design Level. The Superintendent of Building may approve an equivalent methane mitigation system designed by an architect, engineer, or geologist.*

PM HAZ-4: *Construction best management practices for demolition of existing structures shall include, but shall not be limited to, the following:*

- *Both the federal Occupational Safety and Health Administration and California Division of Occupational Safety and Health regulate worker exposure during construction activities that disturb lead-based paint. Any asbestos-containing materials, if present, shall require appropriate abatement of identified asbestos prior to demolition pursuant to South Coast Air Quality Management District Rule 1403.*
- *Polychlorinated biphenyls (PCB)-containing fluorescent light fixtures and electrical transformers that are not labeled "No PCBs" shall be assumed to contain polychlorinated biphenyls and shall be removed prior to demolition activities and shall be disposed of by a licensed and certified polychlorinated biphenyls removal contractor, in accordance with local, state, and federal regulations. The removal and disposal of the electrical transformers shall be the responsibility of the utility owner in accordance with all standards and practices.*

PM HAZ-5: *Construction best management practices for the areas with known or previously undiscovered hazardous materials shall include, but not be limited to, the following:*

- *The Project shall hire a qualified professional to sample soil suspected of contamination (obvious signs of contamination include indicators such as odors, stains, or other suspect materials) for the purpose of classifying material and determining disposal requirements before construction begins. If excavated soil is suspected or known to be contaminated, the Project shall:*
  - *Segregate and stockpile the excavated material in a way that shall facilitate measurement of the stockpile volume.*
  - *Spray the stockpile with water or a South Coast Air Quality Management District-approved vapor suppressant and cover the stockpile with a heavy-duty plastic (i.e., Visqueen) to prevent soil volatilization in the atmosphere or exposure to nearby workers per South Coast Air Quality Management District Rule 1166.*
- *Existing groundwater monitoring wells shall remain under ongoing groundwater investigations associated with off-site sources.*

6.4.2.2 Mitigation Measures

MM HAZ-1: ***Phase II Environmental Site Assessment.*** *Prior to the issuance of a grading permit and before any substantial ground disturbance occurs on or near the properties with documented releases, the Project shall hire a qualified environmental professional to conduct a Phase II Environmental Site Assessment (ESA) to determine the potential presence of petroleum hydrocarbons, metals, and volatile organic compounds in soil and/or groundwater.*

- *If the Phase I ESA identifies any recognized environmental conditions or other indicators of potential contamination, a Phase II ESA shall be conducted. The Phase II Environmental Site Assessment shall include sufficient soil and groundwater sampling and laboratory analysis to identify the types of chemicals and their respective concentrations. The Phase II Environmental Site Assessment shall compare soil and groundwater sampling results against applicable environmental screening levels developed by the Los Angeles Regional Water Quality Control Board and/or Department of Toxic Substances Control. If the Phase II Environmental Site Assessment identifies contaminant concentrations above the screening levels, a site-specific Soil and Groundwater Management Plan shall be prepared and implemented as described in MM HAZ-2. The Project shall consult with the Department of Toxic Substances Control, California Environmental Protection Agency, and/or other appropriate regulatory agencies to ensure sufficient minimization of risk to human health and the environment is completed.*

MM HAZ-2: ***Soil and Groundwater Management Plan.*** *Prior to the issuance of a grading permit, a site-specific Soil and Groundwater Management Plan shall be prepared by a qualified professional environmental contractor to address handling and disposal of contaminated soil and groundwater prior to demolition, excavation, and construction activities.*

- *The Project shall implement the Soil and Groundwater Management Plan during construction activities. The Soil and Groundwater Management Plan shall specify all necessary procedures to ensure the safe handling and disposing of excavated soil, groundwater, and/or dewatering effluent in a manner that is protective of human health and in accordance with federal and state hazardous waste disposal laws, and with state and local stormwater and sanitary sewer requirements. At a minimum, the plan shall include the following:*
  - *Identification and delineation of contaminated areas and procedures for limiting access to such areas to properly trained personnel.*
  - *Step-by-step procedures for handling, excavating, characterizing, and managing excavated soils and dewatering effluent, including procedures for containing, handling, and disposing of hazardous waste; procedures for containing, handling, and disposing of groundwater generated from construction dewatering; the method used to analyze excavated materials and groundwater for hazardous materials likely to be encountered at specific locations; appropriate treatment and/or disposal methods. Removal of soil and materials shall be performed by a licensed engineering contractor with a Class A license and hazardous-substance removal certification.*
  - *Requirements to water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, and staging.*
  - *Requirements to cover or maintain at least 2 feet of free board space on haul trucks transporting soil or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.*
  - *Requirements to use wet power vacuum street sweepers to remove any visible track out mud or dirt onto adjacent public roads at least once a day. Use of dry powered sweeping is prohibited.*
  - *Procedures for handling volatile organic compound-contaminated soil, including, but not limited to, segregating volatile organic compound-contaminated stockpiles from non-volatile organic compound-contaminated stockpiles, spraying volatile organic compound-contaminated soil stockpiles with water and/or approved vapor suppressant and covering them with plastic sheeting for all periods of inactivity lasting more than 1 hour, conducting a daily visual inspection of all covered volatile organic compound-contaminated soil stockpiles to ensure the integrity of the plastic covered surfaces, and removing contaminated soil from an excavation or grading site within 30 days from the time of excavation to a licensed facility.*
  - *Procedures for notification and reporting, including notifying and reporting to internal management and to local agencies.*

- *Minimum requirements for site-specific Health and Safety Plans to protect the general public and workers in the construction area. Prior to the issuance of grading permits, the Soil and Groundwater Management Plan and the results of environmental sampling shall be provided to contractors who shall be responsible for developing their own construction worker Health and Safety Plan and training requirements, per MM HAZ-4.*
- *The Project shall hire a qualified environmental professional to sample groundwater suspected of contamination. If any suspected groundwater contamination is encountered during construction, the contractor shall stop work in the vicinity, cordon off the area, and contact Los Angeles County Metropolitan Transportation Authority who shall immediately notify the Regional Water Quality Control Board. In coordination with the Regional Water Quality Control Board, an investigation and remediation plan shall be developed by a qualified environmental professional in order to protect public health and the environment. Any hazardous or toxic materials shall be disposed of according to local, state, and federal regulations.*
- *Trucking operations shall comply with Caltrans and any other applicable regulations, and all trucks shall be licensed and permitted to carry the appropriate waste classification. The tracking of dirt by trucks leaving the project site shall be minimized by cleaning the wheels upon exit and cleaning the loading zone and exit area as needed.*

MM HAZ-3: ***Contractor Specifications.*** *The Project shall include in its contractor specifications the following requirement relating to hazardous materials:*

- *During all ground-disturbing activities, the contractor(s) shall inspect the exposed soil and groundwater for obvious signs of contamination, such as odors, stains, or other suspect materials. Qualified personnel shall monitor for volatile organic compounds and other subsurface gases for concentrations exceeding South Coast Air Quality Management District levels with a Photoionization Detector. Should signs of unanticipated contamination be encountered, work shall be suspended, and the Los Angeles County Department of Public Health shall be notified, and the area secured. Contaminated soil and/or groundwater shall be segregated and characterized, and a site-specific Soil and Groundwater Management Plan, as described under MM HAZ-2, shall be prepared and implemented.*

MM HAZ-4: ***Worker Health and Safety Plan.*** *The contractor shall prepare site-specific Worker Health and Safety Plan to protect the general public and workers in the construction area. The Health and Safety Plan shall be prepared in accordance with California and federal Occupational Safety and Health Administration regulations. Copies of the Health and Safety Plan shall be made available to construction workers for review during their orientation and/or regular health and safety meetings. The Health and Safety Plan shall identify chemicals of concern, potential hazards, worker training requirements, personal protective equipment and devices, decontamination procedures, the need for personal or area monitoring, and emergency response procedures. The Health and Safety Plan shall be amended, as necessary, if new information becomes available that could affect implementation of the plan.*

MM HAZ-5: ***Hazardous Building Survey and Abatement.*** *Prior to demolition activities of any structures, the Project shall retain a California Division of Occupational Safety and Health-certified contractor to determine the presence or absence of building materials or equipment that contains hazardous materials, including asbestos, lead-based paint, and polychlorinated biphenyls-containing equipment. If such substances are found to be present, the contractor shall prepare and submit a workplan to the relevant oversight agency to demonstrate how these hazardous materials would be properly removed and disposed of in accordance with federal and state law, including South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities). The removal and disposal of hazardous building materials shall be the responsibility of a California Division of Occupational Safety and Health-certified contractor. Following completion of removal activities, the Project shall submit documentation to the relevant oversight agency verifying that all hazardous materials were properly removed and disposed of.*

6.4.3 Impacts After Mitigation

Implementation of MM HAZ-1 through MM HAZ-5 would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling hazardous materials, and would minimize potential exposure to construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous soil, groundwater and/or building materials such as ACM, LBP, or PCBs during demolition activities; thus, impacts would be reduced to less than significant.

7 ALTERNATIVE 3

7.1 Alternative Description

Alternative 3 is an aerial monorail alignment that would run along the Interstate 405 (I-405) corridor and would include seven aerial monorail transit (MRT) stations and an underground tunnel alignment between the Getty Center and Wilshire Boulevard with two underground stations. This alternative would provide transfers to five high-frequency fixed guideway transit and commuter rail lines, including the Los Angeles County Metropolitan Transportation Authority's (Metro) E, Metro D, and Metro G Lines, the East San Fernando Valley Light Rail Transit Line, and the Metrolink Ventura County Line. The length of the alignment between the terminus stations would be approximately 16.1 miles, with 12.5 miles of aerial guideway and 3.6 miles of underground configuration.

The seven aerial and two underground MRT stations would be as follows:

1. Metro E Line Expo/Sepulveda Station (aerial)
2. Santa Monica Boulevard Station (aerial)
3. Wilshire Boulevard/Metro D Line Station (underground)
4. UCLA Gateway Plaza Station (underground)
5. Getty Center Station (aerial)
6. Ventura Boulevard/Sepulveda Boulevard Station (aerial)
7. Metro G Line Sepulveda Station (aerial)
8. Sherman Way Station (aerial)
9. Van Nuys Metrolink Station (aerial)

7.1.1 Operating Characteristics

7.1.1.1 Alignment

As shown on Figure 7-1, from its southern terminus at the Metro E Line Expo/Sepulveda Station, the alignment of Alternative 3 would generally follow I-405 to the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor, except for an underground segment between Wilshire Boulevard and the Getty Center.

The proposed southern terminus station would be located west of the existing Metro E Line Expo/Sepulveda Station, east of I-405 between Pico Boulevard and Exposition Boulevard. Tail tracks would extend just south of the station adjacent to the eastbound Interstate 10 to northbound I-405 connector over Exposition Boulevard. North of the Metro E Line Expo/Sepulveda Station, a storage track would be located off of the main alignment north of Pico Boulevard between I-405 and Cotner Avenue. The alignment would continue north along the east side of I-405 until just south of Santa Monica Boulevard, where a proposed station would be located between the I-405 northbound travel lanes and Cotner Avenue. The alignment would cross over the northbound and southbound freeway lanes north of Santa Monica Boulevard and travel along the west side of I-405. Once adjacent to the U.S. Department of Veterans Affairs (VA) Hospital site, the alignment would cross back over the I-405 lanes and Sepulveda Boulevard, before entering an underground tunnel south of the Federal Building parking lot.

Figure 7-1. Alternative 3: Alignment



Source: LASRE, 2024; HTA, 2024

The alignment would proceed east underground and turn north under Veteran Avenue toward the proposed Wilshire Boulevard/Metro D Line Station located under the University of California, Los Angeles (UCLA) Lot 36 on the east side of Veteran Avenue north of Wilshire Boulevard. North of this station, the underground alignment would curve northeast parallel to Weyburn Avenue before curving north and traveling underneath Westwood Plaza at Le Conte Avenue. The alignment would follow Westwood Plaza until the underground UCLA Gateway Plaza Station in front of the Luskin Conference

Center. The alignment would then continue north under the UCLA campus until Sunset Boulevard, where the tunnel would curve northwest for approximately 2 miles to rejoin I-405.

The Alternative 3 alignment would transition from an underground configuration to an aerial guideway structure after exiting the tunnel portal located at the northern end of the Leo Baeck Temple parking lot. The alignment would cross over Sepulveda Boulevard and the I-405 lanes to the proposed Getty Center Station on the west side of I-405, just north of the Getty Center tram station. The alignment would return to the median for a short distance before curving back to the west side of I-405 south of the Sepulveda Boulevard undercrossing north of the Getty Center Drive interchange. After crossing over Bel Air Crest Road and Skirball Center Drive, the alignment would again return to the median and run under the Mulholland Drive Bridge, then continue north within the I-405 median to descend into the San Fernando Valley (Valley).

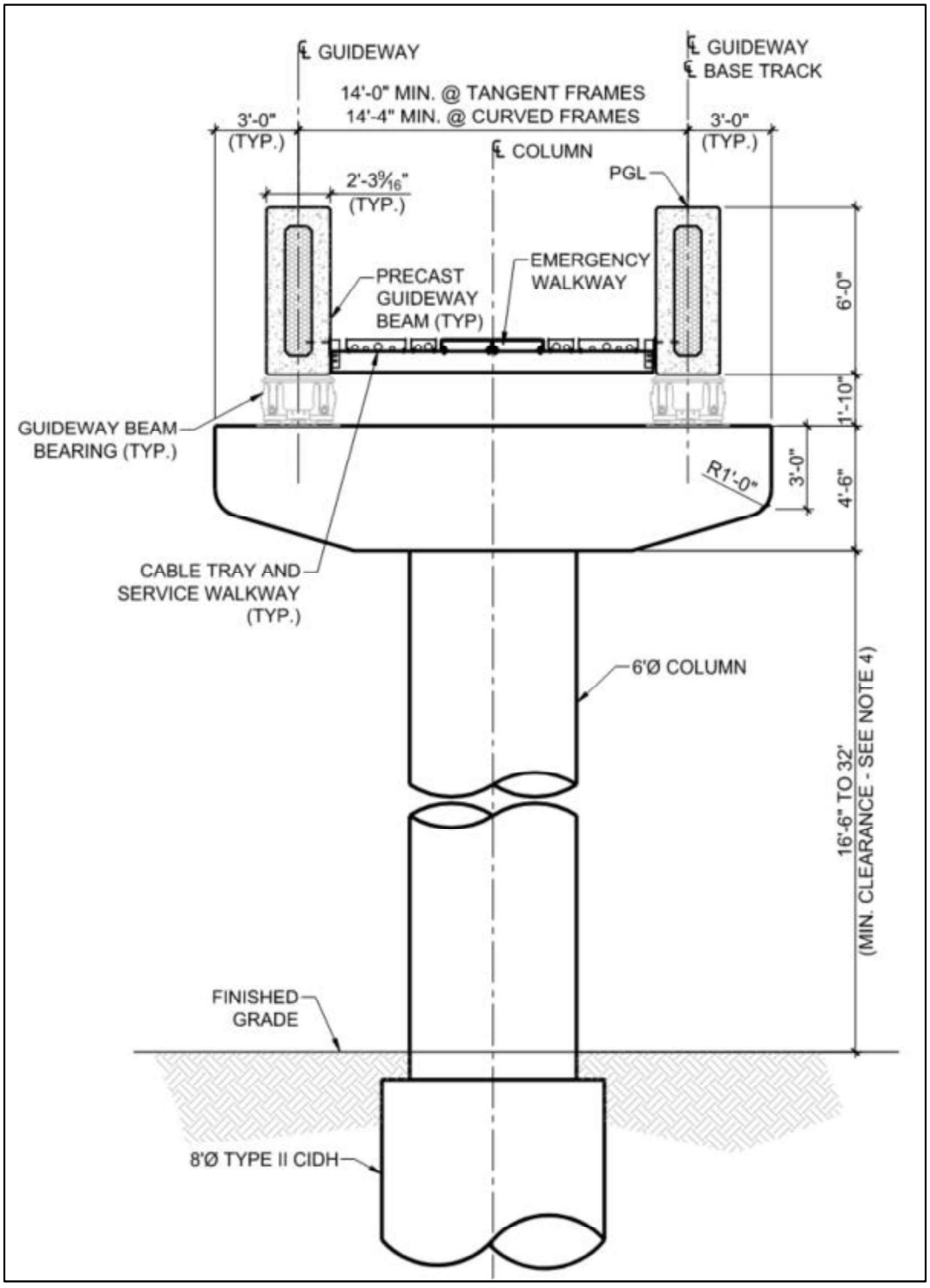
Near Greenleaf Street, the alignment would cross over the northbound freeway lanes and on-ramps toward the proposed Ventura Boulevard Station on the east side of I-405. This station would be located above a transit plaza and replace an existing segment of Dickens Street adjacent to I-405, just south of Ventura Boulevard. Immediately north of the Ventura Boulevard Station, the alignment would cross over the northbound I-405 to U.S. Highway 101 (US-101) connector and continue north between the connector and the I-405 northbound travel lanes. The alignment would continue north along the east side of I-405—crossing over US-101 and the Los Angeles River—to a proposed station on the east side of I-405 near the Metro G Line Busway. A new at-grade station on the Metro G Line would be constructed for Alternative 3 adjacent to the proposed station. These proposed stations are shown on the Metro G Line inset area on Figure 7-1.

The alignment would then continue north along the east side of I-405 to the proposed Sherman Way Station. The station would be located inside the I-405 northbound loop off-ramp to Sherman Way. North of the station, the alignment would continue along the eastern edge of I-405, then curve to the southeast parallel to the LOSSAN rail corridor. The alignment would run elevated along Raymer Street, east of Sepulveda Boulevard, and cross over Van Nuys Boulevard to the proposed terminus station, adjacent to the Van Nuys Metrolink/Amtrak Station. Overhead utilities along Raymer Street would be undergrounded where they would conflict with the guideway or its supporting columns. Tail tracks would be located southeast of this terminus station.

7.1.1.2 Guideway Characteristics

Alternative 3 would utilize straddle-beam monorail technology, which allows the monorail vehicle to straddle a guide beam that both supports and guides the vehicle. Alternative 3 would operate on aerial and underground guideways with dual-beam configurations. Northbound and southbound trains would travel on parallel beams either in the same tunnel or supported by a single-column or straddle-bent aerial structure. Figure 7-2 shows a typical cross-section of the aerial monorail guideway.

Figure 7-2. Typical Aerial Monorail Guideway Cross-Section

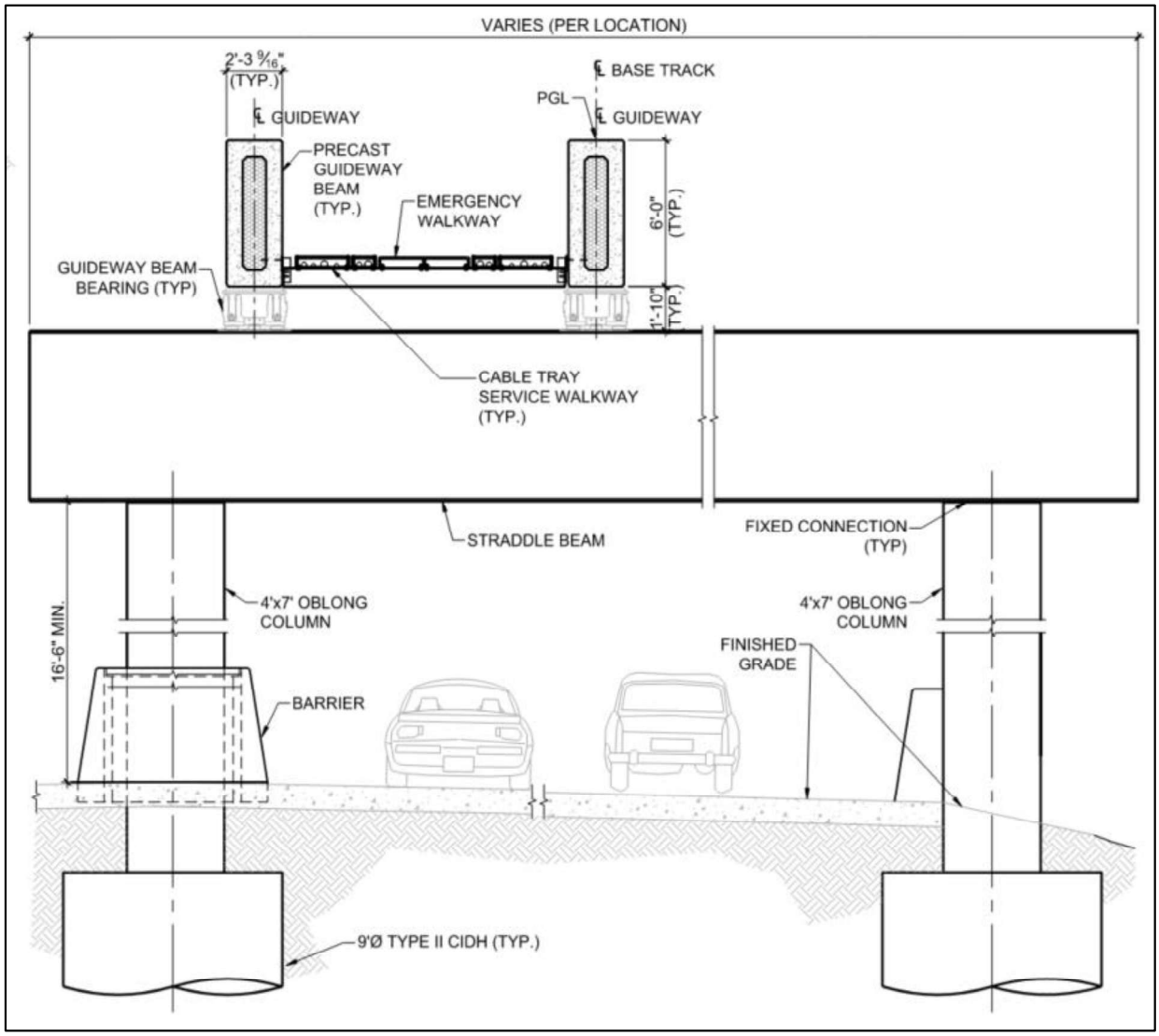


Source: LASRE, 2024

On a typical guideway section (i.e., not at a station), guide beams would rest on 20-foot-wide column caps (i.e., the structure connecting the columns and the guide beams), with typical spans (i.e., the distance between columns) ranging from 70 to 190 feet. The bottom of the column caps would typically be between 16.5 feet and 32 feet above ground level.

Over certain segments of roadway and freeway facilities, a straddle-bent configuration, as shown on Figure 7-3, consisting of two concrete columns constructed outside of the underlying roadway would be used to support the guide beams and column cap. Typical spans for these structures would range between 65 and 70 feet. A minimum 16.5-foot clearance would be maintained between the underlying roadway and the bottom of the column caps.

Figure 7-3. Typical Monorail Straddle-Bent Cross-Section

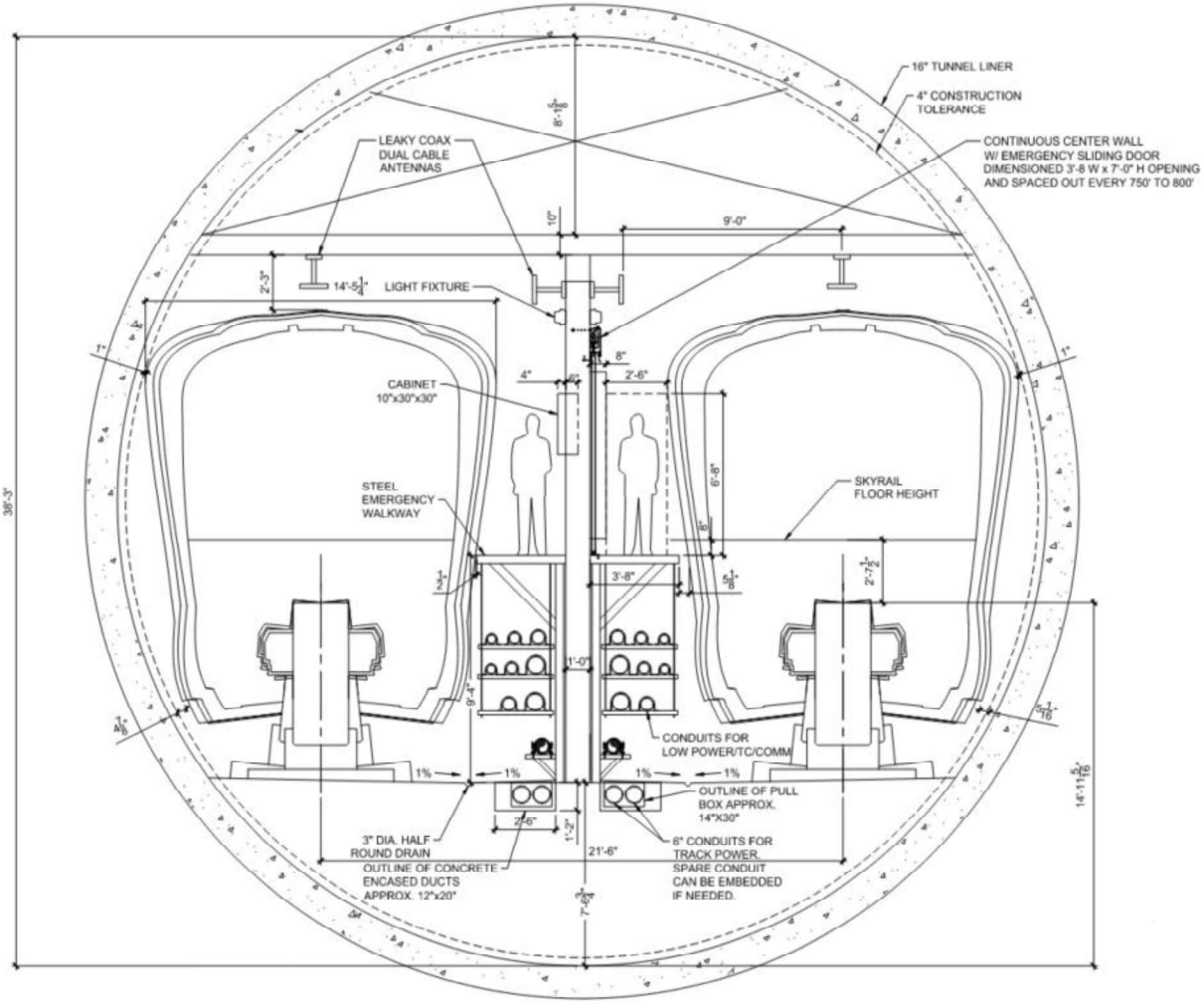


Source: LASRE, 2024

Structural support columns would vary in size and arrangement by alignment location. Columns would be 6 feet in diameter along main alignment segments adjacent to I-405 and would be 4 feet wide by 6 feet long in the I-405 median. Straddle-bent columns would be 4 feet wide by 7 feet long. At stations, six rows of dual 5-foot by 8-foot columns would support the aerial guideway. Beam switch locations and long-span structures would also utilize different-sized columns, with dual 5-foot columns supporting switch locations and either 9-foot or 10-foot-diameter columns supporting long-span structures. Crash protection barriers would be used to protect the columns. All columns would have a cast-in-drilled-hole (CIDH) pile foundation extending 1 foot in diameter beyond the column width, with varying depths for appropriate geotechnical considerations and structural support.

For underground sections, a single 40-foot-diameter tunnel would be needed to accommodate a dual-beam configuration. The tunnel would be divided by a 1-foot-thick center wall dividing two compartments with a 14.5-foot-wide space for trains and a 4-foot-wide emergency evacuation walkway. The center wall would include emergency sliding doors placed every 750 to 800 feet. A plenum within the crown of the tunnel, measuring 8 feet tall from the top of the tunnel, would allow for air circulation and ventilation. Figure 7-4 illustrates these components at a typical cross-section of the underground monorail guideway.

Figure 7-4. Typical Underground Monorail Guideway Cross-Section



Source: LASRE, 2024

7.1.1.3 Vehicle Technology

Alternative 3 would utilize straddle-beam monorail technology, which allows the monorail vehicle to straddle a guide beam that both supports and guides the vehicle. Rubber tires would sit both atop and on each side of the guide beam to provide traction and guide the train. Trains would be automated and powered by power rails mounted to the guide beam, with planned peak-period headways of 166 seconds and off-peak-period headways of 5 minutes. Monorail trains could consist of up to eight cars. Alternative 3 would have a maximum operating speed of 56 miles per hour; actual operating speeds would depend on the design of the guideway and distance between stations.

Monorail train cars would be 10.5 feet wide, with two double doors on each side. End cars would be 46.1 feet long with a design capacity of 97 passengers, and intermediate cars would be 35.8 feet long and have a design capacity of 90 passengers.

7.1.1.4 Stations

Alternative 3 would include seven aerial and two underground MRT stations with platforms approximately 320 feet long. Aerial stations would be elevated 50 feet to 75 feet above the ground

level, and underground stations would be 80 feet to 110 feet underneath the existing ground level. The Metro E Line Expo/Sepulveda, Santa Monica Boulevard, Ventura Boulevard/Sepulveda Boulevard, Sherman Way, and Van Nuys Metrolink Stations would be center-platform stations where passengers would travel up to a shared platform that would serve both directions of travel. The Wilshire Boulevard/Metro D Line, UCLA Gateway Plaza, Getty Center, and Metro G Line Sepulveda Stations would be side-platform stations where passengers would select and travel up or down to station platforms, depending on their direction of travel. Each station, regardless of whether it has side or center platforms, would include a concourse level prior to reaching the train platforms. Each station would have a minimum of two elevators, two escalators, and one stairway from ground level to the concourse.

Aerial station platforms would be approximately 320 feet long and would be supported by six rows of dual 5-foot by 8-foot columns. The platforms would be covered, but not enclosed. Side-platform stations would be 61.5 feet wide to accommodate two 13-foot-wide station platforms with a 35.5-foot-wide intermediate gap for side-by-side trains. Center-platform stations would be 49 feet wide, with a 25-foot-wide center platform.

Underground side platforms would be 320 feet long and 26 feet wide, separated by a distance of 31.5 feet for side-by-side trains.

Monorail stations would include automatic, bi-parting fixed doors along the edges of station platforms. These doors would be integrated into the automatic train control system and would not open unless a train is stopped at the platform.

The following information describes each station, with relevant entrance, walkway, and transfer information. Bicycle parking would be provided at each station.

Metro E Line Expo/Sepulveda Station

- This aerial station would be located near the existing Metro E Line Expo/Sepulveda Station, just east of I-405, between Pico Boulevard and Exposition Boulevard.
- A transit plaza and station entrance would be located on the east side of the station.
- An off-street passenger pick-up/drop-off loop would be located south of Pico Boulevard west of Cotner Avenue.
- An elevated pedestrian walkway would connect the concourse level of the proposed station to the Metro E Line Expo/Sepulveda Station within the fare paid zone.
- Passengers would be able to park at the existing Metro E Line Expo/Sepulveda Station parking facility, which provides 260 parking spaces. No additional automobile parking would be provided at the proposed station.

Santa Monica Boulevard Station

- This aerial station would be located just south of Santa Monica Boulevard, between the I-405 northbound travel lanes and Cotner Avenue.
- Station entrances would be located on the southeast and southwest corners of Santa Monica Boulevard and Cotner Avenue. The entrance on the southeast corner of the intersection would be connected to the station concourse level via an elevated pedestrian walkway spanning Cotner Avenue.
- No dedicated station parking would be provided at this station.

Wilshire Boulevard/Metro D Line Station

- This underground station would be located under UCLA Lot 36 on the east side of Veteran Avenue, north of Wilshire Boulevard.
- A station entrance would be located on the northeast corner of the intersection of Veteran Avenue and Wilshire Boulevard.
- An underground pedestrian walkway would connect the concourse level of the proposed station to the Metro D Line Westwood/UCLA Station using a knock-out panel provided in the Metro D Line Station box. This connection would occur within the fare paid zone.
- No dedicated station parking would be provided at this station.

UCLA Gateway Plaza Station

- This underground station would be located beneath Gateway Plaza.
- Station entrances would be located on the northern end and southeastern end of the plaza.
- No dedicated station parking would be provided at this station.

Getty Center Station

- This aerial station would be located on the west side of I-405 near the Getty Center, approximately 1,000 feet north of the Getty Center tram station.
- An elevated pedestrian walkway would connect the proposed station's concourse level with the Getty Center tram station. The proposed connection would occur outside the fare paid zone.
- An entrance to the walkway above the Getty Center's parking lot would be the proposed station's only entrance.
- No dedicated station parking would be provided at this station.

Ventura Boulevard/Sepulveda Boulevard Station

- This aerial station would be located east of I-405, just south of Ventura Boulevard.
- A transit plaza, including two station entrances, would be located on the east side of the station. The plaza would require the closure of a 0.1-mile segment of Dickens Street between Sepulveda Boulevard and Ventura Boulevard, with a passenger pick-up/drop-off loop and bus stops provided south of the station, off Sepulveda Boulevard.
- No dedicated station parking would be provided at this station.

Metro G Line Sepulveda Station

- This aerial station would be located near the Metro G Line Sepulveda Station, between I-405 and the Metro G Line Busway.
- Entrances to the MRT station would be located on both sides of the new proposed Metro G Line bus rapid transit (BRT) station.
- An elevated pedestrian walkway would connect the concourse level of the proposed station to the proposed new Metro G Line BRT station outside of the fare paid zone.

- Passengers would be able to park at the existing Metro G Line Sepulveda Station parking facility, which has a capacity of 1,205 parking spaces. Currently, only 260 parking spaces are used for transit parking. No additional automobile parking would be provided at the proposed station.

Sherman Way Station

- This aerial station would be located inside the I-405 northbound loop off-ramp to Sherman Way.
- A station entrance would be located on the north side of Sherman Way, directly across the street from the I-405 northbound off-ramp to Sherman Way East.
- An on-street passenger pick-up/drop-off area would be provided on the north side of Sherman Way west of Firmament Avenue.
- No dedicated station parking would be provided at this station.

Van Nuys Metrolink Station

- This aerial station would be located on the east side of Van Nuys Boulevard, just south of the LOSSAN rail corridor, incorporating the site of the current Amtrak ticket office.
- A station entrance would be located on the east side of Van Nuys Boulevard, just south of the LOSSAN rail corridor. A second entrance would be located to the north of the LOSSAN rail corridor, with an elevated pedestrian walkway connecting to both the concourse level of the proposed station and the platform of the Van Nuys Metrolink/Amtrak Station.
- Existing Metrolink Station parking would be reconfigured, maintaining approximately the same number of spaces, but 180 parking spaces would be relocated north of the LOSSAN rail corridor. Metrolink parking would not be available to Metro transit riders.

7.1.1.5 Station-to-Station Travel Times

Table 7-1 presents the station-to-station distance and travel times for Alternative 3. The travel times include both running time and dwelling time. The travel times differ between northbound and southbound trips because of grade differentials and operational considerations at end-of-line stations.

Table 7-1. Alternative 3: Station-to-Station Travel Times and Station Dwell Times

From Station	To Station	Distance (miles)	Northbound Station-to-Station Travel Time (seconds)	Southbound Station-to-Station Travel Time (seconds)	Dwell Time (seconds)
Metro E Line Station					*30*
Metro E Line	Santa Monica Boulevard	0.9	123	97	—
Santa Monica Boulevard Station					*30*
Santa Monica Boulevard	Wilshire/Metro D Line	1.1	192	194	—
Wilshire/Metro D Line Station					*30*
Wilshire/Metro D Line	UCLA Gateway Plaza	0.9	138	133	—
UCLA Gateway Plaza Station					*30*
UCLA Gateway Plaza	Getty Center	2.6	295	284	—
Getty Center Station					*30*
Getty Center	Ventura Boulevard	4.7	414	424	—
Ventura Boulevard Station					*30*
Ventura Boulevard	Metro G Line	2.0	179	187	—
Metro G Line Station					*30*
Metro G Line	Sherman Way	1.5	134	133	—
Sherman Way Station					*30*
Sherman Way	Van Nuys Metrolink	2.4	284	279	—
Van Nuys Metrolink Station					*30*

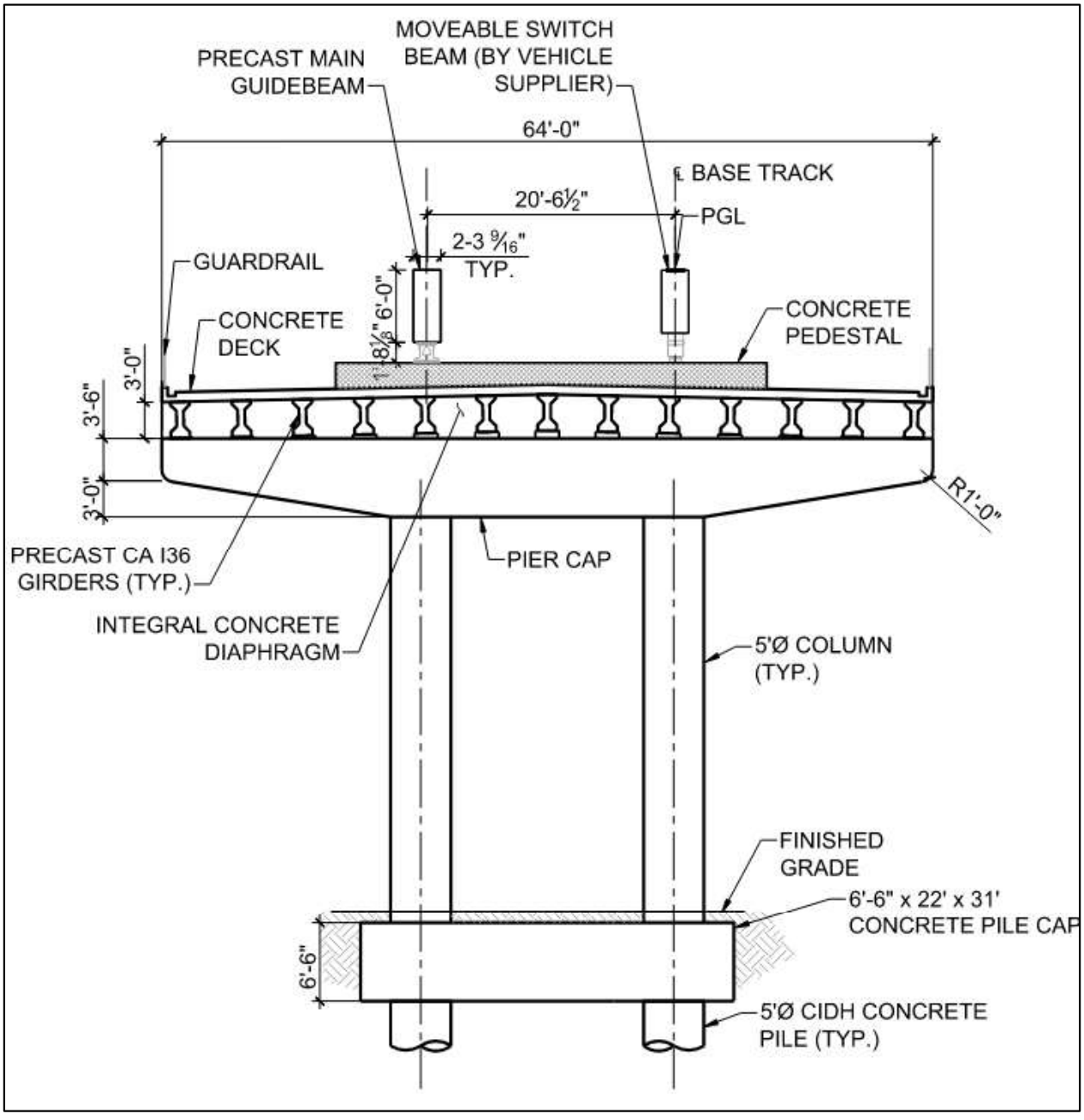
Source: LASRE, 2024

7.1.1.6 Special Trackwork

Alternative 3 would include five pairs of beam switches to enable trains to cross over and reverse direction on the opposite beam. All beam switches would be located on aerial portions of the alignment of Alternative 3. From south to north, the first pair of beam switches would be located just north of the Metro E Line Expo/Sepulveda Station. A second pair of beam switches would be located on the west side of I-405, directly adjacent to the VA Hospital site, south of the Wilshire Boulevard/Metro D Line Station. A third pair of beam switches would be located in the Sepulveda Pass just south of Mountaingate Drive and Sepulveda Boulevard. A fourth pair of beam switches would be located south of the Metro G Line Station between the I-405 northbound lanes and the Metro G Line Busway. The final pair would be located near the Van Nuys Metrolink Station.

At beam switch locations, the typical cross-section of the guideway would increase in column and column cap width. The column cap width at these locations would be 64 feet, with dual 5-foot-diameter columns. Underground pile caps for additional structural support would also be required at these locations. Figure 7-5 shows a typical cross-section of the monorail beam switch.

Figure 7-5. Typical Monorail Beam Switch Cross-Section



Source: LASRE, 2024

7.1.1.7 Maintenance and Storage Facilities

MSF Base Design

In the maintenance and storage facility (MSF) Base Design for Alternative 3, the MSF would be located on City of Los Angeles Department of Water and Power (LADWP) property east of the Van Nuys Metrolink Station. The MSF Base Design site would be approximately 18 acres and would be designed to accommodate a fleet of 208 monorail vehicles. The site would be bounded by the LOSSAN rail corridor

to the north, Saticoy Street to the south, and property lines extending north of Tyrone and Hazeltine Avenues to the east and west, respectively.

Monorail trains would access the site from the main alignment's northern tail tracks at the northwest corner of the site. Trains would travel parallel to the LOSSAN rail corridor before curving southeast to maintenance facilities and storage tracks. The guideway would remain in an aerial configuration within the MSF Base Design, including within maintenance facilities.

The site would include the following facilities:

- Primary entrance with guard shack
- Primary maintenance building that would include administrative offices, an operations control center, and a maintenance shop and office
- Train car wash building
- Emergency generator
- Traction power substation (TPSS)
- Maintenance-of-way (MOW) building
- Parking area for employees

MSF Design Option 1

In the MSF Design Option 1, the MSF would be located on industrial property, abutting Orion Avenue, south of the LOSSAN rail corridor. The MSF Design Option 1 site would be approximately 26 acres and would be designed to accommodate a fleet of 224 monorail vehicles. The site would be bounded by I-405 to the west, Stagg Street to the south, the LOSSAN rail corridor to the north, and Orion Avenue and Raymer Street to the east. The monorail guideway would travel along the northern edge of the site.

Monorail trains would access the site from the monorail guideway east of Sepulveda Boulevard, requiring additional property east of Sepulveda Boulevard and north of Raymer Street. From the northeast corner of the site, trains would travel parallel to the LOSSAN rail corridor before turning south to maintenance facilities and storage tracks parallel to I-405. The guideway would remain in an aerial configuration within the MSF Design Option 1, including within maintenance facilities.

The site would include the following facilities:

- Primary entrance with guard shack
- Primary maintenance building that would include administrative offices, an operations control center, and a maintenance shop and office
- Train car wash building
- Emergency generator
- TPSS
- MOW building
- Parking area for employees

Figure 7-6 shows the locations of the MSF Base Design and MSF Design Option 1 for Alternative 3.

Figure 7-6. Alternative 3: Maintenance and Storage Facility Options



Source: LASRE, 2024; HTA, 2024

7.1.1.8 Traction Power Substations

TPSSs transform and convert high voltage alternating current supplied from power utility feeders into direct current suitable for transit operation. A TPSS on a site of approximately 8,000 square feet would be located approximately every 1 mile along the alignment. Table 7-2 lists the TPSS locations proposed for Alternative 3.

Figure 7-7 shows the TPSS locations along the Alternative 3 alignment.

Table 7-2. Alternative 3: Traction Power Substation Locations

TPSS No.	TPSS Location Description	Configuration
1	TPSS 1 would be located east of I-405, just south of Exposition Boulevard and the monorail guideway tail tracks.	At-grade
2	TPSS 2 would be located east of I-405 and Sepulveda Boulevard, just north of the Getty Center Station.	At-grade
3	TPSS 3 would be located west of I-405, just east of the intersection between Promontory Road and Sepulveda Boulevard.	At-grade
4	TPSS 4 would be located between I-405 and Sepulveda Boulevard, just north of the Skirball Center Drive Overpass.	At-grade
5	TPSS 5 would be located east of I-405, just south of Ventura Boulevard Station, between Sepulveda Boulevard and Dickens Street.	At-grade
6	TPSS 6 would be located east of I-405, just south of the Metro G Line Sepulveda Station.	At-grade
7	TPSS 7 would be located east of I-405, just east of the Sherman Way Station, inside the I-405 Northbound Loop Off-Ramp to Sherman Way westbound.	At-grade
8	TPSS 8 would be located east of I-405, at the southeast quadrant of the I-405 overcrossing with the LOSSAN rail corridor.	At-grade
9	TPSS 9 would be located east of I-405, at the southeast quadrant of the I-405 overcrossing with the LOSSAN rail corridor.	At-grade (within MSF Design Option)
10	TPSS 10 would be located between Van Nuys Boulevard and Raymer Street, south of the LOSSAN rail corridor.	At-grade
11	TPSS 11 would be located south of the LOSSAN rail corridor, between Tyrone Avenue and Hazeltine Avenue.	At-grade (within MSF Base Design)
12	TPSS 12 would be located southwest of Veteran Avenue at Wellworth Avenue.	Underground
13	TPSS 13 would be located within the Wilshire Boulevard/Metro D Line Station.	Underground (adjacent to station)
14	TPSS 14 would be located underneath UCLA Gateway Plaza.	Underground (adjacent to station)

Source: LASRE, 2024; HTA, 2024

Figure 7-7. Alternative 3: Traction Power Substation Locations



Source: LASRE, 2024; HTA, 2024

7.1.1.9 Roadway Configuration Changes

Table 7-3 lists the roadway changes necessary to accommodate the guideway of Alternative 3. Figure 7-8 shows the location of these roadway changes in the Sepulveda Transit Corridor Project (Project) Study Area, except for the I-405 configuration changes, which occur throughout the corridor.

Table 7-3. Alternative 3: Roadway Changes

Location	From	To	Description of Change
Cotner Avenue	Nebraska Avenue	Santa Monica Boulevard	Roadway realignment to accommodate aerial guideway columns
Beloit Avenue	Massachusetts Avenue	Ohio Avenue	Roadway narrowing to accommodate aerial guideway columns
Sepulveda Boulevard	Getty Center Drive	Not Applicable	Southbound right turn lane to Getty Center Drive shortened to accommodate aerial guideway columns
I-405 Northbound On-Ramp and Off-Ramp at Sepulveda Boulevard near I-405 Exit 59	Sepulveda Boulevard near I-405 Northbound Exit 59	Sepulveda Boulevard/I-405 Undercrossing (near Getty Center)	Ramp realignment to accommodate aerial guideway columns and I-405 widening
Sepulveda Boulevard	I-405 Southbound Skirball Center Drive Ramps (north of Mountaingate Drive)	Skirball Center Drive	Roadway realignment into existing hillside to accommodate aerial guideway columns and I-405 widening
I-405 Northbound On-Ramp at Mulholland Drive	Mulholland Drive	Not Applicable	Roadway realignment into the existing hillside between the Mulholland Drive Bridge pier and abutment to accommodate aerial guideway columns and I-405 widening
Dickens Street	Sepulveda Boulevard	Ventura Boulevard	Permanent removal of street for Ventura Boulevard Station construction Pick-up/drop-off area would be provided along Sepulveda Boulevard at the truncated Dickens Street
Sherman Way	Haskell Avenue	Firmament Avenue	Median improvements, passenger drop-off and pick-up areas, and bus pads within existing travel lanes
Raymer Street	Sepulveda Boulevard	Van Nuys Boulevard	Curb extensions and narrowing of roadway width to accommodate aerial guideway columns
I-405	Sepulveda Boulevard Northbound Off-Ramp (Getty Center Drive interchange)	Sepulveda Boulevard Northbound On-Ramp (Getty Center Drive interchange)	I-405 widening to accommodate aerial guideway columns in the median
I-405	Skirball Center Drive	U.S. Highway 101	I-405 widening to accommodate aerial guideway columns in the median

Source: LASRE, 2024; HTA, 2024

Figure 7-8. Alternative 3: Roadway Changes



Source: LASRE, 2024; HTA, 2024

In addition to the changes made to accommodate the guideway, as listed in Table 7-3, roadways and sidewalks near stations would be reconstructed, which would result in modifications to curb ramps and driveways.

7.1.1.10 Ventilation Facilities

For ventilation of the monorail's underground portion, a plenum within the crown of the tunnel would provide a separate compartment for air circulation and allow multiple trains to operate between

stations. Vents would be located at the southern portal near the Federal Building parking lot, Wilshire/Metro D Line Station, UCLA Gateway Plaza Station, and at the northern portal near the Leo Baeck Temple parking lot. Emergency ventilation fans would be located at the UCLA Gateway Plaza Station and at the northern and southern tunnel portals.

7.1.1.11 Fire/Life Safety – Emergency Egress

Continuous emergency evacuation walkways would be provided along the guideway. Walkways along the alignment's aerial portions would typically consist of structural steel frames anchored to the guideway beams to support non-slip walkway panels. The walkways would be located between the two guideway beams for most of the aerial alignment; however, where the beams split apart, such as entering center-platform stations, short portions of the walkway would be located on the outside of the beams. For the underground portion of Alternative 3, 3.5-foot-wide emergency evacuation walkways would be located on both sides of the beams. Access to tunnel segments for first responders would be through stations.

7.1.2 Construction Activities

Construction activities for Alternative 3 would include constructing the aerial guideway and stations, underground tunnel and stations, and ancillary facilities, and widening I-405. Construction of the transit facilities through substantial completion is expected to have a duration of 8 ½ years. Early works, such as site preparation, demolition, and utility relocation, could start in advance of construction of the transit facilities.

Aerial guideway construction would begin at the southern and northern ends of the alignment and connect in the middle. Constructing the guideway would require a combination of freeway and local street lane closures throughout the working limits to provide sufficient work area. The first stage of I-405 widening would include a narrowing of adjacent freeway lanes to a minimum width of 11 feet (which would eliminate shoulders) and placing K-rail on the outside edge of the travel lanes to create outside work areas. Within these outside work zones, retaining walls, drainage, and outer pavement widenings would be constructed to allow for I-405 widening. The reconstruction of on- and off-ramps would be the final stage of I-405 widening.

A median work zone along I-405 for the length of the alignment would be required for erection of the guideway structure. In the median work zone, demolition of existing median and drainage infrastructure would be followed by the installation of new K-rails and installation of guideway structural components, which would include full directional freeway closures when guideway beams must be transported into the median work areas during late-night hours. Additional night and weekend directional closures would be required for installation of long-span structures over I-405 travel lanes where the guideway would transition from the median.

Aerial station construction is anticipated to last the duration of construction activities for Alternative 3 and would include the following general sequence of construction:

- Site clearing
- Utility relocation
- Construction fencing and rough grading
- CIDH pile drilling and installation
- Elevator pit excavation
- Soil and material removal

- Pile cap and pier column construction
- Concourse level and platform level falsework and cast-in-place structural concrete
- Guideway beam installation
- Elevator and escalator installation
- Completion of remaining concrete elements such as pedestrian bridges
- Architectural finishes and mechanical, electrical, and plumbing installation

Underground stations, including the Wilshire Boulevard/Metro D Line Station and the UCLA Gateway Plaza Station, would use a "cut-and-cover" construction method whereby the station structure would be constructed within a trench excavated from the surface that is covered by a temporary deck and backfilled during the later stages of station construction. Traffic and pedestrian detours would be necessary during underground station excavation until decking is in place and the appropriate safety measures are taken to resume cross traffic.

A tunnel boring machine (TBM) would be used to construct the underground segment of the guideway. The TBM would be launched from a staging area on Veteran Avenue south of Wilshire Boulevard, and head north toward an exit portal location north of Leo Baeck Temple. The southern portion of the tunnel between Wilshire Boulevard and the Bel Air Country Club would be at a depth between 80 to 110 feet from the surface to the top of the tunnel. The UCLA Gateway Plaza Station would be constructed using cut-and-cover methods. Through the Santa Monica Mountains, the tunnel would range between 30 to 300 feet deep.

Alternative 3 would require construction of a concrete casting facility for columns and beams associated with the elevated guideway. A specific site has not been identified; however, it is expected that the facility would be located on industrially zoned land adjacent to a truck route in either the Antelope Valley or Riverside County. When a site is identified, the contractor would obtain all permits and approvals necessary from the relevant jurisdiction, the appropriate air quality management entity, and other regulatory entities.

TPSS construction would require additional lane closures. Large equipment, including transformers, rectifiers, and switchgears would be delivered and installed through prefabricated modules where possible in at-grade TPSSs. The installation of transformers would require temporary lane closures on Exposition Boulevard, Beloit Avenue, and the I-405 northbound on-ramp at Burbank Boulevard.

Table 7-4 and Figure 7-9 show the potential construction staging areas for Alternative 3. Staging areas would provide the necessary space for the following activities:

- Contractors' equipment
- Receiving deliveries
- Storing materials
- Site offices
- Work zone for excavation
- Other construction activities (including parking and change facilities for workers, location of construction office trailers, storage, staging and delivery of construction materials and permanent plant equipment, and maintenance of construction equipment)

Table 7-4. Alternative 3: Construction Staging Locations

No.	Location Description
1	Public Storage between Pico Boulevard and Exposition Boulevard, east of I-405
2	South of Dowlen Drive and east of Greater LA Fisher House
3	Federal Building Parking Lot
4	Kinross Recreation Center and UCLA Lot 36
5	North end of the Leo Baeck Temple Parking Lot (tunnel boring machine retrieval)
6	At 1400 N Sepulveda Boulevard
7	At 1760 N Sepulveda Boulevard
8	East of I-405 and north of Mulholland Drive Bridge
9	Inside of I-405 Northbound to US-101 Northbound Loop Connector, south of US-101
10	ElectroRent Building south of G Line Busway, east of I-405
11	Inside the I-405 Northbound Loop Off-Ramp at Victory Boulevard
12	Along Cabrito Road east of Van Nuys Boulevard

Source: LASRE, 2024; HTA, 2024

Figure 7-9. Alternative 3: Construction Staging Locations



Source: LASRE, 2024; HTA, 2024

7.2 Existing Conditions

7.2.1 Regional Setting

The Resource Study Area (RSA) consists of portions of the City of Los Angeles neighborhoods, including West Los Angeles, Westwood, Brentwood, Sherman Oaks, and Van Nuys. Existing land uses within the RSA include those typically found in mature urban and suburban communities such as residential, office,

commercial, retail, mixed-use development, education facilities, museums, parks, and open space. The majority of single-family residential land uses within the RSA are located in Brentwood, Bel-Air, Encino, and Sherman Oaks, while multi-family residential land uses are concentrated in the Westwood, Sawtelle, and Van Nuys neighborhoods. Businesses and industrial parks are concentrated within Van Nuys along Van Nuys Boulevard. Commercial uses within the RSA range from local neighborhood/commercial main street retail operations to large regional malls and shopping centers within West Los Angeles, Westwood, Santa Monica, Van Nuys, Brentwood and Sherman Oaks. Activity centers within the RSA include the Fox 11 Los Angeles, UCLA, the Getty Museum, Los Angeles National Cemetery, Ronald Reagan Medical Center, West Los Angeles U.S. Veterans Affairs Medical Center, Hammer Museum, Sherman Oaks Hospital, the Bad News Bears Park, Southern California Behavioral Health Hospital, and the Department of Public Social Services. (Refer to the *Sepulveda Transit Corridor Project Land Use and Development Technical Report* [Metro, 2025] for additional information related to existing land uses in the RSA).

7.2.2 Hazardous Materials from Known Release Sites

In June 2023, several publicly available databases maintained under Government Code Section 65962.5 (i.e., the Cortese List) were searched to determine whether any known hazardous materials are present in the RSA. The Hazardous Waste and Substances Site List (EnviroStor database [DTSC, 2023]) is maintained by the DTSC as part of the requirements of Government Code Section 65962.5. SWRCB maintains the GeoTracker database, an information management system for tracking leaking underground storage tank (LUST) cleanup sites, permitted underground storage tanks (USTs), Cleanup Program Sites, Military Cleanup sites, Land Disposal sites, Waste Discharge Requirement sites, and Oil and Gas Monitoring sites (SWRCB, 2023).[16]

On October 24, 2022, EDR, Inc. (EDR) conducted a government database search for listings within the appropriate American Society for Testing and Materials (ASTM) minimum search distance (Attachment 1A). The search radius (distance from Alternative 3) depends upon the applicable standards for each database and is identified in Table 7-5 for each of the respective database listings. A variety of identified sites within the vicinity of Alternative 3 are listed in the databases as shown in Table 7-5. Many of the facilities are permitted for more than one hazardous material use and, therefore, could be listed in more than one database.

[16] Cleanup Program Sites (CPSs), also known as Site Cleanups (SCs), are formerly known as Spills, Leaks, Investigations, and Cleanups (SLIC) sites. Cleanup Program Sites include all "non-federally owned" sites that are regulated under the State Water Resources Control Board's Site Cleanup Program and/or similar programs conducted by each of the nine Regional Water Quality Control Boards. These CPSs are highly variable, and hazardous materials found at them include, but are not limited to, hydrocarbon solvents, pesticides, perchlorate, nitrate, heavy metals, and petroleum constituents. Leaking Underground Storage Tank (LUST) Cleanup Sites include all Underground Storage Tank (UST) sites that have had an unauthorized release (i.e., leak or spill) of a hazardous substance (usually fuel hydrocarbons) and are being (or have been) cleaned up. In GeoTracker, LUST sites consist almost entirely of fuel-contaminated LUST sites (also known as "Leaking Underground Fuel Tank" or "LUFT" sites), which are regulated pursuant to Title 23 of the California Code of Regulations, Chapter 16, Article 11.

Table 7-5. Alternative 3: EDR Database Search Results

Agency Database (* Indicates that Alternative 3 ROW is listed in this database)	Survey Distance	Number of Sites Identified
AST—Aboveground Petroleum Storage Tank Facilities: A listing of aboveground storage tank petroleum storage tank locations.	0.25 mile	34
CERS HAZ WASTE—California Environmental Reporting System (CERS) Haz Waste: A list of sites in the California Environmental Protection Agency Regulated Site Portal that fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and Resource Conservation and Recovery Act LQ HW Generator programs.	0.25 mile	268*
CERS TANKS—California Environmental Reporting System (CERS) Tanks: A list of sites in the California Environmental Protection Agency Regulated Site Portal that fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.	0.25 mile	73*
CERS—California Environmental Reporting System (CERS): Provides an overview of regulated hazardous materials and waste, state, and federal cleanups, impacted ground and surface waters, and toxic materials activities across the spectrum of environmental programs for any given location in California.	0.25 mile	443*
CHMIRS—California Hazardous Material Incident Report System: California Hazardous Material Incident Report System contains information on reported hazardous material incidents (accidental releases or spills).	0.25 mile	121*
CIWQS—California Integrated Water Quality System: The California Integrated Water Quality System (CIWQS) is a computer system used by the state and Regional Water Quality Control Board to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.	0.25 mile	149*
CORTESE—Hazardous Waste & Substances Sites List: Identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with underground storage tanks (USTs) having a reportable release and all solid waste disposal facilities from which there is known migration. The sites for the list are designated by State Water Resources Control Board leaking underground storage tank, Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).	0.25 mile	64*
HIST CORTESE: Identifies historical public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The sites for the list are designated by the State Water Resources Control Board leaking underground storage tank, Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control [Cal-Sites]. This listing is no longer updated by the state agency.	0.5 mile	61*
CPS-SLIC—Statewide Spills, Leaks, Investigations, and Cleanup Cases (GEOTRACKER): Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Regional Water Quality Control Board data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.	0.5 mile	8

Agency Database (* Indicates that Alternative 3 ROW is listed in this database)	Survey Distance	Number of Sites Identified
DRYCLEANERS—Cleaner Facilities: A list of drycleaner related facilities that have Environmental Protection Agency Identification (ID) numbers. These are facilities with certain Standard Industrial Classification (SIC) codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; dry-cleaning plants, except rugs; carpet and upholstery cleaning; industrial launderers; laundry and garment services.	0.25 mile	95
EMI—Emissions Inventory Data: Toxics and criteria pollutant emissions data collected by the California Air Resources Board (CARB) and local air pollution agencies.	0.25 mile	209*
ENVIROSTOR—EnviroStor Database: The Department of Toxic Substances Control's Site Mitigation and Brownfields Reuse Program's (SMBRP) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List [NPL]); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to that which was available in the CalSite database and provides additional site information, including, but not limited to, identification of formerly contaminated properties that have been released for reuse; properties where environmental deed restrictions have been recorded to prevent inappropriate land uses; and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.	1 mile	17
FID UST—Facility Inventory Database Underground Storage Tank: Contains a historical listing of active and inactive UST locations from the State Water Resources Control Board. Refer to local/county sources for current data.	0.25 mile	222
HAULERS—Registered Waste Tire Haulers Listing: A listing of registered waste tire haulers.	0.25 mile	52
HAZNET—Facility and Manifest Data: The data is extracted from the copies of hazardous waste manifests received each year by the Department of Toxic Substances Control. The annual volume of manifests is typically 700,000 to 1,000,000 annually, representing approximately 350,000 to 500,000 shipments. Data are from the manifests submitted without correction; therefore, many contain some invalid values for data elements such as generator ID, treatment, storage, and disposal (TSD) ID, waste category, and disposal method. This database begins with calendar year 1993.	0.25 mile	2,933*
HIST Cal-Sites—Calsites Database: The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California Environmental Protection Agency reevaluated and significantly reduced the number of sites in the Calsites database. It is no longer updated by the state agency. It has been replaced by ENVIROSTOR.	1 mile	1
HWP—EnviroStor Permitted Facilities Listing: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.	1 mile	1
HWTS— Hazardous Waste Tracking System: The Department of Toxic Substances Control maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.	0.25 mile	4,441*
UST— Active Underground Storage Tank Facilities: Active UST facilities gathered from the local regulatory agencies.	0.25 mile	449*

Agency Database (* Indicates that Alternative 3 ROW is listed in this database)	Survey Distance	Number of Sites Identified
LUST—Leaking Underground Fuel Tank Report (GEOTRACKER): LUST Sites included in GeoTracker. GeoTracker is the Regional Water Quality Control Board data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.	0.5 mile	102
SWEEPS UST—Statewide Environmental Evaluation and Planning System Underground Storage Tank: This UST listing was updated and maintained by a company contacted by the State Water Resources Control Board in the early 1990s. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.	0.25 mile	226
HIST UST—Hazardous Substances Storage Contained Database: Facilities on a historic list of UST sites.	0.25 mile	172
NPDES—National Pollutant Discharge Elimination System (NPDES) Permits Listing: A listing of NPDES permits, including stormwater.	0.25 mile	78*
SWF/LF (SWIS)—Solid Waste Information System: Active, Closed and Inactive Landfills. **Solid Waste Information System** records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet Resource Conservation and Recovery Act Section 4004 criteria for solid waste landfills or disposal sites.	0.5 mile	7
WDS—Waste Discharge System: Sites which have been issued waste discharge requirements.	0.25 mile	2
ECHO—Enforcement & Compliance History Information: Enforcement & Compliance History Information provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.	0.125 mile	1,211*
EDR Exclusive Historical Auto Stations: EDR has searched selected national collections of business directories and has compiled listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, and service station.	0.125 mile	222
EDR Exclusive Historical Cleaners: EDR has searched selected national collections of business directories and has compiled listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, and wash & dry.	0.125 mile	114*
FINDS—Facility Index System/Facility Registry System: Contains both facility information and "pointers" to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCBs Activity Data System).	0.125 mile	1,370*

Agency Database (* Indicates that Alternative 3 ROW is listed in this database)	Survey Distance	Number of Sites Identified
RCRA NonGen/NLR— Resource Conservation and Recovery Act Non-Generators/No Longer Regulated: RCRA Info is the Environmental Protection Agency's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act. Non-Generators do not presently generate hazardous waste.	0.25 mile	951*
RCRA-LQG—Resource Conservation and Recovery Act Information System Large Quantity Generators: Sites that generate, transport, store, treat, and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Facilities permitted to generate more than 1,000 kilograms (kg) of hazardous waste or over 1 kg of acutely hazardous waste per month.	0.25 mile	45
RCRA-SQG—Resource Conservation and Recovery Act Information System Small Quantity Generators: Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Facilities permitted to generate more than 100 kg per month but less than 1,000 kg per month of non-acutely hazardous materials.	0.25 mile	203
RCRA-TSDF—Resource Conservation and Recovery Act Information System Small Quantity Generators: Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. Treatment, storage, and disposal facilities (TSDFs) treat, store, or dispose of the waste.	0.5 mile	1
RCRA-VSQG— Resource Conservation and Recovery Act Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators): Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.	0.25 mile	2
SEMS—Superfund Enterprise Management System: Hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of the EPA''s Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the EPA by states, municipalities, private companies, and private persons, pursuant to Section 103 of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.	0.5 mile	1
SEMS-ARCHIVE—Superfund Enterprise Management System Archive: Sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015.	0.5 mile	5

Source: ICF, 2022a

As stated in Section 3, many listings in the report were identified as not having the potential to impact the Project. Thus, this discussion focuses on the potential for recognized environmental conditions (REC), LUST, and Cortese list sites that could potentially result in a hazard to the public and/or environment during construction and operation.

There are 48 closed LUST cases, six Cleanup Program Sites, one State Response, one Corrective Action, and seven-Tiered Permit sites within 0.5 mile of Alternative 3 (Attachment 2, Table B-2).[17] No Brownfields sites were identified within or in the vicinity of Alternative 3. All 48 closed LUST cases are on the Cortese list. The status of the LUST cases reported as "case closed" indicates that remedial action is completed, or was deemed unnecessary, by the local regulatory agency. Table B-2 summarizes the identified affected properties, including business addresses, a summary of the status of each property, and proximity of the property to the Alternative 3 alignment. The site numbers identified for each property in Table B-2 correspond with the numbers that appear on Figure 7-10 and Figure 7-11.

[17] Tiered Permit: Sites with permits granted by the Resource Conservation and Recovery Act.

Figure 7-10. Alternative 3: Hazardous Material Sites within 0.5 Mile (North)



Source: DTSC, 2023; SWRCB, 2023, ICF 2022a

Figure 7-11. Alternative 3: Hazardous Material Sites within 0.5 Mile (South)



Source: DTSC, 2023; SWRCB, 2023, ICF 2022a

7.2.2.1 San Fernando Valley Superfund Site

The Area 4 Pollock Operable Unit (OU) is one of the four San Fernando Valley (Valley) Superfund Site areas. The Valley (Area 4) Superfund site is located south of Los Feliz Avenue to State Route 110, east of the RSA. The four Valley Superfund Site area are designated as the following:

- Area 1 North Hollywood (North Hollywood and Burbank OU)
- Area 2 Glendale (Crystal Springs Well Field)
- Area 3 Glendale (Verdugo Study Area) (Note Area 3 was removed from Superfund site list in 2004)
- Area 4 Pollock OU (Pollock Well Field)

The Valley (Area 4) Pollock OU Superfund site is a 5,860-acre area with areas of contaminated groundwater near the LADWP Pollock Well Field in the City of Los Angeles. Historical manufacturing work in the Valley groundwater basin, dating back to World War II, contaminated the groundwater in the region with volatile organic compounds (VOC), including trichloroethylene (TCE) and tetrachloroethylene (PCE). The Valley groundwater basin provides drinking water to residents of the Cities of Los Angeles, Burbank, and Glendale, as well as the La Crescenta Water District. In 2022, LADWP stated that the San Fernando Basin provides approximately 10 percent of the City of Los Angeles's water supply annually, but that it has the potential to provide up to 21 percent in an average year.

Affected groundwater associated with the San Fernando Valley Superfund Site could potentially extend near the northern portions of Alternative 3 north of Saticoy Street. In addition, the eastern portion of the plume is depicted as moving south, just east of Alternative 3 (ICF, 2022a).

Use of contaminated groundwater poses the greatest risk at this site. The Valley Area 4 groundwater contamination is being addressed through the coordination of federal, state and municipal agencies, including EPA, DTSC, State Regional Water Quality Control Board (SRWQCB), and the Los Angeles Regional Water Quality Control Board (LARWQCB).

EPA completed an interim investigation of the Pollock Well Field in 1994. EPA did not select a remedy for the site because the LADWP constructed a wellhead treatment project to clean the water in the Valley Basin. Since 1999, LADWP's Granular Activated Carbon Treatment Plant at the Pollock Well Field has been treating groundwater to meet drinking water standards and return it to the public water supply system.

Because the LADWP built a VOC treatment facility to treat groundwater, EPA determined that further cleanup was not immediately necessary. EPA is evaluating the effectiveness of the Pollock wellhead treatment project as part of its ongoing basin-wide studies and will determine the need for additional cleanup actions at the site. While the site awaits further investigation on the nature and extent of contamination in this area, the Pollock wellhead treatment operation continues to treat groundwater to meet drinking water standards and reduce the potential of exposure to contaminated water.

EPA Remedial Investigation field activities at the Pollock OU began in 2017 and have included the following:

- Groundwater assessment and sampling of existing monitoring wells
- Soil sampling during the installation of new monitoring wells
- Installation and sampling of soil gas monitoring probes
- Indoor air sampling to evaluate vapor intrusion

EPA conducted an initial round of indoor air sampling of homes in the Atwater Village area in February 2022. Results from the first sampling event indicated that indoor air in the homes sampled was not

impacted by VOCs migrating from the groundwater into homes. To verify that VOCs from the contaminated groundwater are not impacting indoor air quality in the area, an additional round of indoor air sampling of homes, businesses, and schools in the Atwater Village neighborhood was conducted in winter 2023 (EPA, 2023a). Results from the initial sampling indicate that VOCs would not affect proposed stations under Alternative 3.

7.2.3 Hazardous Materials from Roadway Corridors

Yellow-thermoplastic and yellow-painted traffic stripe and pavement markings that were applied to roadways before 1997 contained as much as 2.6 percent lead (Caltrans, 2019). Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably paint. The use of lead as an additive to paint was discontinued in 1978 because the EPA and OSHA determined that exposure to lead presents an adverse human health risk. Residue from removing this yellow-thermoplastic and yellow-painted traffic stripe and pavement marking contains heavy metals such as lead chromate in concentrations that exceed thresholds established by the California Health and Safety Code and Title 22 of the California Code of Regulations (CCR) Division 4.5 (Caltrans, 2019). Lead paint is allowed to be used for industrial applications like water towers in the U.S.

Aerially deposited lead (ADL) can be present along major roadway corridors, such as I-405, Van Nuys Boulevard and Sepulveda Boulevard. Lead alkyl compounds were first added to gasoline in the 1920s to boost octane levels and improve engine performance. Beginning in 1973, EPA ordered a gradual phase-out of lead from gasoline, substantially reducing the use of leaded gasoline by the mid-1980s. However, the EPA estimated that prior to the 1970s, vehicles emitted approximately 75 percent of the lead consumed in leaded gasoline as particulate matter through tailpipe exhaust (DTSC, 2004). A portion of this particulate matter settled into soils near major roadways. DTSC regulations specify the levels at which lead in soil is considered to be a risk. In areas where road construction would occur, the California Department of Transportation (Caltrans) has found lead within 30 feet of the edge of the pavement and within the top six inches of the soil. In some cases, lead has been found as deep as 2 to 3 feet below the surface. Therefore, soils in major roadway corridors, including those within the Alternative 3 alignment, have the potential to be contaminated with ADL from car emissions that occurred prior to the elimination of lead in gasoline (DTSC, 2016).

7.2.4 Treated Wood Waste

Wood utility poles may be treated with preserving chemicals that, if removed, can result in a substance called treated wood waste (TWW). TWW contains hazardous chemicals that pose a risk to human health and the environment. Arsenic, chromium, copper, creosote, and pentachlorophenol are among the chemicals added to preserve wood. These chemicals are known to be toxic or carcinogenic. Harmful exposure to these chemicals may result from dermal contact with TWW or from inhalation or ingestion of TWW particulate (DTSC, 2024).

7.2.5 Hazardous Building Materials

Asbestos is designated as a hazardous substance when the fibers have the potential to come in contact with air because the fibers are small enough to be inhaled and become lodged in the lung tissue, which can cause health problems. The presence of asbestos-containing material (ACM) in buildings, natural gas pipelines, and cementitious water pipelines poses an inhalation threat only if the ACMs are found to be in a friable state. If the ACMs are not friable, no inhalation hazard is present, because asbestos fibers remain bound in the material matrix and cannot be inhaled. Emissions of asbestos fiber to the ambient

air, which can occur during activities such as renovation or demolition of structures made with ACMs (e.g., insulation), are regulated in accordance with Section 112 of the Federal Clean Air Act.

Lead is a highly toxic metal that EPA and OSHA have determined to be an adverse health risk, particularly to young children. In 1978, the federal government required the reduction of lead in house paint to less than 0.06 percent (600 parts per million). Because of its toxic properties, lead is regulated as a hazardous material. Excessive exposure to lead can result in the accumulation of lead in the blood, soft tissues, and bones. Primary sources of lead exposure include the following: deteriorating lead-based paint, including painted curbs, poles, protective bollards, bridges, and fire hydrants along the right-of-way (ROW) and existing buildings within the alternative alignment; lead-contaminated dust; and lead-contaminated soil. Buildings that have been constructed prior to 1978 and that contain lead-based paints could require abatement prior to construction activities.

Polychlorinated biphenyls (PCBs) are organic chemicals, usually in the form of an oil, that were historically used in electrical equipment. PCBs are most commonly associated with pole-mounted electrical transformers, but they were also used in insulators and capacitors in building electrical equipment. PCBs were commonly used in the small capacitor within fluorescent light ballasts. Ballasts manufactured through 1979 may contain PCBs. On-site fluorescent light features and electrical transformers that were manufactured prior to and throughout 1979, or reasonably suspected to have been manufactured before or throughout 1979, shall be assumed to contain PCBs. PCBs-containing florescent light bulbs would be of concern if they are leaking as they may expose workers handling the fixtures to a variety of adverse health effects. According to EPA TSCA regulations, the material must be incinerated. The entire lighting fixture does not need special handling and disposal as long as the ballast (electrical box) is not leaking. The non-leaking ballasts can be removed and recycled or disposed of properly. PCBs are considered hazardous materials because of their toxicity; they have been shown to cause cancer in animals, along with effects on the immune, reproductive, nervous, and endocrine systems, and studies have shown evidence of similar effects in humans (EPA, 2013).

7.2.6 Other Potential Hazardous Materials

7.2.6.1 Residual Pesticides

Chemicals used in agricultural activities could result in residual concentrations of persistent pesticides in the soil. Persistent pesticides such as organochlorine pesticides (e.g., dichlorodiphenyltrichloroethane, Toxaphene, and Dieldrin) leave residues that remain in the environment without breaking down.

Lead arsenate is used as an herbicide, insecticide, or rodenticide. Lead arsenates were historically used by railroad companies as a means of weed control along a railroad ROW. Pesticide residues from lead arsenate bind tightly to the surface soil layer, where they can remain for decades. As a result, such residues, if present, could pose a human health risk when the soil is excavated. Lead and arsenic are the primary constituents of lead arsenate pesticide. Both lead and arsenic could be toxic at high concentrations in soil and are highly toxic to humans.

7.2.6.2 Household Hazardous Waste

EPA defines household hazardous waste as "leftover products such as paints, cleaners, oils, batteries, and pesticides that contain potentially hazardous ingredients that could be corrosive, toxic, ignitable, or reactive." According to EPA, Americans generate approximately 1.6 million tons of household hazardous waste per year, with the average home accumulating as much as 100 pounds of household hazardous waste annually. Improper disposal of household hazardous wastes commonly includes pouring them down the drain, on the ground, or into storm sewers, and in some cases, putting them out with the trash. Though the dangers of such disposal methods might not be immediately obvious, improper disposal of these wastes can pollute the environment and pose a threat to human health.

7.2.7 Methane Hazard Zones

Methane gas, commonly known as natural gas, may underlay the site. Potential hazards associated with methane include fire or explosion due to methane gas accumulations, since it is a highly flammable substance, and human health risks associated with natural gas poisoning. Exposure to high concentrations of methane can result in long-term health effects such as respiratory, cardiovascular, and neurological issues, though this is generally a concern in confined spaces rather than outdoor environments. Methane and other flammable or toxic gases, notably hydrogen sulfide, are often associated with naturally occurring petroleum deposits or active and former oil fields. These areas may have a potential for subsurface accumulations of methane and other volatile gases. Both methane and hydrogen sulfide are highly flammable and, in high concentrations, pose explosion hazards to the public. Exposure to high levels of hydrogen sulfide can also cause long-term health effects, including impaired cognitive function, respiratory irritation, and neurological impacts.

In the City of Los Angeles, two types of methane hazard zones exist: methane zones and methane buffer zones. A methane zone is the area closest to the source of the subsurface methane gas, whereas a methane buffer zone surrounds the outer limits of a methane zone. Both of these zones are typically caused by naturally surfacing tar and crude oil. These subsurface hazards can also be caused by soil contamination issues, such as historical oil wells (Geo Forward, 2021).

As shown on Figure 7-12, methane hazard zones exist within the Alternative 3 alignment. The Sawtelle Methane Hazard Zone begins at the base of the southern slope of the Santa Monica Mountains and follows I-405 south to approximately Santa Monica Boulevard. According to gas data collected from monitoring wells and soil vapor probes, methane and hydrogen sulfide were detected at high concentrations within existing monitoring wells and vapor probes, particularly near the Westfield Mall area (Metro, 2024c). Relatively low concentrations of methane and hydrogen sulfide were detected in soil gas vapor probes installed in Metro Purple Line Reaches 6 and 7, which are located along and adjacent to Wilshire Boulevard in the Westwood neighborhood and at the VA (Metro, 2024c). In addition, the methane zones map shows the methane zone and methane buffer zone near the southern end of the tunnel alignment (Geo Forward, 2021).

Figure 7-12. Alternative 3: Methane Hazard Zones



Source: Geo Forward, 2021

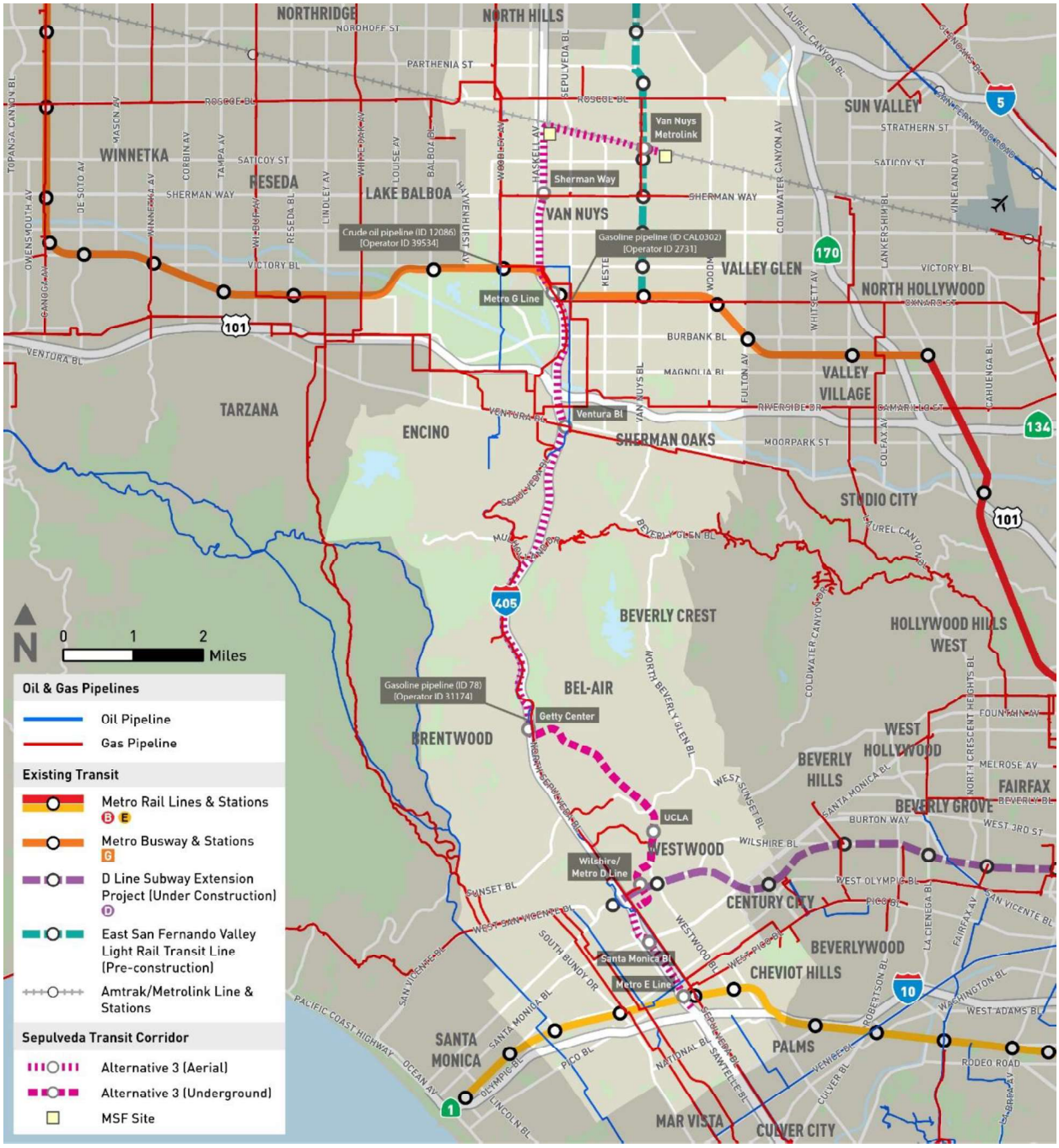
7.2.8 Petroleum and Natural Gas Pipelines

The Pipeline and Hazardous Materials Safety Administration (PHMSA) Public Map Viewer (USDOT PHMSA, 2023) identifies the following three hazardous liquid pipelines within and in the vicinity of Alternative 3 as shown on Figure 7-13:[18]

- Torrance Valley Pipeline Company (Operator Identification [ID] 39534) operates a crude oil pipeline (ID 12086) as part of the Saticoy-Slauson system. As of May 20, 2022, the pipeline was reported active and filled. The 13.34-mile pipeline originates east of the Van Nuys Airport at Woodley Avenue. It travels south to the intersection of Woodley Avenue and Victory Boulevard, then turns east to travel along Victory Boulevard to the intersection of Victory Boulevard and Sepulveda Boulevard. The pipeline parallels Sepulveda Boulevard to its terminus at the intersection of Sepulveda Boulevard and Montana Avenue.
- Shell Pipeline Company (Operator ID 31174) operates a gasoline pipeline (ID 78) as part of the Ventura Products Line system. As of June 15, 2022, the pipeline was reported active and filled. The 12.25-mile pipeline originates near the intersection of Sepulveda Boulevard and Bellagio Road where it travels south, parallel to Sepulveda Boulevard, continuing south beyond I-10.
- Chevron Pipeline Company (Operator ID 2731) operates a gasoline pipeline (ID CAL0302) as part of the El Segundo-Van Nuys Production subsystem. As of August 3, 2022, the pipeline was reported active and filled. The 17.14-mile pipeline originates near the intersection of Oxnard Street and Sepulveda Boulevard. The pipeline travels south, parallel to Sepulveda Boulevard, and continues south beyond I-10.

[18] In accordance with PHMSA's security policy, the scale of the Public Map Viewer is restricted to 1:24,000, and the minimum accuracy of the mapped pipeline locations is 500 feet.

Figure 7-13. Alternative 3: Pipelines



Source: USDOT PHMSA, 2023

7.2.9 Proximity to Schools

The following schools are located within 0.25 mile of Alternative 3:

- Cohasset Street Elementary located at 15810 Saticoy Street in Van Nuys
- Bassett Street Elementary located at 15756 Bassett Street in Van Nuys

- Hesby Oaks Leadership Charter located at 15530 Hesby Street in Sherman Oaks
- Ivy Bound Academy of Math, Science, and Technology Charter Middle located at 15355 Morrison Street in Sherman Oaks
- Nora Sterry Elementary located at 1730 Corinth Avenue in West Los Angeles
- UCLA located at 405 Hilgard Avenue in Westwood (the UCLA campus also houses two university-affiliated schools, the Geffen Academy for students in grades 6-12 and the Lab School for children ages 4-12)

7.2.10 Proximity to Airports

Concentration of people and facilities in the vicinity of airports raises concerns about safety and aircraft hazards. Potential aircraft accidents pose a hazard if Alternative 3 is located near an airport or in the immediate area of the landing and approach zones. In addition, people can be exposed to excessive noise and aircraft pollution. The Van Nuys Airport and Santa Monica Municipal Airport are in the vicinity of Alternative 3. These airports are discussed further in Section 7.2.10.1and Section 7.2.10.2.

7.2.10.1 Van Nuys Airport

The Van Nuys Airport is located at 16461 Sherman Way in Van Nuys. Van Nuys Airport is a 740-acre general aviation facility owned and operated by Los Angeles World Airports (LAWA). The airport is located in the west-central portion of the City of Los Angeles's incorporated boundaries, approximately 25 miles northwest of downtown Los Angeles in the center of the Valley. In general, the airport is bounded by Roscoe Boulevard on the north, Victory Boulevard on the south, Balboa Boulevard on the west, and Woodley Avenue on the east.

The airport houses 720 aircraft and operates two north-south parallel asphalt runways, one of which is 4,013 feet long (16L-24R) and the other which is 8,001 feet long (16R-34L). As of May 2023, the airport is averaging 615 flights per day (AirNav, 2023a).

The land development surrounding the airport is a combination of residential, commercial, industrial, and public uses, with single-family residential being the predominant use. Much of the land immediately surrounding the airport is developed with light industrial and commercial manufacturing uses, with golf courses and public parks located immediately to the south.

Alternative 3 would be approximately 0.9 mile east of the Van Nuys Airport. The *Van Nuys Airport Plan* indicates that Alternative 3 would be located approximately 0.4 mile outside the airport's airport influence area (AIA)[19] (Figure 7-14) (DCP, 2006; Los Angeles County Airport Land Use Commission [ALUC], 2003a, 2023).

7.2.10.2 Santa Monica Municipal Airport

The Santa Monica Municipal Airport is located at 3223 Donald Douglas Loop-South in the City of Santa Monica. The airport is approximately 2 miles east of the Pacific Ocean and 6 miles north of the City of Los Angeles. The airport houses various types of businesses, including art studios, office space, and event venues. In general, the airport is bounded by Ocean Park Boulevard on the north, Airport Avenue

[19] Airport influence area (AIA) is the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may substantially affect land uses or necessitate restrictions on those uses. The AIA constitutes the area within which certain land use actions are subject to review to determine consistency with the Airport Land Use Compatibility Plan policies.

on the south, 23rd Street on the west, and Bundy Drive on the east. It includes recreational space for a city park, a restaurant, a theater, and an interim open space. The Santa Monica City Council approved a plan to formally close the Santa Monica Airport in 2028.

The airport houses 84 aircraft and operates two northeast-northwest parallel asphalt runways, both of which are 3,500 feet long, and a 1,600-square foot asphalt helipad. As of May 2023, the airport is averaging 452 flights per day (AirNav, 2023b).

The southern terminus of Alternative 3 would be approximately 1.2 miles northeast of the Santa Monica Municipal Airport. The *Los Angeles County Airport Land Use Plan* indicates that Alternative 3 would be located approximately 1 mile outside the airport's AIA (Figure 7-14) (LA County Planning, 1991, ALUC, 2003b, 2023).

Figure 7-14. Alternative 3: Airport Influence Area



Source: ALUC, 2023a, 2023b

7.3 Impacts Evaluation

7.3.1 Impact HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

7.3.1.1 Operational Impacts

It is not anticipated that substantial quantities of hazardous materials would be routinely transported, used, stored, or disposed of during operation of Alternative 3. Operation of stations and the guideway would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous.[20] As mandated by Project Measure (PM) HAZ-1, cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage, and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions and standard industry practices.

Compliance with existing regulations mandated by PM HAZ-1 would assure proper transportation, use, storage, and disposal of hazardous materials, and the operational impacts of Alternative 3 would be less than significant.

7.3.1.2 Construction Impacts

Construction of Alternative 3 could expose the public or the environment to hazardous materials if the following situations occurred: improper handling or use of hazardous materials or hazardous wastes (particularly if used or handled by untrained personnel); transportation accident; environmentally unsound disposal methods; or fire, explosion, or other emergencies. The severity of potential effects varies with the activity conducted, the concentration of, quantity of and type of hazardous material or wastes present, and the proximity of sensitive receptors.

As described throughout Section 2,there is an established, comprehensive federal, state, regional, and local framework independent of the CEQA process that is intended to reduce the risks associated with the use, transport, and disposal of hazardous materials. Transportation of hazardous materials on area roadways is regulated by the California Highway Patrol (CHP) and Caltrans. The use and disposal of hazardous materials is heavily regulated at both the federal and state level; these regulations are declared and enforced by agencies such as the EPA, SWRCB, DTSC, California Occupational Safety and Health Administration (Cal/OSHA), and the South Coast Air Quality Management District (SCAQMD). Metro would be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases. In accordance with the SWRCB and PM HAZ-2, Metro would obtain and comply with a National Pollutant Discharge Elimination System (NPDES) permit. In addition, coverage under the SWRCB's Construction General Permit would be obtained. As part of the Construction General Permit, the contractor would be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP), which would include best management practices (BMPs) as mandated by PM HAZ-2, including the following and/or similar measure to minimize the risk of accidental spills of hazardous materials during construction.

[20] Acutely hazardous materials are defined as waste containing chemicals so dangerous they could pose a threat to human health and the environment, even when properly managed.

The types and amounts of hazardous materials would vary according to the nature of the construction activity. Construction of Alternative 3 would require use of typical construction equipment (e.g., gasoline- or diesel-powered machinery) and vehicles containing fuel, oil, and grease, as well as use and transport of these materials. Limited quantities of certain hazardous materials such as paints, solvents, and glues would be used during construction. Construction staging and laydown would occur at multiple locations along the alignment and station sites and could include storage of excavated or demolished materials, construction offices, equipment storage, mechanical shops, and plants (grout, water treatment, foam, etc.) (Metro, 2024c). There is low likelihood that substantial quantities of hazardous materials would be stored during construction. Moreover, these hazardous materials would not include acutely hazardous materials or substances listed in 40 CFR 355 *Appendix A: Extremely Hazardous Substances and Their Threshold Planning Quantities* that could harm construction workers or the general public.

Whether a person exposed to a hazardous substance suffers adverse health effects as a result of that exposure depends upon a complex interaction of factors including the following: the exposure pathway (the route by which a hazardous material enters the body); the amount of material to which the person is exposed; the physical form of the hazardous material (e.g., liquid or vapor) and its characteristics (e.g., toxicity and corrosivity); the frequency and duration of exposure; and the Individual's unique biological characteristics, such as age, gender, weight, and general health. Adverse health effects from exposure to hazardous materials may be short-term (acute) or long-term (chronic). Acute effects can include damage to organs or systems in the body and possibly death. Chronic adverse effects, which may result from acute short-term or long-term exposure to a hazardous material, can also include organ or systemic damage, but chronic effects of particular concern include birth defects, genetic damage, and cancer.

Transportation of hazardous materials, such as contaminated soils; hazardous building materials (including asbestos, lead, and PCBs); and other hazardous wastes (i.e., TWW, roadway demolition debris, and hazardous building materials) would occur along designated truck routes by certified personnel within the Alternative 3 corridor and/or along major streets connecting to construction staging areas and the nearest freeways (e.g., I-405, I-10, US-101). Consistent with local plans, truck routes that may be used for transporting and hauling hazardous materials include Van Nuys Boulevard, Ventura Boulevard, Beverly Glen Boulevard, Santa Monica Boulevard, and Bundy Drive. As mandated by PM HAZ-2, transportation of hazardous materials would comply with State regulations governing hazardous materials transport included in the California Vehicle Code (Title 13 of the CRR), the State Fire Marshal Regulations (Title 19 of the CRR), and Title 22 of the CRR. Restrictions on haul routes can be incorporated into the construction specifications according to local permitting requirements.

Contaminated soils and hazardous building materials and wastes would be disposed of in accordance with federal, state, and local requirements at the following landfills:

- South Yuma County Landfill located at 19536 South Avenue 1E, Yuma, AZ
- Clean Harbors Buttonwillow Landfill located at 2500 West Lokern Road, Buttonwillow, CA
- U.S. Ecology located at Highway 95 South, Beatty, NV (EPA, 2023b)

The Los Angeles County Public Health Department manages enforcement and permitting for facilities that receive and dispose of solid waste, including hazardous waste. Table 7-6 provides a representative list of the hazardous waste disposal landfills and potential haul routes.

Table 7-6. Hazardous Waste Disposal Landfills and Potential Haul Routes

Landfill Site Name	Hazardous Waste Accepted	General Potential Haul Route
South Yuma County Landfill 19536 South Avenue 1E Yuma, AZ	Contaminated soil, PCBs, asbestos	I-405 South to SR-91 East to I-15 South to I-8 East to Yuma Arizona
Clean Harbors Buttonwillow 2500 West Lokern Road Buttonwillow, CA	Acutely hazardous materials[a], contaminated soil, PCBs, asbestos, RCRA waste with heavy metals	I-405 North to I-5 North to SR-58 West to Lokern Road
U.S. Ecology Highway 95 South Beatty, NV	Contaminated soil, PCBs, asbestos	I-405 South to I-10 East to I-15 North to US-95 North to Beatty, Nevada

Source: HTA, 2024

[a]Acutely hazardous materials are defined as waste containing such dangerous chemicals that it could pose a threat to human health and the environment, even when properly managed.

PCB = polychlorinated biphenyl
RCRA = Resource Conservation and Recovery Act

Adherence to federal and state regulations stipulated by PM HAZ-2 reduces the risk of exposure to hazardous materials used during construction. Each of these regulations is specifically designed to protect the public health through improved procedures for handling hazardous materials, better technology in the equipment used to transport these materials, and a faster, more coordinated response to emergencies. With compliance with existing regulations, impacts related to the creation of significant hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials during construction of Alternative 3 would be less than significant.

7.3.1.3 Maintenance and Storage Facilities Impacts

MSF Base Design

The types and amounts of hazardous materials would vary according to the nature of the activity. Construction of the MSF Base Design would require the use of typical construction equipment (e.g., gasoline- or diesel-powered machinery) and vehicles containing fuel, oil, and grease, as well as the use and transport of these materials. Limited quantities of certain hazardous materials such as paints, solvents, and glues would be used during construction.

Maintenance of trains, vehicles, and equipment would occur at an MSF. Multiple buildings would be constructed, including a multi-level MOW building, track storage area, wash bays, ancillary storage buildings, and a TPSS structure. Operation of the MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, common household-type cleaning materials, and pesticides/herbicides. Cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions. The types and amounts of hazardous materials used at the MSF Base Design would not pose any greater risk than the existing uses at other similar development elsewhere in the vicinity of the MSF Base Design. Operation of the MSF Base Design would not require the use, handling, or storage of quantities of hazardous materials in

excess of regulatory thresholds.[21] If the quantity of hazardous materials used, handled, or stored on-site would exceed the regulatory thresholds, there is an established comprehensive regulatory framework independent of the CEQA process that would be followed, including preparation and submittal of a Hazardous Materials Business Plan (HMBP), as mandated by PM HAZ-1.

As previously discussed, adherence to federal and state regulations stipulated by PM HAZ-2 reduces the risk of exposure to hazardous materials used during construction and operation. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a faster, more coordinated response to emergencies. With compliance with existing regulations, impacts related to the creation of significant hazards to the public or the environment through the routine transport, use, storage and disposal of hazardous materials during construction of the MSF Base Design would be less than significant.

MSF Design Option 1

The types and amounts of hazardous materials would vary according to the nature of the activity. Construction of the MSF Design Option 1 would require use of typical construction equipment (e.g., gasoline- or diesel-powered machinery) and vehicles containing fuel, oil, and grease, as well as the use and transport of these materials. Limited quantities of certain hazardous materials such as paints, solvents, and glues would be used during construction.

Maintenance of trains, vehicles, and equipment would occur at an MSF. Multiple buildings would be constructed, including a multi-level MOW building, track storage area, wash bays, ancillary storage buildings, and a TPSS structure. Operation of the MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, common household-type cleaning materials, and pesticides/herbicides. Cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions. The types and amounts of hazardous materials used at the MSF Design Option 1 would not pose any greater risk than the existing uses at other similar development elsewhere in the in the vicinity of the MSF Design Option 1. Operation of the MSF Design Option 1 would not require the use, handling, or storage of quantities of hazardous materials in excess of regulatory thresholds.[22] If the quantity of hazardous materials used, handled, or stored on-site would exceed the regulatory thresholds, an established, comprehensive regulatory framework independent of the CEQA process would be followed, including preparation and submittal of an HMBP, as mandated by PM HAZ-1.

As previously discussed, adherence to federal and state regulations stipulated by PM HAZ-2 reduces the risk of exposure to hazardous materials used during construction and operation. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a faster, more coordinated response to emergencies. With compliance to existing regulations,

[21]The thresholds are 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance, per Chapter 6.95 California Health and Safety Code.

[22]The thresholds are 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance, per Chapter 6.95 California Health and Safety Code.

impacts related to the creation of significant hazards to the public or the environment through the routine transport, storage, use, and disposal of hazardous materials during construction of the MSF Design Option 1 would be less than significant.

7.3.2 Impact HAZ-2: 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?

7.3.2.1 Operational Impacts

As discussed in Section in 7.3.1, operation of stations, the guideway, and an MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal and state regulatory requirements as mandated by PM HAZ-1, which are intended to prevent or manage hazards. If a spill does occur, it would be remediated accordingly.

As mandated by PM HAZ-3, tunnels and stations for the Project would be designed to provide a redundant protection system against gas intrusion hazard, such as those described in the City of Los Angeles Municipal Code, Chapter IX, Building Regulations, Article 1, Division 71, Methane Seepage Regulations. In compliance with these regulations, specific requirements would be determined according to the actual methane levels and pressures detected on a site, and the identified specific requirements will be incorporated into the design and construction. Therefore, the risk posed by hazardous subsurface gas such as methane gas and/or hydrogen sulfide to the operations of Alternative 3 would be minimized. With adherence to PM HAZ-1 and PM HAZ-3, operational impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials under Alternative 3 would be less than significant.

7.3.2.2 Construction Impacts

Construction activities for the proposed Project, such as grading and mass excavation, including use of a TBM, could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. Exposure to unanticipated hazardous substances could occur from previously unidentified soil contamination caused by the contaminants originating at nearby listed sites (e.g., roadways and industrial uses). Or from construction-related soil contamination caused by spillage and/or mixing of construction trash and debris into the soil. EDR searched various regulatory databases and identified several sites in the surrounding area as being contaminated or having the potential to become contaminated from the release of hazardous substances. A summary of these sites is presented in Table 7-5 and detailed in Attachment 1A. Exposure to hazardous materials during construction activities could occur as a result of any of the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

If any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons. The risks are particularly heightened during tunneling activities, which would involve deeper excavation and may encounter legacy contamination or naturally occurring hazardous materials that are less likely to be present near the surface.

If tunneling is advanced through contaminated soil or groundwater, the excavated soil/slurry mix could be considered hazardous, depending on the levels of contamination encountered. Potentially affected parcels within one-quarter mile of Alternative 3 may have subsurface contamination from undocumented releases associated with current and/or historical use of the property(ies) (e.g., gas stations, dry cleaners, or industrial properties) (ICF, 2022b). During construction, there is the potential to encounter, dewater, and dispose of contaminated groundwater during ground-disturbing activities, shallow excavation, tunnel boring, excavation for the underground guideway, or relocation of utilities. During construction activities involving ground-disturbing activities, there is potential to encounter contaminated groundwater. This risk is heightened when performing shallow excavations, utilities relocation, or construction that requires dewatering. If contaminated groundwater is encountered, it would be managed and disposed of in compliance with local, state, and federal regulations. This could include treating the contaminated groundwater on-site or offsite or transporting it to a wastewater treatment facility capable of handling hazardous materials.

The Area 4 Pollock OU could potentially extend near the northern portions of Alternative 3 north of Saticoy Street (ICF, 2022a). A historical manufacturing work in the Valley groundwater basin, dating back to World War II, contaminated the groundwater in the region with volatile organic compounds (VOCs), including trichloroethylene (TCE) and tetrachloroethylene (PCE). Use of contaminated groundwater poses the greatest risk at this site. The Valley Area 4 groundwater contamination is being addressed through the coordination of federal, state and municipal agencies including EPA, DTS, SRWQCB, and Los Angeles Regional Water Quality Control Board (LARWQCB). EPA conducted rounds of indoor sampling in the Atwater Village area (outside of the RSA) and determined that the VOCs migrating from the groundwater did not impact the area. Based on these results, it can be inferred that VOCs would not affect proposed stations under Alternative 3.

The tunnel alignment for Alternative 3 would traverse the methane and methane buffer zones in the southern portion of the alignment. As discussed previously and shown on Figure 7-12, the Santa Monica Boulevard Station and the Wilshire/Metro D Line Station would be within the methane hazard zone. As described in Section 7.2.7, methane gas and hydrogen sulfide are highly flammable and can pose challenges during construction, particularly when tunneling activities disturb formations where methane gas and/or hydrogen sulfide may accumulate. The use of a TBM in such areas increase the potential for encountering pockets of methane gas and/or hydrogen sulfide, which could lead to fire or explosion hazards if proper precautions are not taken. Pursuant to Section 91.7104.1 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619) and as outlined in PM HAZ-3, all construction activities within the methane hazard zone would implement the City's methane mitigation measures. These measures include subsurface testing of geological formations, compliance with Methane Mitigation Standards established by the Superintendent of Building, and installation of methane gas and/or hydrogen sulfide mitigation systems for all underground structures, such as stations and tunnels. During tunneling, monitoring for methane gas and/or hydrogen sulfide concentrations, maintaining ventilation systems to minimize accumulation of gas.

Several high-pressure pipelines containing crude oil traverse the RSA (refer to Figure 7-13). A review of the PHMSA Pipeline Map Viewer (PHMSA, 2023) indicated there have been no recorded pipeline releases within the RSA. However, Project-related excavation and earthmoving activities could encounter buried pipelines, resulting in accidental rupture or leaks, which could cause a human health and environmental hazard. For security reasons, the PHMSA Pipeline Map Viewer (PHMSA, 2023) cannot be used for field verification of exact high-pressure pipeline locations, and the potential presence of other pipelines is unknown. In addition, it is possible buried underground utility lines may be within the RSA (such as stormwater, sewer, electrical, or communication cables).

Construction would require demolition of existing structures. Demolition of structures could potentially expose construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as ACM, lead-based paint (LBP), or PCBs. Both the federal OSHA and Cal/OSHA regulate worker exposure during construction activities that disturb LBP. Any ACMs, if present, would need appropriate abatement of the identified asbestos prior to demolition pursuant to the SCAQMD Rule 1403 and PM HAZ-4.

Additional effects from construction activities, such as excavation, tunneling, demolition, and grading, could include the potential exposure of construction workers and/or the public to chemical compounds in soils, soil gases. These activities may also result in the localized spread of contamination if disturbed soils or materials are improperly handled, leading to the migration of contaminants to previously uncontaminated areas. In addition, airborne chemical compounds released from construction or demolition areas, such as dust containing hazardous substances, could pose inhalation risks to workers, nearby residents, and the environment. Transportation of contaminated slurry or soils off-site for disposal could also result in accidental releases, such as spills or leaks, if proper containment measures are not implemented. Therefore, construction impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be potentially significant.

Alternative 3 would be required to implement MM HAZ-1 through MM HAZ-5, which would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as training in procedures and plans for safely handling hazardous materials. Implementation of MM HAZ-1 through MM HAZ-5 would minimize potential exposure of construction workers and the public to hazardous conditions through the disturbance or improper handling, transporting, and/or disposal of hazardous building materials such as ACM, LBP, or PCBs during demolition activities. Regulations stipulated by PM HAZ-3 would ensure that the city's methane mitigation measures to reduce the potential exposure of construction workers and the public to methane gas and/or hydrogen sulfide would be implemented. Therefore, implementation of MM HAZ-1 through MM HAZ-5, and adherence to PM HAZ-3, applicable local, state, and federal regulations would reduce impacts related to the upset and accidental release of hazardous materials to a less than significant level.

7.3.2.3 Maintenance and Storage Facilities

MSF Base Design

Operation of MSF Design Option would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal and state regulatory requirements as mandated by PM HAZ-1, that are intended to prevent or manage hazards, and if a spill does occur, it would be remediated accordingly.

Construction activities for the MSF Design Option, such as grading and excavation, could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. Exposure to unanticipated hazardous substances could occur from previously unidentified soil contamination caused by the contaminants originating at nearby listed sites (e.g., roadways and industrial uses). Or from construction-related soil contamination caused by spillage and/or mixing of construction trash and debris into the soil. EDR searched various regulatory databases identified several sites in the surrounding area as being contaminated or having the potential to become contaminated from the release of hazardous substances. A summary of these sites identified by EDR are presented in Table 7-5 and detailed in Attachment 1A. Exposure to hazardous materials during construction activities could occur as a result of any of the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

If any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons.

Construction would require demolition of existing structures. Demolition of structures could potentially expose construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials (such as ACM, LBP, or PCBs). Both the federal OSHA and Cal/OSHA regulate worker exposure during construction activities that disturb LBP. Any ACMs, if present, would need appropriate abatement of identified asbestos before demolition begins, pursuant to the SCAQMD Rule 1403 and PM HAZ-4.

Additional effects could include the potential exposure of construction workers and/or the public to chemical compounds in soils, soil gases, and groundwater; potential localized spread of contamination; potential exposure of workers, the public, and the environment to airborne chemical compounds migrating from the construction or demolition areas; and potential accidents during transportation of contaminated slurry, soils, or groundwater. Therefore, construction impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be potentially significant.

The MSF Design Option would be required to implement MM HAZ-1 through MM HAZ-4, which would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling hazardous materials. Implementation of MM HAZ-1 through MM HAZ-4 would minimize potential exposure of construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials. Therefore, implementation of MM HAZ-1 through MM HAZ-4, and adherence to applicable local, state, and federal regulations would reduce impacts related to the upset and accidental release of hazardous materials to a less than significant level.

MSF Design Option 1

Operation of MSF Design Option 1 would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in

accordance with all federal and state regulatory requirements as mandated by PM HAZ-1, that are intended to prevent or manage hazards, and if a spill does occur, it would be remediated accordingly.

Construction activities for the MSF Design Option 1, such as grading and excavation, could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. Exposure to unanticipated hazardous substances could occur from previously unidentified soil contamination caused by the contaminants originating at nearby listed sites (e.g., roadways and industrial uses). Or from construction-related soil contamination caused by spillage and/or mixing of construction trash and debris into the soil. EDR searched various regulatory databases identified several sites in the surrounding area as being contaminated or having the potential to become contaminated from the release of hazardous substances. A summary of these sites identified by EDR are presented in Table 7-5 and detailed in Attachment 1A. Exposure to hazardous materials during construction activities could occur as a result of any of the following:

- Direct dermal contact with hazardous materials;
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking); and
- Inhalation of airborne dust released from dried hazardous materials.

If any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons. The risks are particularly heightened during tunneling activities, which would involve deeper excavation and may encounter legacy contamination or naturally occurring hazardous materials that are less likely to be present near the surface.

Construction would require demolition of existing structures. Demolition of structures could potentially expose construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials (such as ACM, LBP, or PCBs). Both the federal OSHA and Cal/OSHA regulate worker exposure during construction activities that disturb LBP. Any ACMs, if present, would need appropriate abatement of the identified asbestos before demolition begins pursuant to the SCAQMD Rule 1403 and PM HAZ-4.

Additional effects could include the potential exposure of construction workers and/or the public to chemical compounds in soils, soil gases, and groundwater; potential localized spread of contamination; potential exposure of workers, the public, and the environment to airborne chemical compounds migrating from the construction or demolition areas; and potential accidents during transportation of contaminated slurry or soils or groundwater. Therefore, construction impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be potentially significant.

The MSF Design Option 1 would be required to implement MM HAZ-1 through MM HAZ-4, which would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling hazardous materials. Implementation of MM HAZ-1 through MM HAZ-4 would minimize potential exposure of construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials. Therefore, implementation of MM HAZ-1 through MM HAZ-4, and adherence to applicable local, state, and federal regulations would reduce impacts related to the upset and accidental release of hazardous materials to a less than significant level.

7.3.3 Impact HAZ-3: 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?

7.3.3.1 Operational Impacts

As discussed in Section 7.3.1, operation of the underground stations and guideway would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials within 0.25 mile of schools (refer to Section 7.2.9). None of these substances would be acutely hazardous.

As mandated by PM HAZ-1, cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage, and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions. Therefore, impacts associated with handling hazardous materials within 0.25 mile of an existing school under Alternative 3 would be less than significant.

7.3.3.2 Construction Impacts

Construction of Alternative 3 would involve handling of hazardous materials and diesel-powered equipment within 0.25 mile of schools (refer to Section 7.2.9). Such activities, if not appropriately managed, could result in hazardous emissions that would potentially affect nearby schools.

As described throughout Section 3, there is an established, comprehensive federal, state, regional, and local framework independent of the CEQA process that is intended to reduce the risks associated with handling of hazardous materials, including transport, use, storage, and disposal. The use and disposal of hazardous materials is heavily regulated at both the federal and state level; these regulations are promulgated and enforced by agencies such as the EPA, the SWRCB and DTSC, Cal/OSHA, and the SCAQMD. By implementing the SWPPP and associated BMPs, as mandated by the SWRCB Construction General Permit and described in PM HAZ-2, construction-related hazardous substances, such as oil and greases, would be managed through appropriate material handling and BMP. In addition, transportation of hazardous materials would comply with state regulations governing hazardous materials transport included in the California Vehicle Code (Title 13 of the CCR, the State Fire Marshal Regulations (Title 19 of the CCR), and Title 22 of the CCR. Cooperation with the corridor cities would occur throughout the construction process. Restrictions on haul routes would be incorporated into the construction specifications according to local permitting requirements as set forth in PM HAZ-2.

Adherence to federal and state regulations reduces the risk of exposure to hazardous materials used during construction. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a faster, more coordinated response to emergencies. By adhering to existing regulations, construction of Alternative 3 would have less than significant impacts associated with the transportation, use, storage, and handling of acutely hazardous materials within 0.25 mile of an existing school.

7.3.3.3 Maintenance and Storage Facilities

MSF Base Design

The MSF Base Design is not located within 0.25 mile of a school. Therefore, the MSF Base Design would have no impact related to emissions of hazardous materials within 0.25 mile of a school.

MSF Design Option 1

The MSF Design Option 1 is not located within 0.25 mile of a school. Therefore, the MSF Design Option 1 would have no impact related to emissions of hazardous materials within 0.25 mile of a school.

7.3.4 Impact HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

7.3.4.1 Operational Impacts

Alternative 3 includes 48 LUST sites that are identified on the Cortese List. These sites are identified in Table B-2 and on Figure 7-10 and Figure 7-11. All 48 LUST sites have a case closed status. The status of the LUST cases reported as "case closed" indicates that remedial action is completed, or was deemed unnecessary, by the local regulatory agency. Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the proposed Project site. In addition, during operations, no ground-disturbing activities would occur at the Cortese-listed hazardous materials sites such that hazardous releases of contaminated soils could create a significant hazard to the public or the environment. Alternative 3 is located on a site that is included on one or more hazardous materials lists compiled in accordance with Government Code Section 65962.5. With adherence to existing regulations, operation of the Alternative 3 would not create or result in a significant hazard to people or the environment, and Alternative 3 during operation would result in a less than significant impact.

7.3.4.2 Construction Impacts

Alternative 3 includes 48 LUST sites that are identified on the Cortese List as having confirmed releases of hazardous materials, including petroleum hydrocarbons, VOCs, and metals to soil and groundwater. These sites are identified in Table B-2 and on Figure 7-10 and Figure 7-11. The LUST sites have been remediated and are classified as "Closed" by the regulatory agency, which signifies that they have been remediated to the satisfaction of the agency with oversight. Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the project site. Alternative 3 is located on a site that is included on one or more hazardous materials lists compiled in accordance with Government Code Section 65962.5. With adherence to existing regulations, Alternative 3 would not create or result in a significant hazard to people or the environment, and the Alternative 3 would result in a less than significant impact.

7.3.4.3 Maintenance and Storage Facilities

MSF Base Design

The hazardous site conditions for the MSF Base Design related to Government Code Section 65962.5, commonly known as the Cortese List, are associated with contaminated soils, and these sites are listed as "Closed," which signifies that they have been remediated to the satisfaction of the agency with oversight (refer to Section 7.3.4.2). Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the project site. With adherence to existing regulations, MSF Base Design would not create or result in a significant hazard to people or the environment, and the MSF Base Design would result in a less than significant impact.

MSF Design Option 1

The hazardous site conditions for the MSF Design Option 1 related to Government Code Section 65962.5, commonly known as the Cortese list, are associated with contaminated soils, and these sites

are listed as "Closed," which signifies that they have been remediated to the satisfaction of the agency with oversight (refer to Section 7.3.4.2). Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the project site. With adherence to existing regulations, MSF Design Option 1 would not create or result in a significant hazard to people or the environment, and the MSF Design Option 1 would result in a less than significant impact.

7.3.5 Impact HAZ-5: 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?

7.3.5.1 Operational Impacts

Alternative 3 would be 0.9 mile and 1.2 miles from the Van Nuys Airport and Santa Monica Municipal Airport, respectively. The *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport implements relevant policies and guidelines for land-use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA, airport safety zones, and noise impact zones. These plans also address airport land-use compatibility concerns regarding exposure to aircraft noise, land use safety with respect both to people and property on the ground and the occupants of the aircraft, protection of airport airspace, and general concerns related to aircraft overflights. According to the *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport, Alternative 3 is located outside the AIA for both airports (Figure 7-14). Alternative 3 is not located within the safety zone or the noise impact zone for the airports. (DCP, 2006; LA County Planning, 1991; ALUC, 2003a, 2003b, 2023).

Alternative 3 would not interfere with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval. The Alternative 3 is not within the AIA, Safety Zones, and Noise Impact Zones. Adherence to existing local, state, and federal regulations would ensure that during operation of the Alternative 3, impacts associated with potential aviation hazards would be less than significant.

7.3.5.2 Construction Impacts

Alternative 3 is 0.9 mile from the Van Nuys Airport and 1.2 miles from the Santa Monica Municipal Airport. The *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport implements relevant policies and guidelines for land-use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA, airport safety zones, and noise impact zones. These plans also address airport land-use compatibility concerns regarding exposure to aircraft noise, land use safety with respect both to people and property on the ground and the occupants of the aircraft, protection of airport airspace, and general concerns related to aircraft overflights. According to the *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport, Alternative 3 is located outside the AIA for both airports (Figure 7-14) Alternative 3 is not located within the safety zone or the noise impact zone for the airports. (DCP, 2006; LA County Planning, 1991; ALUC, 2003a, 2003b, 2023).

Alternative 3 would not interfere with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval. The Alternative 3 is not within the AIA, Safety Zones, and Noise Impact Zones. Adherence to existing local, state, and federal regulations would ensure that during construction of the Alternative 3, impacts associated with potential aviation hazards would be less than significant.

7.3.5.3 Maintenance and Storage Facilities

MSF Base Design

The MSF Base Design is approximately 2.6 miles from the Van Nuys Airport and is not located within a outside the airport's AIA. The MSF Base Design is not located within the AIA, Safety Zones, and Noise Impact Zones. With adherence to existing federal, state and local regulations, the MSF Base Design would not result in a safety hazard or excessive noise related airports during operation and the impact would be less than significant.

MSF Design Option 1

MSF Design Option 1 is 0.9 mile from the Van Nuys Airport. The *Van Nuys Airport Plan* for the Van Nuys Airport implements relevant policies and guidelines for land-use within the AIA, airport safety zones, and noise impact zones. These plans also address airport land-use compatibility concerns regarding exposure to aircraft noise, land use safety with respect both to people and property on the ground and the occupants of the aircraft, protection of airport airspace, and general concerns related to aircraft overflights. According to the *Van Nuys Airport Plan* for the Van Nuys Airport, MSF Design Option 1 is located outside the AIA. MSF Design Option 1 would not interfere with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval. With adherence to existing federal, state and local regulations, the MSF Design Option 1 would not result in a safety hazard or excessive noise related airports during operation and the impact would be less than significant.

7.4 Project Measures and Mitigation Measures

7.4.1 Operational Impacts

7.4.1.1 Project Measures

The following PMs are design features, BMPs, or other measures required by law and/or permit approvals. These measures are components of the Project and are applicable to Alternative 3.

PM HAZ-1: *Operational (post Project) BMPs shall be implemented by the Project and include but not be limited to:*

- *Cleaning and maintenance products shall be required to be labeled with appropriate cautions and instructions for handling, storage, and disposal. Staff shall be trained and required to use, store, and dispose of these materials properly in accordance with label directions.*
- *If the quantity of hazardous materials used, handled, or stored on-site at the maintenance and storage facility exceeds the regulatory thresholds of 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance per Chapter 6.95 of the California Health and Safety Code, the Project shall prepare a Hazardous Materials Business Plan in accordance with all related requirements of the California Health and Safety Code (Chapter 6.95, Articles 1 and 2). The plan shall be reviewed and recertified every year and amended as required by the California Health and Safety Code (Chapter 6.95, Articles 1 and 2).*

- *Storage and disposal of hazardous materials and waste shall be conducted in accordance with all applicable federal and state regulatory requirements, such as the Resource Conservation and Recovery Act; the Comprehensive Environmental Response, Compensation, and Liability Act; the Hazardous Materials Release Response Plans and Inventory Law; and the Hazardous Waste Control Act, and if a spill does occur, it shall be remediated in accordance with all applicable federal and state regulatory requirements and in coordination with the Department of Toxic Substances Control and/or Los Angeles Regional Water Quality Control Board.*
- *Compliance with applicable Los Angeles County and City of Los Angeles requirements pertaining to emergency vehicle access as well as the California Building Code and California Fire Code standards shall ensure that sufficient ingress and egress routes are maintained and provided to the new stations.*

7.4.1.2 Mitigation Measures

No mitigation measures are required.

7.4.2 Construction Impacts

7.4.2.1 Project Measures

The following PMs are design features, BMPs, or other measures required by law and/or permit approvals. These measures are components of the Project and are applicable to Alternative 3.

PM HAZ-2: *Construction BMPs shall include but not be limited to:*

- *The Project shall be required to obtain permits before construction begins and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases in accordance with the U.S. Environmental Protection Agency, State Water Resources Control Board, Department of Toxic Substances Control, California Division of Occupational Safety and Health, and the South Coast Air Quality Management District.*
- *The Project shall develop a Stormwater Pollution Prevention Plan in accordance with the State Water Resources Control Board's Construction Clean Water Act Section 402 General Permit conditions, and subject to regular inspections by applicable jurisdiction(s) to ensure compliance. The Stormwater Pollution Prevention Plan shall include specifications for, but not be limited to, the following:*
  - *Maintain proper working conditions for vehicles and equipment to minimize potential fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials.*
  - *Conduct servicing, refueling, and staging of construction equipment only at designated areas where a spill would not flow to drainages. Conduct equipment washing, if needed, only in designated locations where water would not flow into drainage channels.*

  - *Implement drainage best management practices to protect water quality (such as oil/water separators, catch basin inserts, storm drain inserts, media filtration, and catch basin screens).*
  - *Report hazardous spills to the designated Certified Unified Program Agency (i.e., Los Angeles County Fire Department Health Hazardous Materials Division or Santa Fe Springs Department of Fire and Rescue) and implement clean up immediately and proper disposal of contaminated soil at a licensed facility.*
  - *Establish properly designed, centralized storage areas to keep hazardous materials fully contained.*
  - *Keep spill cleanup materials (e.g., rags, absorbent materials, and secondary containment) properly stored and maintained at the work site when handling materials.*
  - *Implement monitoring program by the construction site supervisor that includes both dry and wet weather inspections.*

- *Transportation of hazardous materials by the Project shall comply with state regulations governing hazardous materials transport included in the California Vehicle Code (Title 13 of the California Code of Regulations), the State Fire Marshal Regulations (Title 19 of the California Code of Regulations), and Title 22 of the California Code of Regulations. These regulations include the following:*
  - *Require all motor carrier transporters of hazardous materials to have a Hazardous Materials Transportation license issued by the California Highway Patrol.*
  - *Require the transport of hazardous materials via routes with the least overall travel time.*
  - *Prohibit the transport of hazardous materials through residential neighborhoods.*
  - *Require transporters to take immediate action to protect human health and the environment in the event of spill, release, or mishap.*
  - *Incorporate restrictions on haul routes into the construction specifications according to local permitting requirements.*
- *Contaminated soils and hazardous building materials and wastes shall be disposed of in accordance with federal, state, and local requirements at landfills serving Los Angeles County. The removal and disposal of hazardous building materials shall be the responsibility of a California Division of Occupational Safety and Health-certified contractor in accordance with South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities).*
- *Traffic control during construction shall follow local jurisdiction guidelines. For specialized construction tasks, it may be necessary to work during nighttime hours to minimize traffic disruptions.*

PM HAZ-3: *Construction best management practices for activities within methane hazard zones, including tunneling operations and underground station construction shall include, but not be limited to, the following:*

- *Pursuant to Section 91.7104.1 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619), site testing of subsurface geological formations shall be conducted by a Project-approved testing agency under the supervision of a licensed architect or registered engineer or geologist. Testing shall address, but necessarily be limited to, methane concentrations and surface conditions along tunneling routes and at underground stations locations. The licensed architect or registered engineer or geologist shall indicate the testing instruments used and testing procedure followed. The testing procedure shall meet the Methane Mitigation Standards established by the Superintendent of Building.*
- *All paving work, building construction, tunneling and underground station construction within the methane zone or methane buffer zone as defined by Los Angeles Department of Building and Safety shall be required to comply with Methane Mitigation Standards established by the Superintendent of Building as well as the requirements outlined in Sections 91.7103 and 91.7104 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619).*
- *All building and underground structures, including tunneling and stations, located in the Methane Zone shall provide a methane mitigation system as required by Los Angeles Municipal Code Table 71 in Section 91.7104.2 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619) based on the appropriate Site Design Level. The Superintendent of Building may approve an equivalent methane mitigation system designed by an architect, engineer, or geologist.*

PM HAZ-4: *Construction best management practices for demolition of existing structures shall include, but shall not be limited to, the following:*

- *Both the federal Occupational Safety and Health Administration and California Division of Occupational Safety and Health regulate worker exposure during construction activities that disturb lead-based paint. Any asbestos-containing materials, if present, shall require appropriate abatement of identified asbestos prior to demolition pursuant to South Coast Air Quality Management District Rule 1403.*
- *Polychlorinated biphenyls (PCB)-containing fluorescent light fixtures and electrical transformers that are not labeled "No PCBs" shall be assumed to contain polychlorinated biphenyls and shall be removed prior to demolition activities and shall be disposed of by a licensed and certified polychlorinated biphenyls removal contractor, in accordance with local, state, and federal regulations. The removal and disposal of the electrical transformers shall be the responsibility of the utility owner in accordance with all standards and practices.*

PM HAZ-5: *Construction best management practices for the areas with known or previously undiscovered hazardous materials shall include, but not be limited to, the following:*

- *The Project shall hire a qualified professional to sample soil suspected of contamination (obvious signs of contamination include indicators such as odors, stains, or other suspect materials) for the purpose of classifying material and determining disposal requirements before construction begins. If excavated soil is suspected or known to be contaminated, the Project shall:*
  - *Segregate and stockpile the excavated material in a way that shall facilitate measurement of the stockpile volume.*
  - *Spray the stockpile with water or a South Coast Air Quality Management District-approved vapor suppressant and cover the stockpile with a heavy-duty plastic (i.e., Visqueen) to prevent soil volatilization in the atmosphere or exposure to nearby workers per South Coast Air Quality Management District Rule 1166.*
- *Existing groundwater monitoring wells shall remain under ongoing groundwater investigations associated with off-site sources.*

7.4.2.2 Mitigation Measures

MM HAZ-1: ***Phase II Environmental Site Assessment.*** *Prior to the issuance of a grading permit and before any substantial ground disturbance occurs on or near the properties with documented releases, the Project shall hire a qualified environmental professional to conduct a Phase II Environmental Site Assessment (ESA) to determine the potential presence of petroleum hydrocarbons, metals, and volatile organic compounds in soil and/or groundwater.*

- *If the Phase I ESA identifies any recognized environmental conditions or other indicators of potential contamination, a Phase II ESA shall be conducted. The Phase II Environmental Site Assessment shall include sufficient soil and groundwater sampling and laboratory analysis to identify the types of chemicals and their respective concentrations. The Phase II Environmental Site Assessment shall compare soil and groundwater sampling results against applicable environmental screening levels developed by the Los Angeles Regional Water Quality Control Board and/or Department of Toxic Substances Control. If the Phase II Environmental Site Assessment identifies contaminant concentrations above the screening levels, a site-specific Soil and Groundwater Management Plan shall be prepared and implemented as described in MM HAZ-2. The Project shall consult with the Department of Toxic Substances Control, California Environmental Protection Agency, and/or other appropriate regulatory agencies to ensure sufficient minimization of risk to human health and the environment is completed.*

MM HAZ-2: ***Soil and Groundwater Management Plan.*** *Prior to the issuance of a grading permit, a site-specific Soil and Groundwater Management Plan shall be prepared by a qualified professional environmental contractor to address handling and disposal of contaminated soil and groundwater prior to demolition, excavation, and construction activities.*

- *The Project shall implement the Soil and Groundwater Management Plan during construction activities. The Soil and Groundwater Management Plan shall specify all necessary procedures to ensure the safe handling and disposing of excavated soil, groundwater, and/or dewatering effluent in a manner that is protective of human health and in accordance with federal and state hazardous waste disposal laws, and with state and local stormwater and sanitary sewer requirements. At a minimum, the plan shall include the following:*
  - *Identification and delineation of contaminated areas and procedures for limiting access to such areas to properly trained personnel.*
  - *Step-by-step procedures for handling, excavating, characterizing, and managing excavated soils and dewatering effluent, including procedures for containing, handling, and disposing of hazardous waste; procedures for containing, handling, and disposing of groundwater generated from construction dewatering; the method used to analyze excavated materials and groundwater for hazardous materials likely to be encountered at specific locations; appropriate treatment and/or disposal methods. Removal of soil and materials shall be performed by a licensed engineering contractor with a Class A license and hazardous-substance removal certification.*
  - *Requirements to water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, and staging.*
  - *Requirements to cover or maintain at least 2 feet of free board space on haul trucks transporting soil or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.*
  - *Requirements to use wet power vacuum street sweepers to remove any visible track out mud or dirt onto adjacent public roads at least once a day. Use of dry powered sweeping is prohibited.*
  - *Procedures for handling volatile organic compound-contaminated soil, including, but not limited to, segregating volatile organic compound-contaminated stockpiles from non-volatile organic compound-contaminated stockpiles, spraying volatile organic compound-contaminated soil stockpiles with water and/or approved vapor suppressant and covering them with plastic sheeting for all periods of inactivity lasting more than 1 hour, conducting a daily visual inspection of all covered volatile organic compound-contaminated soil stockpiles to ensure the integrity of the plastic covered surfaces, and removing contaminated soil from an excavation or grading site within 30 days from the time of excavation to a licensed facility.*
  - *Procedures for notification and reporting, including notifying and reporting to internal management and to local agencies.*

- *Minimum requirements for site-specific Health and Safety Plans to protect the general public and workers in the construction area. Prior to the issuance of grading permits, the Soil and Groundwater Management Plan and the results of environmental sampling shall be provided to contractors who shall be responsible for developing their own construction worker Health and Safety Plan and training requirements, per MM HAZ-4.*
- *The Project shall hire a qualified environmental professional to sample groundwater suspected of contamination. If any suspected groundwater contamination is encountered during construction, the contractor shall stop work in the vicinity, cordon off the area, and contact Los Angeles County Metropolitan Transportation Authority who shall immediately notify the Regional Water Quality Control Board. In coordination with the Regional Water Quality Control Board, an investigation and remediation plan shall be developed by a qualified environmental professional in order to protect public health and the environment. Any hazardous or toxic materials shall be disposed of according to local, state, and federal regulations.*
- *Trucking operations shall comply with Caltrans and any other applicable regulations, and all trucks shall be licensed and permitted to carry the appropriate waste classification. The tracking of dirt by trucks leaving the project site shall be minimized by cleaning the wheels upon exit and cleaning the loading zone and exit area as needed.*

MM HAZ-3: ***Contractor Specifications.*** *The Project shall include in its contractor specifications the following requirement relating to hazardous materials:*

- *During all ground-disturbing activities, the contractor(s) shall inspect the exposed soil and groundwater for obvious signs of contamination, such as odors, stains, or other suspect materials. Qualified personnel shall monitor for volatile organic compounds and other subsurface gases for concentrations exceeding South Coast Air Quality Management District levels with a Photoionization Detector. Should signs of unanticipated contamination be encountered, work shall be suspended, and the Los Angeles County Department of Public Health shall be notified, and the area secured. Contaminated soil and/or groundwater shall be segregated and characterized, and a site-specific Soil and Groundwater Management Plan, as described under MM HAZ-2, shall be prepared and implemented.*

MM HAZ-4: ***Worker Health and Safety Plan.*** *The contractor shall prepare site-specific Worker Health and Safety Plan to protect the general public and workers in the construction area. The Health and Safety Plan shall be prepared in accordance with California and federal Occupational Safety and Health Administration regulations. Copies of the Health and Safety Plan shall be made available to construction workers for review during their orientation and/or regular health and safety meetings. The Health and Safety Plan shall identify chemicals of concern, potential hazards, worker training requirements, personal protective equipment and devices, decontamination procedures, the need for personal or area monitoring, and emergency response procedures. The Health and Safety Plan shall be amended, as necessary, if new information becomes available that could affect implementation of the plan.*

MM HAZ-5: ***Hazardous Building Survey and Abatement.*** *Prior to demolition activities of any structures, the Project shall retain a California Division of Occupational Safety and Health-certified contractor to determine the presence or absence of building materials or equipment that contains hazardous materials, including asbestos, lead-based paint, and polychlorinated biphenyls-containing equipment. If such substances are found to be present, the contractor shall prepare and submit a workplan to the relevant oversight agency to demonstrate how these hazardous materials would be properly removed and disposed of in accordance with federal and state law, including South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities). The removal and disposal of hazardous building materials shall be the responsibility of a California Division of Occupational Safety and Health-certified contractor. Following completion of removal activities, the Project shall submit documentation to the relevant oversight agency verifying that all hazardous materials were properly removed and disposed of.*

7.4.3 Impacts After Mitigation

Implementation of MM HAZ-1 through MM HAZ-5 would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling hazardous materials, and would minimize potential exposure of construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous soil, groundwater and/or building materials such as ACM, LBP, or PCBs during demolition activities; thus, impacts would be reduced to less than significant.

8 ALTERNATIVE 4

8.1 Alternative Description

Alternative 4 is a heavy rail transit (HRT) system with a hybrid underground and aerial guideway track configuration that would include four underground stations and four aerial stations. This alternative would provide transfers to five high-frequency fixed guideway transit and commuter rail lines, including the Los Angeles County Metropolitan Transportation Authority's (Metro) E, Metro D, and Metro G Lines, the East San Fernando Valley Light Rail Transit Line, and the Metrolink Ventura County Line. The length of the alignment between the terminus stations would be approximately 13.9 miles, with 5.7 miles of aerial guideway and 8.2 miles of underground configuration.

The four underground and four aerial HRT stations would be as follows:

1. Metro E Line Expo/Sepulveda Station (underground)
2. Santa Monica Boulevard Station (underground)
3. Wilshire Boulevard/Metro D Line Station (underground)
4. UCLA Gateway Plaza Station (underground)
5. Ventura Boulevard/Sepulveda Boulevard Station (aerial)
6. Metro G Line Sepulveda Station (aerial)
7. Sherman Way Station (aerial)
8. Van Nuys Metrolink Station (aerial)

8.1.1 Operating Characteristics

8.1.1.1 Alignment

As shown on Figure 8-1, from its southern terminus station at the Metro E Line Expo/Sepulveda Station, the alignment of Alternative 4 would run underground, north through the Westside of Los Angeles (Westside) and the Santa Monica Mountains to a tunnel portal south of Ventura Boulevard in the San Fernando Valley (Valley). At the tunnel portal, the alignment would transition to an aerial guideway that would generally run above Sepulveda Boulevard before curving eastward along the south side of the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor to the northern terminus station adjacent to the Van Nuys Metrolink/Amtrak Station.

The proposed southern terminus station would be located underground east of Sepulveda Boulevard between the existing elevated Metro E Line tracks and Pico Boulevard. Tail tracks for vehicle storage would extend underground, south of National Boulevard, east of Sepulveda Boulevard. The alignment would continue north beneath Bentley Avenue before curving northwest to an underground station at the southeast corner of Santa Monica Boulevard and Sepulveda Boulevard. From the Santa Monica Boulevard Station, the alignment would continue and curve eastward toward the Wilshire Boulevard/Metro D Line Station beneath the Metro D Line Westwood/UCLA Station, which is currently under construction as part of the Metro D Line Extension Project. From there, the underground alignment would curve slightly to the northeast and continue beneath Westwood Boulevard before reaching the UCLA Gateway Plaza Station.

Figure 8-1. Alternative 4: Alignment



Source: STCP, 2024; HTA, 2024

From the UCLA Gateway Plaza Station, the alignment would turn to the northwest beneath the Santa Monica Mountains to the east of Interstate 405 (I-405). South of Mulholland Drive, the alignment would curve to the north to reach a tunnel portal at Del Gado Drive, just east of I-405 and south of Sepulveda Boulevard.

The alignment would transition from an underground configuration to an aerial guideway structure after exiting the tunnel portal and would continue northeast to the Ventura Boulevard/Sepulveda Boulevard

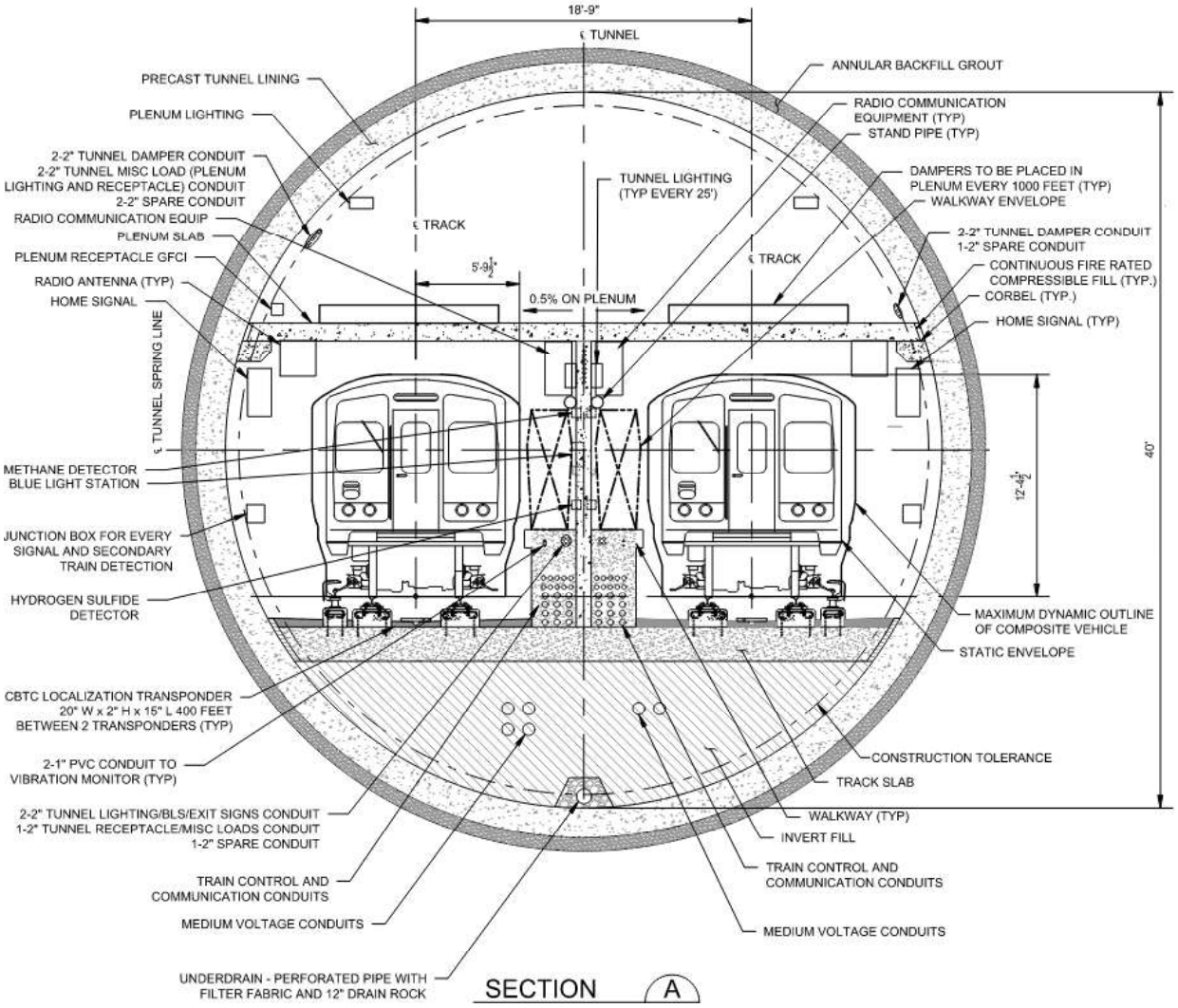
Station located over Dickens Street, immediately west of the Sepulveda Boulevard and Dickens Street intersection. North of the station, the aerial guideway would transition to the center median of Sepulveda Boulevard. The aerial guideway would continue north on Sepulveda Boulevard and cross over U.S. Highway 101 (US-101) and the Los Angeles River before continuing to the Metro G Line Sepulveda Station, immediately south of the Metro G Line Busway. Overhead utilities along Sepulveda Boulevard in the Valley would be undergrounded where they would conflict with the guideway or its supporting columns.

The aerial guideway would continue north above Sepulveda Boulevard where it would reach the Sherman Way Station just south of Sherman Way. After leaving the Sherman Way Station, the alignment would continue north before curving to the southeast to parallel the LOSSAN rail corridor on the south side of the existing tracks. Parallel to the LOSSAN rail corridor, the guideway would conflict with the existing Willis Avenue Pedestrian Bridge, which would be demolished. The alignment would follow the LOSSAN rail corridor before reaching the proposed northern terminus Van Nuys Metrolink Station located adjacent to the existing Metrolink/Amtrak Station. Tail tracks and yard lead tracks would descend to a proposed at-grade maintenance and storage facility (MSF) east of the northern terminus station. Modifications to the existing pedestrian underpass to the Metrolink platforms to accommodate these tracks would result in reconfiguration of an existing rail spur serving City of Los Angeles Department of Water and Power (LADWP) property.

8.1.1.2 Guideway Characteristics

Alternative 4 would utilize a single-bore tunnel configuration for underground tunnel sections, with an outside diameter of approximately 43.5 feet. The tunnel would include two parallel tracks with 18.75-foot track spacing in tangent sections separated by a continuous central dividing wall throughout the tunnel. Inner walkways would be constructed adjacent to the two tracks. Inner and outer walkways would be constructed within tunnel sections near the track crossovers. At the crown of the tunnel, a dedicated air plenum would be provided by constructing a concrete slab above the railway corridor. The air plenum would allow for ventilation throughout the underground portion of the alignment. Figure 8-2 illustrates these components at a typical cross-section of the underground guideway.

Figure 8-2. Typical Underground Guideway Cross-Section

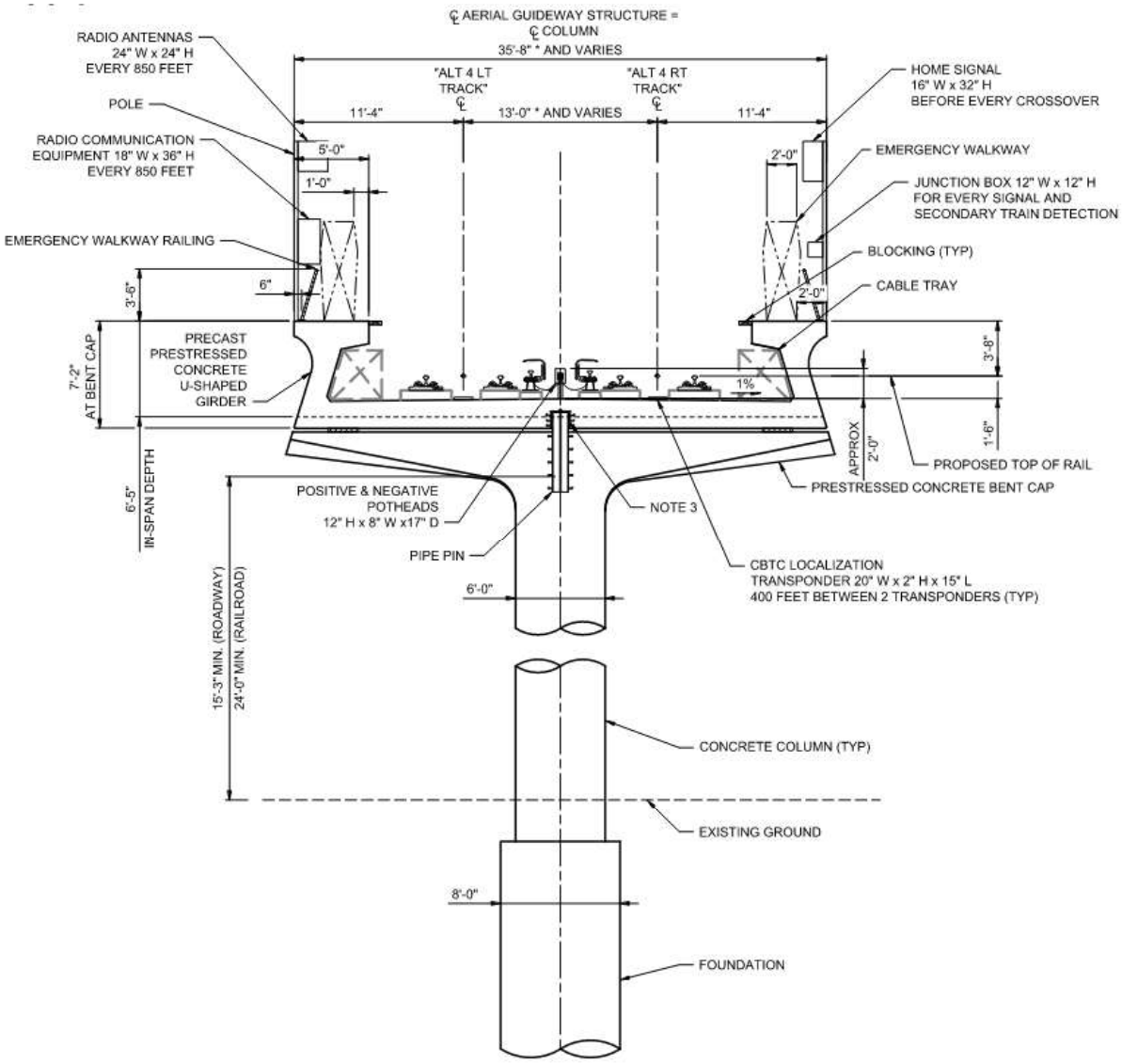


Source: STCP, 2024

In aerial sections, the guideway would be supported by either single columns or straddle-bents. Both types of structures would support a U-shaped concrete girder and the HRT track. The aerial guideway would be approximately 36 feet wide. The track would be constructed on the concrete girders with direct fixation and would maintain a minimum of 13 feet between the centerlines of the two tracks. On the outer side of the tracks, emergency walkways would be constructed with a minimum width of 2 feet.

The single-column pier would be the primary aerial structure throughout the aerial portion of the alignment. Crash protection barriers would be used to protect columns located in the median of Sepulveda Boulevard in the Valley. Figure 8-3 shows a typical cross-section of the single-column aerial guideway.

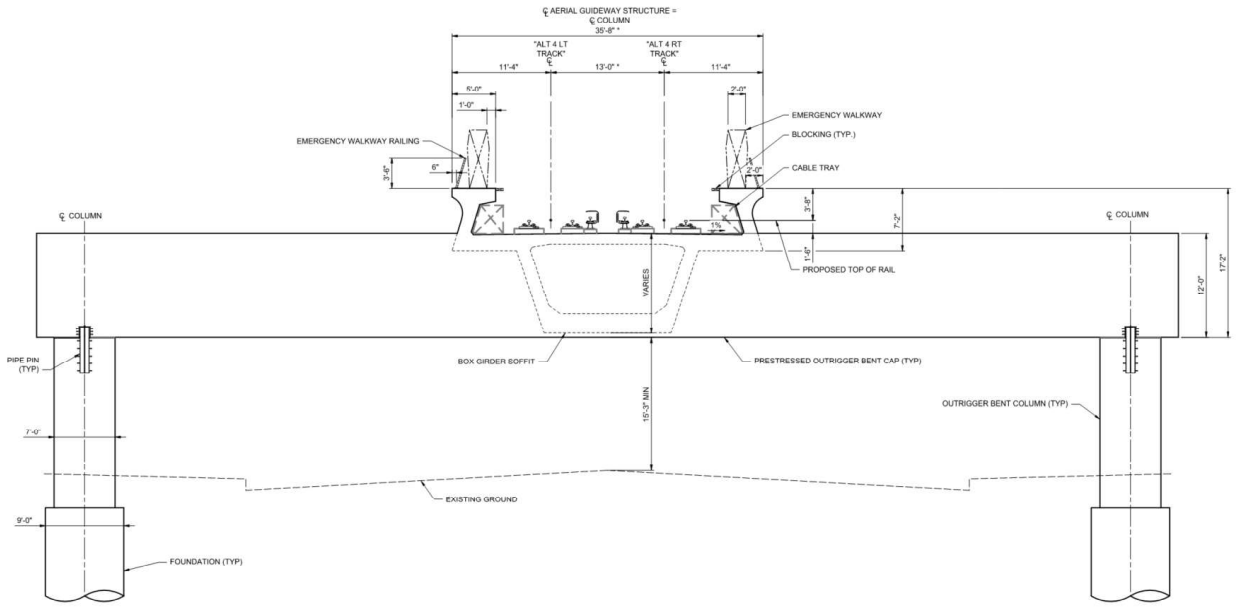
Figure 8-3. Typical Aerial Guideway Cross-Section



Source: STCP, 2024

In order to span intersections and maintain existing turn movements, sections of the aerial guideway would be supported by straddle bents, a concrete straddle-beam placed atop two concrete columns constructed outside of the underlying roadway. Figure 8-4 illustrates a typical straddle-bent configuration.

Figure 8-4. Typical Aerial Straddle-Bent Cross-Section



Source: STCP, 2024

8.1.1.3 Vehicle Technology

Alternative 4 would utilize steel-wheel HRT trains, with automated train operations and planned peak-period headways of 2.5 minutes and off-peak-period headways ranging from 4 to 6 minutes. Each train could consist of three or four cars with open gangways between cars. The HRT vehicle would have a maximum operating speed of 70 miles per hour; actual operating speeds would depend on the design of the guideway and distance between stations. Train cars would be approximately 10 feet wide, with three double doors on each side. Each car would be approximately 72 feet long, with capacity for 170 passengers. Trains would be powered by a third rail.

8.1.1.4 Stations

Alternative 4 would include four underground stations and four aerial stations with station platforms measuring 280 feet long for both station configurations. The aerial stations would be constructed a minimum of 15.25 feet above ground level, supported by rows of dual columns with 8-foot diameters. The southern terminus station would be adjacent to the Metro E Line Expo/Sepulveda Station, and the northern terminus station would be adjacent to the Van Nuys Metrolink/Amtrak Station.

All stations would be side-platform stations where passengers would select and travel to station platforms depending on their direction of travel. All stations would include 20-foot-wide side platforms separated by 30 feet for side-by-side trains. Aerial station platforms would be covered, but not enclosed. Each underground station would include an upper and lower concourse level prior to reaching the train platforms. Each aerial station, except for the Sherman Way Station, would include a mezzanine level prior to reaching the station platforms. At the Sherman Way Station, separate entrances on opposite sides of the street would provide access to either the northbound or southbound platform, with an overhead pedestrian walkway providing additional connectivity across platforms. Each station would have a minimum of two elevators, two escalators, and one stairway from the ground level to the concourse or mezzanine.

Stations would include automatic, bi-parting fixed doors along the edges of station platforms. These platform screen doors would be integrated into the automatic train control system and would not open unless a train is stopped at the platform.

The following information describes each station, with relevant entrance, walkway, and transfer information. Bicycle parking would be provided at each station.

Metro E Line Expo/Sepulveda Station

- This underground station would be located just north of the existing Metro E Line Expo/Sepulveda Station, on the east side of Sepulveda Boulevard.
- A station entrance would be located on the east side of Sepulveda Boulevard, north of the Metro E Line.
- A walkway to transfer to the Metro E Line would be provided at street level within the fare paid zone.
- A 126-space parking lot would be located immediately north of the station entrance, east of Sepulveda Boulevard. Passengers would also be able to park at the existing Metro E Line Expo/Sepulveda Station parking facility, which provides 260 parking spaces.

Santa Monica Boulevard Station

- This underground station would be located under the southeast corner of Santa Monica Boulevard and Sepulveda Boulevard.
- The station entrance would be located on the south side of Santa Monica Boulevard, between Sepulveda Boulevard and Bentley Avenue.
- No dedicated station parking would be provided at this station.

Wilshire Boulevard/Metro D Line Station

- This underground station would be located beneath the Metro D Line tracks and platform under Gayley Avenue, between Wilshire Boulevard and Lindbrook Drive.
- Station entrances would be provided on the northeast corner of Wilshire Boulevard and Gayley Avenue and on the northeast corner of Lindbrook Drive and Gayley Avenue. Passengers would also be able to use the Metro D Line Westwood/UCLA Station entrances to access the station platform.
- A direct internal station transfer to the Metro D Line would be provided at the south end of the station.
- No dedicated station parking would be provided at this station.

UCLA Gateway Plaza Station

- This underground station would be located underneath Gateway Plaza on the University of California, Los Angeles (UCLA) campus.
- Station entrances would be provided on the north side of Gateway Plaza and on the east side of Westwood Boulevard, across from Strathmore Place.
- No dedicated station parking would be provided at this station.

Ventura Boulevard/Sepulveda Boulevard Station

- This aerial station would be located west of Sepulveda Boulevard, spanning over Dickens Street.

- A station entrance would be provided on the west side of Sepulveda Boulevard, south of Dickens Street.
- A 52-space parking lot would be located adjacent to the station entrance on the southwest corner of the Sepulveda Boulevard and Dickens Street intersection, and an additional 40-space parking lot would be located on the northwest corner of the same intersection.

Metro G Line Sepulveda Station

- This aerial station would be located over Sepulveda Boulevard, immediately south of the Metro G Line Busway.
- A station entrance would be provided on the west side of Sepulveda Boulevard, south of the Metro G Line Busway.
- An elevated pedestrian walkway would connect the platform level of the proposed station to the planned aerial Metro G Line Busway platforms within the fare paid zone.
- Passengers would be able to park at the existing Metro G Line Sepulveda Station parking facility, which has a capacity of 1,205 parking spaces. Currently, only 260 parking spaces are used for transit parking. No additional automobile parking would be provided at the proposed station.

Sherman Way Station

- This aerial station would be located over Sepulveda Boulevard, between Sherman Way and Gault Street.
- Station entrances would be provided on either side of Sepulveda Boulevard, south of Sherman Way.
- A 46-space parking lot would be located on the northwest corner of the Sepulveda Boulevard and Gault Street intersection, and an additional 76-space parking lot would be located west of the station along Sherman Way.

Van Nuys Metrolink Station

- This aerial station would span Van Nuys Boulevard, just south of the LOSSAN rail corridor.
- The primary station entrance would be located on the east side of Van Nuys Boulevard, just south of the LOSSAN rail corridor. A secondary station entrance would be located between Raymer Street and Van Nuys Boulevard.
- An underground pedestrian walkway would connect the station plaza to the existing pedestrian underpass to the Metrolink/Amtrak platform outside the fare paid zone.
- Existing Metrolink Station parking would be reconfigured, maintaining approximately the same number of spaces, but 66 parking spaces would be relocated west of Van Nuys Boulevard. Metrolink parking would not be available to Metro transit riders.

8.1.1.5 Station-to-Station Travel Times

Table 8-1 presents the station-to-station distance and travel times at peak period for Alternative 4. The travel times include both run time and dwell time. Dwell time is 30 seconds for transfer stations and 20 seconds for other stations. Northbound and southbound travel times vary slightly because of grade differentials and operational considerations at end-of-line stations.

Table 8-1. Alternative 4: Station-to-Station Travel Times and Station Dwell Times

From Station	To Station	Distance (miles)	Northbound Station-to-Station Travel Time (seconds)	Southbound Station-to-Station Travel Time (seconds)	Dwell Time (seconds)
Metro E Line Station					*30*
Metro E Line	Santa Monica Boulevard	0.9	89	86	—
Santa Monica Boulevard Station					*20*
Santa Monica Boulevard	Wilshire/Metro D Line	0.9	91	92	—
Wilshire/Metro D Line Station					*30*
Wilshire/Metro D Line	UCLA Gateway Plaza	0.7	75	68	—
UCLA Gateway Plaza Station					*20*
UCLA Gateway Plaza	Ventura Boulevard	6.1	376	366	—
Ventura Boulevard Station					*20*
Ventura Boulevard	Metro G Line	1.9	149	149	—
Metro G Line Station					*30*
Metro G Line	Sherman Way	1.4	110	109	—
Sherman Way Station					*20*
Sherman Way	Van Nuys Metrolink	1.9	182	180	—
Van Nuys Metrolink Station					*30*

Source: STCP, 2024

8.1.1.6 Special Trackwork

Alternative 4 would include 10 double crossovers throughout the alignment, enabling trains to cross over to the parallel track. Each terminus station would include a double crossover immediately north and south of the station. Except for the Santa Monica Boulevard Station, each station would have a double crossover immediately south of the station. The remaining crossovers would be located along the alignment midway between the UCLA Gateway Plaza Station and the Ventura Boulevard Station.

8.1.1.7 Maintenance and Storage Facility

The MSF for Alternative 4 would be located east of the Van Nuys Metrolink Station and would encompass approximately 46 acres. The MSF would be designed to accommodate 184 rail cars and would be bounded by single-family residences to the south, the LOSSAN rail corridor to the north, Woodman Avenue on the east, and Hazeltine Avenue and industrial manufacturing enterprises to the west. Trains would access the site from the fixed guideway's tail tracks at the northwest corner of the site. Trains would then travel southeast to maintenance facilities and storage tracks.

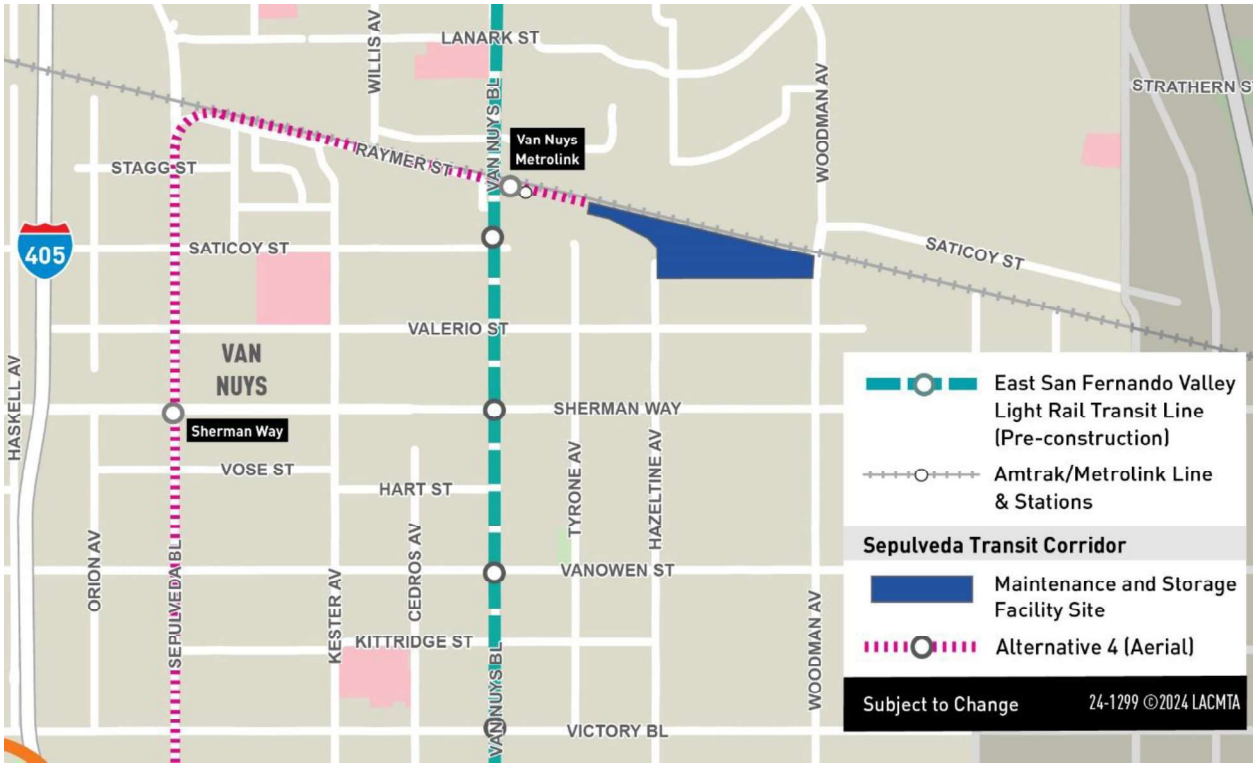
The site would include the following facilities:

- Two entrance gates with guard shacks
- Main shop building
- Maintenance-of-way (MOW) building
- Storage tracks
- Carwash building
- Cleaning and inspections platforms
- Material storage building
- Hazmat storage locker
- Traction power substation (TPSS) located on the west end of the MSF to serve the mainline

- TPSS located on the east end of the MSF to serve the yard and shops
- Parking area for employees
- Grade-separated access roadway (over the HRT tracks at the east end of the facility, and necessary drainage)

Figure 8-5 shows the location of the MSF site for Alternative 4.

Figure 8-5. Alternative 4: Maintenance and Storage Facility Site



Source: STCP, 2024; HTA, 2024

8.1.1.8 Traction Power Substations

TPSSs transform and convert high voltage alternating current supplied from power utility feeders into direct current suitable for transit operation. Twelve TPSS facilities would be located along the alignment and would be spaced approximately 0.5 to 2.5 miles apart. TPSS facilities would generally be located within the stations, adjacent to the tunnel through the Santa Monica Mountains, or within the MSF. TPSSs would be approximately 2,000 to 3,000 square feet. Table 8-2 lists the TPSS locations for Alternative 4.

Figure 8-6 shows the TPSS locations along the Alternative 4 alignment.

Table 8-2. Alternative 4: Traction Power Substation Locations

TPSS No.	Location Description	Configuration
1	TPSS 1 would be located east of Sepulveda Boulevard and north of the Metro E Line.	Underground (within station)
2	TPSS 2 would be located south of Santa Monica Boulevard, between Sepulveda Boulevard and Bentley Avenue.	Underground (within station)
3	TPSS 3 would be located at the southeast corner of UCLA Gateway Plaza.	Underground (within station)
4	TPSS 4 would be located south of Bellagio Road and west of Stone Canyon Road.	Underground (adjacent to tunnel)
5	TPSS 5 would be located west of Roscomare Road, between Donella Circle and Linda Flora Drive.	Underground (adjacent to tunnel)
6	TPSS 6 would be located east of Loom Place, between Longbow Drive and Vista Haven Road.	Underground (adjacent to tunnel)
7	TPSS 7 would be located west of Sepulveda Boulevard, between the I-405 Northbound On-Ramp and Dickens Street.	At-grade (within station)
8	TPSS 8 would be located west of Sepulveda Boulevard, between the Metro G Line Busway and Oxnard Street.	At-grade (within station)
9	TPSS 9 would be located at the southwest corner of Sepulveda Boulevard and Sherman Way.	At-grade (within station)
10	TPSS 10 would be located south of the LOSSAN rail corridor and north of Raymer Street and Kester Avenue.	At-grade
11	TPSS 11 would be located south of the LOSSAN rail corridor and east of the Van Nuys Metrolink Station.	At-grade (within MSF)
12	TPSS 12 would be located south of the LOSSAN rail corridor and east of Hazeltine Avenue.	At-grade (within MSF)

Source: STCP, 2024; HTA, 2024

Figure 8-6. Alternative 4: Traction Power Substation Locations



Source: STCP, 2024; HTA, 2024

8.1.1.9 Roadway Configuration Changes

Table 8-3 lists the roadway changes necessary to accommodate the guideway of Alternative 4. Figure 8-7 shows the location of roadway changes in the Sepulveda Transit Corridor Project (Project) Study Area, and Figure 8-8 shows detail of the street vacation at Del Gado Drive.

In addition to the changes made to accommodate the guideway, as listed in Table 8-3, roadways and sidewalks near stations would be reconstructed, resulting in modifications to curb ramps and driveways.

Table 8-3. Alternative 4: Roadway Changes

Location	From	To	Description of Change
Del Gado Drive	Woodcliff Road	Not Applicable	Vacation of approximately 325 feet of Del Gado Drive east of I-405 to accommodate tunnel portal
Sepulveda Boulevard	Ventura Boulevard	Raymer Street	Construction of raised median and removal of all on-street parking on the southbound side of the street and some on-street parking on the northbound side of the street to accommodate aerial guideway columns
Sepulveda Boulevard	La Maida Street	Not Applicable	Prohibition of left turns to accommodate aerial guideway columns
Sepulveda Boulevard	Valleyheart Drive South, Hesby Street, Hartsook Street, Archwood Street, Hart Street, Leadwell Street, Covello Street	Not Applicable	Prohibition of left turns to accommodate aerial guideway columns
Raymer Street	Kester Avenue	Keswick Street	Reconstruction resulting in narrowing of width and removal of parking on the westbound side of the street to accommodate aerial guideway columns

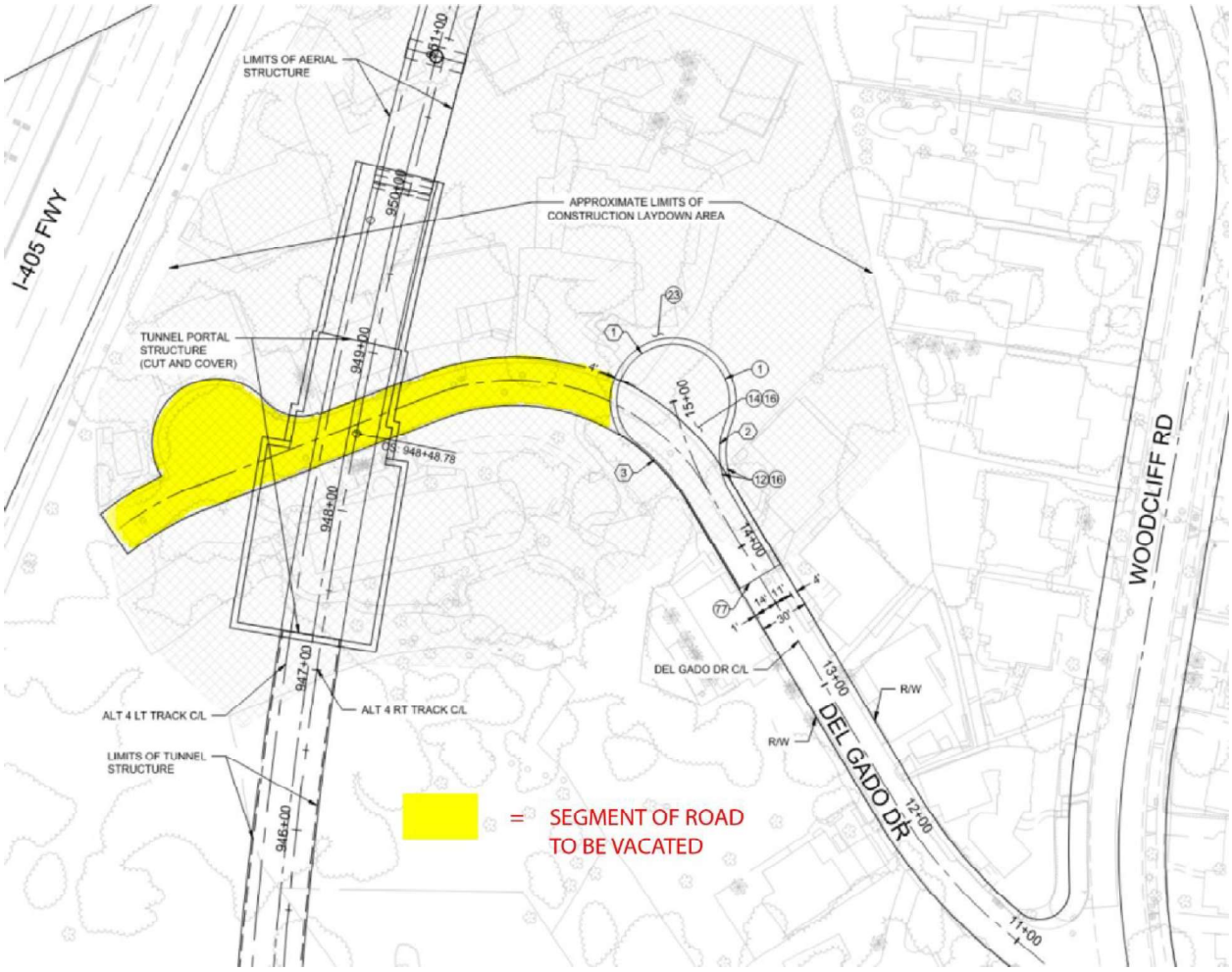
Source: STCP, 2024; HTA, 2024

Figure 8-7. Alternative 4: Roadway Changes



Source: STCP, 2024; HTA, 2024

Figure 8-8. Alternative 4: Street Vacation at Del Gado Drive



Source: STCP, 2024; HTA, 2024

8.1.1.10 Ventilation Facilities

For ventilation of the alignment's underground portion, a plenum within the crown of the tunnel would provide a separate compartment for air circulation and allow multiple trains to operate between stations. Each underground station would include a fan room with additional ventilation facilities. Alternative 4 would also include a stand-alone ventilation facility at the tunnel portal on the northern end of the tunnel segment, located east of I-405 and south of Del Gado Drive. Within this facility, ventilation fan rooms would provide both emergency ventilation, in case of a tunnel fire, and regular ventilation, during non-revenue hours. The facility would also house sump pump rooms to collect water from various sources, including storm water; wash water (from tunnel cleaning); and water from a fire-fighting incident, system testing, or pipe leaks.

8.1.1.11 Fire/Life Safety – Emergency Egress

Within the tunnel segment, emergency walkways would be provided between the center dividing wall and each track. Sliding doors would be located in the central dividing wall at required intervals to connect the two sides of the railway with a continuous walkway to allow for safe egress to a point of safety (typically at a station) during an emergency. Similarly, the aerial guideway would include two

emergency walkways with safety railing located on the outer side of the tracks. Access to tunnel segments for first responders would be through stations and the portal.

8.1.2 Construction Activities

Temporary construction activities for Alternative 4 would occur within project work zones at permanent facility locations, construction staging and laydown areas, and construction office areas. Construction of the transit facilities through substantial completion is expected to have a duration of 8 ¼ years. Early works, such as site preparation, demolition, and utility relocation, could start in advance of construction of the transit facilities.

For the guideway, Alternative 4 would consist of a single-bore tunnel through the Westside and Santa Monica Mountains. The tunnel would be comprised of two separate segments, one running north from the southern terminus to the UCLA Gateway Plaza Station (Westside segment), and the other running south from the portal in the San Fernando Valley to the UCLA Gateway Plaza Station (Santa Monica Mountains segment). Two tunnel boring machines (TBMs) with approximately 45-foot-diameter cutting faces would be used to construct the two tunnel segments underground. For the Westside segment, the TBM would be launched from Staging Area No. 1 in Table 8-4 at Sepulveda Boulevard and National Boulevard. For the Santa Monica Mountains segment, the TBM would be launched from Staging Area No. 4 in the San Fernando Valley. Both TBMs would be extracted from the UCLA Gateway Plaza Station Staging Area No. 3 in Table 8-4. Figure 8-9 shows the location of construction staging locations along the Alternative 4 alignment.

Table 8-4. Alternative 4: On-Site Construction Staging Locations

No.	Location Description
1	Commercial properties on southeast corner of Sepulveda Boulevard and National Boulevard
2	North side of Wilshire Boulevard, between Veteran Avenue and Gayley Avenue
3	UCLA Gateway Plaza
4	Residential properties on both sides of Del Gado Drive and south side of Sepulveda Boulevard adjacent to I-405
5	West of Sepulveda Boulevard, between Valley Vista Boulevard and Sutton Street
6	West of Sepulveda Boulevard, between US-101 and Sherman Oaks Castle Park
7	Lot behind Los Angeles Fire Department Station 88
8	Commercial property on southeast corner of Sepulveda Boulevard and Raymer Street
9	South of the LOSSAN rail corridor, east of Van Nuys Metrolink Station, west of Woodman Avenue

Source: STCP, 2024; HTA, 2024

Figure 8-9. Alternative 4: On-Site Construction Staging Locations



Source: STCP, 2024; HTA, 2024

The distance from the surface to the top of the tunnel for the Westside tunnel segment would vary from approximately 40 feet to 90 feet depending on the depth needed to construct the underground stations. The depth of the Santa Monica Mountains tunnel segment would vary from approximately 470 feet as it passes under the Santa Monica Mountains to 50 feet near UCLA. The tunnel segment through the Westside would be excavated in soft ground, while the tunnel through the Santa Monica Mountains would be excavated primarily in hard ground or rock as geotechnical conditions transition from soft to hard ground near the UCLA Gateway Plaza Station.

The aerial guideway viaduct would be primarily situated in the center of Sepulveda Boulevard in the San Fernando Valley, with guideway columns located in both the center and outside of the right-of-way of Sepulveda Boulevard. This would result in a linear work zone spanning the full width of Sepulveda Boulevard along the length of the aerial guideway. Three to five main phases would be required to construct the aerial guideway. A phased approach would allow travel lanes along Sepulveda Boulevard to remain open as construction individually occupies either the center, left, or right side of the roadway via the use of lateral lane shifts. Additional lane closures on side streets may be required along with appropriate detour routing.

The aerial guideway would comprise a mix of simple spans and longer balanced cantilever spans ranging from 80 to 250 feet in length. The repetitive simple spans would be utilized when guideway bent is located within the center median of Sepulveda Boulevard and would be constructed using Accelerated Bridge Construction (ABC) segmental span-by-span technology. Longer balanced cantilever spans would be provided at locations such as freeways, arterials, or street crossings, and would be constructed using ABC segmental balance cantilever technology. Foundations would consist of cast-in-drilled-hole (CIDH) shafts with both precast and cast-in-place structural elements. During construction of the aerial guideway, multiple crews would work on components of the guideway simultaneously.

Construction work zones would also be co-located with future MSF and station locations. All work zones would comprise the permanent facility footprint with additional temporary construction easements from adjoining properties.

The Metro E Line, Santa Monica Boulevard, Wilshire Boulevard/Metro D Line, and UCLA Gateway Plaza Stations would be constructed using a “cut-and-cover” method whereby the station structure would be constructed within a trench excavated from the surface with a portion or all being covered by a temporary deck and backfilled during the later stages of station construction. Traffic and pedestrian detours would be necessary during underground station excavation until decking is in place and the appropriate safety measures are taken to resume cross traffic. Constructing the Ventura Boulevard/Sepulveda Boulevard, Metro G Line Sepulveda, Sherman Way, and Van Nuys Metrolink Stations would include construction of CIDH elevated viaduct with two parallel side platforms supported by outrigger bents.

In addition to work zones, Alternative 4 would require construction staging and laydown areas at multiple locations along the alignment as well as off-site staging areas. Construction staging areas would provide the necessary space for the following activities:

- Contractors’ equipment
- Receiving deliveries
- Testing of soils for minerals or hazards
- Storing materials
- Site offices
- Work zone for excavation

- Other construction activities (including parking and change facilities for workers, location of construction office trailers, storage, staging, and delivery of construction materials and permanent plant equipment, and maintenance of construction equipment)

A larger, off-site staging area would be used for temporary storage of excavated material from both tunneling and station cut-and-cover excavation activities. Table 8-4 and Figure 8-9 present potential construction staging areas along the alignment for Alternative 4. Table 8-5 and Figure 8-10 present candidate sites for off-site staging and laydown areas.

Table 8-5. Alternative 4: Potential Off-Site Construction Staging Locations

No.	Location Description
S1	East of Santa Monica Airport Runway
S2	Ralph's Parking Lot in Westwood Village
N1	West of Sepulveda Basin Sports Complex, south of the Los Angeles River
N2	West of Sepulveda Basin Sports Complex, north of the Los Angeles River
N3	Metro G Line Sepulveda Station Park & Ride Lot
N4	North of Roscoe Boulevard and Hayvenhurst Avenue
N5	LADWP property south of the LOSSAN rail corridor, east of Van Nuys Metrolink Station

Source: STCP, 2024; HTA, 2024

Figure 8-10. Alternative 4: Potential Off-Site Construction Staging Locations



Source: STCP, 2024; HTA, 2024

Construction of the HRT guideway between the Van Nuys Metrolink Station and the MSF would require reconfiguration of an existing rail spur serving LADWP property. The new location of the rail spur would require modification to the existing pedestrian undercrossing at the Van Nuys Metrolink Station.

Alternative 4 would require construction of a concrete casting facility for tunnel lining segments because no existing commercial fabricator capable of producing tunnel lining segments for a large-diameter tunnel exists within a practical distance of the Project Study Area. The site of the MSF would initially be

used for this casting facility. The casting facility would include casting beds and associated casting equipment, storage areas for cement and aggregate, and a field quality control facility, which would need to be constructed on-site. When a more detailed design of the facility is completed, the contractor would obtain all permits and approvals necessary from the City of Los Angeles, the South Coast Air Quality Management District, and other regulatory entities.

As areas of the MSF site begin to become available following completion of pre-casting operations, construction of permanent facilities for the MSF would begin, including construction of surface buildings such as maintenance shops, administrative offices, train control, traction power and systems facilities. Some of the yard storage track would also be constructed at this time to allow delivery and inspection of passenger vehicles that would be fabricated elsewhere. Additional activities occurring at the MSF during the final phase of construction would include staging of trackwork and welding of guideway rail.

8.2 Existing Conditions

8.2.1 Regional Setting

The Resource Study Area (RSA) consists of portions of the City of Los Angeles neighborhoods, including West Los Angeles, Westwood, Brentwood, Sherman Oaks, and Van Nuys. Existing land uses within the RSA include those typically found in mature urban and suburban communities such as residential, office, commercial, retail, mixed-use development, education facilities, museums, parks, and open space. The majority of single-family residential land uses within the RSA are located in Brentwood, Bel-Air, Encino, and Sherman Oaks, while multi-family residential land uses are concentrated in the Westwood, Sawtelle, and Van Nuys neighborhoods. Businesses and industrial parks are concentrated within Van Nuys along Van Nuys Boulevard. Commercial uses within the RSA range from local neighborhood/commercial main street retail operations to large regional malls and shopping centers within West Los Angeles, Westwood, Santa Monica, Van Nuys, Brentwood and Sherman Oaks. Activity centers within the RSA include the Fox 11 Los Angeles, UCLA, the Getty Museum, Los Angeles National Cemetery, Ronald Reagan Medical Center, West Los Angeles U.S. Veterans Affairs (VA) Medical Center, Hammer Museum, Sherman Oaks Hospital, Sherman Oaks Galleria, Valley Presbyterian Hospital, the Bad News Bears Park, Southern California Behavioral Health Hospital, and the Department of Public Social Services. (Refer to the *Sepulveda Transit Corridor Project Land Use and Development Technical Report* [Metro, 2025] for additional information related to existing land uses in the RSA).

8.2.2 Hazardous Materials from Known Release Sites

In June 2023, several publicly available databases maintained under Government Code Section 65962.5 (i.e., the Cortese List) were searched to determine whether any known hazardous materials are present in the RSA. The Hazardous Waste and Substances Site List (EnviroStor database [DTSC, 2023]) is maintained by the DTSC as part of the requirements of Government Code Section 65962.5. SWRCB maintains the GeoTracker database, an information management system for tracking leaking underground storage tank (LUSTs) cleanup sites, permitted underground storage tanks (USTs), Cleanup

Program Sites, Military Cleanup sites, Land Disposal sites, Waste Discharge Requirement sites, and Oil and Gas Monitoring sites (SWRCB, 2023).[23]

On October 24, 2022, EDR, Inc. (EDR) conducted a government database search for listings within the appropriate American Society for Testing and Materials (ASTM) minimum search distance (Attachment 1B). The search radius (distance from Alternative 4) depends on the applicable standards for each database and is identified in Table 8-6 for each of the respective database listings. A variety of identified sites within the vicinity of the Alternative 4 site is listed in the databases, as shown in Table 8-6. Many of the facilities are permitted for more than one hazardous material use and, therefore, could be listed in more than one database.

Table 8-6. Alternative 4: EDR Database Search Results

Agency Database (* Indicates that Alternative 4 ROW is listed in this database)	Survey Distance	Number of Sites Identified
AST—Aboveground Petroleum Storage Tank Facilities: A listing of aboveground storage tank petroleum storage tank locations.	0.25 mile	34
CERS HAZ WASTE—California Environmental Reporting System (CERS) HAZ Waste: A list of sites in the California Environmental Protection Agency Regulated Site Portal that fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and Resource Conservation and Recovery Act LQ HW Generator programs.	0.25 mile	268*
CERS TANKS—California Environmental Reporting System (CERS) Tanks: A list of sites in the California Environmental Protection Agency Regulated Site Portal that fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.	0.25 mile	73*
CERS—California Environmental Reporting System (CERS): Provides an overview of regulated hazardous materials and waste, state, and federal cleanups, impacted ground and surface waters, and toxic materials activities across the spectrum of environmental programs for any given location in California.	0.25 mile	443*
CHMIRS—California Hazardous Material Incident Report System: California Hazardous Material Incident Report System contains information on reported hazardous material incidents (accidental releases or spills).	0.25 mile	121*
CIWQS—California Integrated Water Quality System: The California Integrated Water Quality System (CIWQS) is a computer system used by the state and Regional Water Quality Control Board to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.	0.25 mile	149*

[23] Cleanup Program Sites (CPSs), also known as Site Cleanups (SCs), are formerly known as Spills, Leaks, Investigations, and Cleanups (SLIC) sites. Cleanup Program Sites include all "non-federally owned" sites that are regulated under the State Water Resources Control Board's Site Cleanup Program and/or similar programs conducted by each of the nine Regional Water Quality Control Boards. These sites are highly variable and hazardous materials found at them include but are not limited to hydrocarbon solvents, pesticides, perchlorate, nitrate, heavy metals, and petroleum constituents. LUST Cleanup Sites include all UST sites that have had an unauthorized release (i.e., leak or spill) of a hazardous substance, usually fuel hydrocarbons, and are being (or have been) cleaned up. In GeoTracker, LUST sites consist almost entirely of fuel-contaminated LUST sites (also known as "Leaking Underground Fuel Tank", or "LUFT" sites) that are regulated pursuant to Title 23 of the California Code of Regulations, Chapter 16, Article 11.

Agency Database (* Indicates that Alternative 4 ROW is listed in this database)	Survey Distance	Number of Sites Identified
CORTESE—Hazardous Waste & Substances Sites List: Identifies public drinking water wells with detectable levels of contamination; hazardous substance sites selected for remedial action; sites with known toxic material identified through the abandoned site assessment program; sites with underground storage tanks (USTs) having a reportable release and all solid waste disposal facilities from which there is known migration. The sites for the list are designated by State Water Resources Control Board leaking underground storage tank, Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).	0.25 mile	64*
HIST CORTESE: Identifies historical public drinking water wells with detectable levels of contamination; hazardous substance sites selected for remedial action; sites with known toxic material identified through the abandoned site assessment program; sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The sites for the list are designated by the State Water Resources Control Board leaking underground storage tank, Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.	0.5 mile	61*
CPS-SLIC—Statewide Spills, Leks, Investigations, and Cleanup Cases (GEOTRACKER): Cleanup Program Sites (CPSs); also known as Site Cleanups [SCs] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Regional Water Quality Control Board data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.	0.5 mile	8
DRYCLEANERS—Cleaner Facilities: A list of drycleaner-related facilities that have U.S. Environmental Protection Agency Identification numbers. These are facilities with certain Standard Industrial Classification (SIC) codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; dry-cleaning plants, except rugs; carpet and upholstery cleaning; industrial launderers; laundry and garment services.	0.25 mile	95
EMI—Emissions Inventory Data: Toxics and criteria pollutant emissions data collected by the California Air Resources Board (CARB) and local air pollution agencies.	0.25 mile	209*
ENVIROSTOR—EnviroStor Database: The Department of Toxic Substances Control's Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List [NPL]); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information that was available in the CalSite database, and provides additional site information, including, but not limited to: identification of formerly contaminated properties that have been released for reuse; properties where environmental deed restrictions have been recorded to prevent inappropriate land uses; and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.	1 mile	17
FID UST—Facility Inventory Database Underground Storage Tank: Contains a historical listing of active and inactive UST locations from the State Water Resources Control Board. Refer to local/county source for current data.	0.25 mile	222
HAULERS—Registered Waste Tire Haulers Listing: A listing of registered waste tire haulers.	0.25 mile	52

Agency Database (* Indicates that Alternative 4 ROW is listed in this database)	Survey Distance	Number of Sites Identified
HAZNET—Facility and Manifest Data: The data is extracted from the copies of hazardous waste manifests received each year by the Department of Toxic Substances Control. The annual volume of manifests is typically 700,000 to 1,000,000 annually, representing approximately 350,000 to 500,000 shipments. Data is from the manifests submitted without correction; therefore, many contain some invalid values for data elements such as generator ID, treatment, storage, and disposal (TSD) ID, waste category, and disposal method. This database begins with calendar year 1993.	0.25 mile	2,933*
HIST Cal-Sites—CalSites Database: The CalSites database contains potential or confirmed hazardous substance release properties. In 1996, the California Environmental Protection Agency reevaluated and significantly reduced the number of sites in the CalSites database. It is no longer updated by the state agency. It has been replaced by ENVIROSTOR.	1 mile	1
HWP—EnviroStor Permitted Facilities Listing: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.	1 mile	1
HWTS— Hazardous Waste Tracking System: The Department of Toxic Substances Control maintains the Hazardous Waste Tracking System, which stores identification number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.	0.25 mile	4,441*
UST— Active Underground Storage Tank Facilities: Active underground storage tank facilities gathered from the local regulatory agencies.	0.25 mile	449*
LUST—Leaking Underground Fuel Tank Report (GEOTRACKER): LUST Sites included in GeoTracker. GeoTracker is the Regional Water Quality Control Board data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.	0.5 mile	102
SWEEPS UST—Statewide Environmental Evaluation and Planning System Underground Storage Tank (UST): This underground storage tank listing was updated and maintained by a company contacted by the State Water Resources Control Board in the early 1990s. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.	0.25 mile	226
HIST UST—Hazardous Substances Storage Contained Database: Facilities on a historic list of UST sites.	0.25 mile	172
NPDES—National Pollutant Discharge Elimination System (NPDES) Permits Listing: A listing of NPDES permits, including stormwater.	0.25 mile	78*
SWF/LF (SWIS)—Solid Waste Information System: Active, Closed and Inactive Landfills. Solid Waste Information System records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet Resource Conservation and Recovery Act Section 4004 criteria for solid waste landfills or disposal sites.	0.5 mile	7
WDS—Waste Discharge System: Sites which have been issued waste discharge requirements.	0.25 mile	2
ECHO—Enforcement & Compliance History Information: Enforcement & Compliance History Information provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.	0.125 mile	1,211*

Agency Database (* Indicates that Alternative 4 ROW is listed in this database)	Survey Distance	Number of Sites Identified
EDR Exclusive Historical Auto Stations: EDR has searched selected national collections of business directories and has compiled listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, and service station.	0.125 mile	222
EDR Exclusive Historical Cleaners: EDR has searched selected national collections of business directories and has compiled listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to, dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, and wash & dry.	0.125 mile	114*
FINDS—Facility Index System/Facility Registry System: Contains both facility information and "pointers" to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCBs Activity Data System).	0.125 mile	1,370*
RCRA NonGen/NLR— Resource Conservation and Recovery Act Non-Generators/No Longer Regulated: Resource Conservation and Recovery Act Info is the U.S. Environmental Protection Agency's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act of 1976 and the Hazardous and Solid Waste Amendments of 1984. The database includes selective information on sites that generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act. Non-Generators do not presently generate hazardous waste.	0.25 mile	951*
RCRA-LQG—Resource Conservation and Recovery Act Information System Large Quantity Generators: Sites that generate, transport, store, treat, and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Facilities permitted to generate more than 1,000 kilograms (kg) of hazardous waste or over 1 kg of acutely hazardous waste per month.	0.25 mile	45
RCRA-SQG—Resource Conservation and Recovery Act Information System Small Quantity Generators: Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Facilities permitted to generate more than 100 kg per month but less than 1,000 kg per month of non-acutely hazardous materials.	0.25 mile	203
RCRA-TSDF—Resource Conservation and Recovery Act Information System Small Quantity Generators: Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. Treatment, storage, and disposal facilities (TSDFs) treat, store, or dispose of the waste.	0.5 mile	1

Agency Database (* Indicates that Alternative 4 ROW is listed in this database)	Survey Distance	Number of Sites Identified
RCRA-VSQG—Resource Conservation and Recovery Act Very Small Quantity Generators (Formerly known as Conditionally Exempt Small Quantity Generators): Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.	0.25 mile	2
SEMS—Superfund Enterprise Management System: Hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of the U.S. Environmental Protection Agency's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to Superfund Enterprise Management System by the U.S. Environmental Protection Agency in 2015. The list contains data on potentially hazardous waste sites that have been reported to the U.S. Environmental Protection Agency by states, municipalities, private companies, and private persons, pursuant to Section 103 of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites that are already on or proposed to be on the National Priorities List (NPL) and the sites that are in the screening and assessment phase for possible inclusion on the NPL.	0.5 mile	1
SEMS-ARCHIVE—Superfund Enterprise Management System Archive: Sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the U.S. Environmental Protection Agency in 2015.	0.5 mile	5

Source: ICF, 2022a

As stated in Section 3, many listings in the report were identified as not having the potential to impact the Project. Thus, this discussion focuses on the potential for recognized environmental conditions (REC), LUST, and Cortese list sites that could potentially result in a hazard to the public and/or environment during construction and operation.

There are 48 closed LUST cases, nine Cleanup Program Sites, one State Response, and four Tiered Permit sites within 0.5 mile of Alternative 4 (Attachment 2, Table B-3).[24] No Brownfields sites were identified within or in the vicinity of Alternative 4. All 48 closed LUST cases are on the Cortese list. Sites listed as sites are listed as "Closed" signify that they have been remediated to the satisfaction of the agency with oversight. Table B-3 summarizes the identified affected properties, including business addresses, a summary of the status of each property, and proximity to Alternative 4. The site numbers identified for each property in Table B-3 correspond with the numbers that appear on Figure 8-11 and Figure 8-12.

[24] Tiered Permit: Sites with permits granted by the Resource Conservation and Recovery Act.

Figure 8-11. Alternative 4: Hazardous Material Sites within 0.5 Mile (North)



Source: DTSC, 2023; SWRCB, 2023, ICF 2022b

Figure 8-12. Alternative 4: Hazardous Material Sites within 0.5 Mile (South)



Source: DTSC, 2023; SWRCB, 2023, ICF 2022b

8.2.2.1 San Fernando Valley Superfund Site

The Area 4 Pollock Operable Unit (OU) is one of the four San Fernando Valley Superfund Site areas. The Valley (Area 4) Superfund site is located south of Los Feliz Avenue to State Route 110, east of the RSA. The four Valley Superfund Site area are designated as the following:

- Area 1 North Hollywood (North Hollywood and Burbank OU)

- Area 2 Glendale (Crystal Springs Well Field)
- Area 3 Glendale (Verdugo Study Area) (Note Area 3 was removed from Superfund site list in 2004)
- Area 4 Pollock OU (Pollock Well Field)

The Valley (Area 4) Pollock OU Superfund site is a 5,860-acre expanse with areas of contaminated groundwater near the LADWP Pollock Well Field in the City of Los Angeles. Historical manufacturing work in the Valley groundwater basin, dating back to World War II, contaminated the groundwater in the region with volatile organic compounds (VOCs), including trichloroethylene (TCE) and tetrachloroethylene (PCE). The Valley groundwater basin provides drinking water to residents of the Cities of Los Angeles, Burbank, and Glendale, as well as the La Crescenta Water District. In 2022, LADWP stated that the San Fernando Basin provides approximately 10 percent of the City of Los Angeles's water supply annually but has the potential to provide up to 21 percent in an average year.

The regional plume of the Area 4 Pollock OU could potentially affect the northern portions of Alternative 4 north of Saticoy Street. In addition, the eastern portion of the plume is depicted as moving south, just east of Alternative 4 (ICF, 2022b).

The Valley Area 4 groundwater contamination is being addressed through the coordination of federal, state, and municipal agencies, including EPA, DTSC, State Regional Water Quality Control Board (SRWQCB), and the Los Angeles Regional Water Quality Control Board (LARWQCB).

EPA completed an interim investigation of the Pollock Well Field in 1994. EPA did not select a remedy for the site because the LADWP constructed a wellhead treatment project to clean the water in the Valley Basin. Since 1999, LADWP's Granular Activated Carbon Treatment Plant at the Pollock Well Field has been treating groundwater to meet drinking water standards and return it to the public water supply system.

Because the LADWP built a VOC treatment facility to treat groundwater, EPA determined that further cleanup was not immediately necessary. EPA is evaluating the effectiveness of the Pollock wellhead treatment project as part of its ongoing basin-wide studies and will determine the need for additional cleanup actions at the site. While the site awaits further investigation on the nature and extent of contamination in this area, the Pollock wellhead treatment operation continues to treat groundwater to meet drinking water standards and reduce the potential of exposure to contaminated water.

EPA Remedial Investigation field activities at the Pollock OU began in 2017 and have included the following:

- Groundwater assessment and sampling of existing monitoring wells
- Soil sampling during the installation of new monitoring wells
- Installation and sampling of soil gas monitoring probes
- Indoor air sampling to evaluate vapor intrusion

EPA conducted an initial round of indoor air sampling of homes in the Atwater Village area in February 2022. Results from the first sampling event indicated that indoor air sampled was not impacted by VOCs migrating from the groundwater into homes. To verify that VOCs from the contaminated groundwater are not impacting indoor air quality in the area, an additional round of indoor air sampling of homes, businesses, and schools in the Atwater Village neighborhood was conducted in winter 2023 (EPA, 2023a). Based on these results, it can be inferred that VOCs would not affect proposed stations under Alternative 4.

8.2.3 Hazardous Materials from Roadway Corridors

Yellow-thermoplastic and yellow-painted traffic stripe and pavement markings applied to roadways before 1997 contained as much as 2.6 percent lead (Caltrans, 2019). Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably paint. The use of lead as an additive to paint was discontinued in 1978 because the EPA and OSHA determined that exposure to lead presents an adverse human health risk. Residue from removing this yellow-thermoplastic and yellow-painted traffic stripe and pavement markings contains heavy metals such as lead chromate in concentrations that exceed thresholds established by the California Health and Safety Code and Title 22 of the California Code of Regulations (CCR) Division 4.5 (Caltrans, 2019).

Aerially deposited lead (ADL) can be present along major roadway corridors, such as I-405, Van Nuys Boulevard and Sepulveda Boulevard. Lead alkyl compounds were first added to gasoline in the 1920s to boost octane levels and improve engine performance. Beginning in 1973, EPA ordered a gradual phase-out of lead from gasoline, substantially reducing the use of leaded gasoline by the mid-1980s. However, the EPA estimated that prior to the 1970s, vehicles emitted approximately 75 percent of the lead consumed in leaded gasoline as particulate matter through tailpipe exhaust (DTSC, 2004). A portion of this particulate matter settled into soils near major roadways. DTSC regulations specify the levels at which lead in soil is considered to be a risk. In areas where road construction would occur, the California Department of Transportation (Caltrans) has found lead within 30 feet of the edge of the pavement and within the top 6 inches of the soil. In some cases, lead has been found as deep as 2 to 3 feet below the surface. Therefore, soils in major roadway corridors, including those within the Alternative 4 alignment, have the potential to be contaminated with ADL from car emissions that occurred prior to the elimination of lead in gasoline (DTSC, 2016).

8.2.4 Treated Wood Waste

Wood utility poles may be treated with preserving chemicals that, if removed, can result in a substance called treated wood waste (TWW). TWW contains hazardous chemicals that pose a risk to human health and the environment. Arsenic, chromium, copper, creosote, and pentachlorophenol are among the chemicals added to preserve wood. These chemicals are known to be toxic or carcinogenic. Harmful exposure to these chemicals may result from dermal contact with TWW, or from inhalation or ingestion of TWW particulate (DTSC, 2024).

8.2.5 Hazardous Building Materials

Asbestos is designated as a hazardous substance when the fibers have potential to come in contact with air because the fibers are small enough to inhale and lodge in the lung tissue, which can cause health problems. The presence of ACM in buildings natural gas pipelines, and cementitious water pipelines poses an inhalation threat only if the ACMs are found to be in a friable state. If the ACMs are not friable, inhalation hazard is not present because asbestos fibers remain bound in the material matrix. Emissions of asbestos fibers to the ambient air, which can occur during activities such as renovation or demolition of structures made with ACMs (e.g., insulation), are regulated in accordance with Section 112 of the Federal Clean Air Act.

Lead is a highly toxic metal that EPA and OSHA have determined to be an adverse health risk, particularly to young children. In 1978, the federal government required the reduction of lead in house paint to less than 0.06 percent (600 parts per million). Because of its toxic properties, lead is regulated as a hazardous material. Excessive exposure to lead can result in the accumulation of lead in the blood, soft tissues, and bones. Primary sources of lead exposure include the following: deteriorating lead-based

paint, including painted curbs, poles, protective bollards, bridges, and fire hydrants along the ROW and existing buildings within the alternative alignment; lead-contaminated dust; and lead-contaminated soil. Buildings that have been constructed prior to 1978 and that contain lead-based paints could require abatement prior to construction activities.

Polychlorinated biphenyls (PCBs) are organic chemicals, usually in the form of an oil, that were historically used in electrical equipment. PCBs are most commonly associated with pole-mounted electrical transformers, but they were also used in insulators and capacitors in building electrical equipment. PCBs were commonly used in the small capacitor within fluorescent light ballasts. Ballasts manufactured through 1979 may contain PCBs. On-site fluorescent light features and electrical transformers that were manufactured prior to and throughout 1979, or reasonably suspected to have been manufactured before or throughout 1979, shall be assumed to contain PCBs. PCBs-containing florescent light bulbs would be of concern if they are leaking as they may expose workers handling the fixtures to a variety of adverse health effects. According to EPA TSCA regulations, the material must be incinerated. The entire lighting fixture does not need special handling and disposal as long as the ballast (electrical box) is not leaking. The non-leaking ballasts can be removed and recycled or disposed of properly. PCBs are considered hazardous materials because of their toxicity; they have been shown to cause cancer in animals, along with effects on the immune, reproductive, nervous, and endocrine systems, and studies have shown evidence of similar effects in humans (EPA, 2013).

8.2.6 Other Potential Hazardous Materials

8.2.6.1 Residual Pesticides

Chemicals used in agricultural activities could result in residual concentrations of persistent pesticides in the soil. Persistent pesticides such as organochlorine pesticides (e.g., dichlorodiphenyltrichloroethane, Toxaphene, and Dieldrin) leave residues that remain in the environment without breaking down.

Lead arsenate is used as an herbicide, insecticide, or rodenticide. Lead arsenates were historically used by railroad companies as a means of weed control along a railroad ROW. Pesticide residues from lead arsenate bind tightly to the surface soil layer, where they can remain for decades. As a result, such residues, if present, could pose a human health risk when the soil is excavated. Lead and arsenic are the primary constituents of lead arsenate pesticide. Both lead and arsenic could be toxic at high concentrations in soil and are highly toxic to humans.

8.2.6.2 Household Hazardous Waste

EPA defines household hazardous waste as “leftover products such as paints, cleaners, oils, batteries, and pesticides that contain potentially hazardous ingredients that could be corrosive, toxic, ignitable, or reactive.” According to EPA, Americans generate approximately 1.6 million tons of household hazardous waste per year, while the average home can accumulate as much as 100 pounds of household hazardous waste annually. Improper disposal of household hazardous wastes commonly include pouring them down the drain, on the ground, or into storm sewers, and in some cases putting them out with the trash. Though the dangers of such disposal methods might not be immediately obvious, improper disposal of these wastes can pollute the environment and pose a threat to human health.

8.2.7 Methane Hazard Zones

Methane gas, commonly known as natural gas, may underlay the site. Potential hazards associated with methane include fire or explosion due to methane gas accumulations, since it is a highly flammable substance, and human health risks associated with natural gas poisoning. Exposure to high

concentrations of methane can result in long-term health effects such as respiratory, cardiovascular, and neurological issues, though this is generally a concern in confined spaces rather than outdoor environments. Methane and other flammable or toxic gases, notably hydrogen sulfide, are often associated with naturally occurring petroleum deposits or active and former oil fields. These areas may have a potential for subsurface accumulations of methane and other volatile gases. Both methane and hydrogen sulfide are highly flammable and, in high concentrations, pose explosion hazards to the public. Exposure to high levels of hydrogen sulfide can also cause long-term health effects, including impaired cognitive function, respiratory irritation, and neurological impacts.

In the City of Los Angeles, two types of methane hazard zones exist: methane zones and methane buffer zones. A methane zone is the area closest to the source of the subsurface methane gas, whereas a methane buffer zone surrounds the outer limits of a methane zone. Both of these zones are typically a result of naturally surfacing tar and crude oil. These subsurface hazards can also be caused by other soil contamination issues, such as historical oil wells (Geo Forward, 2021).

As shown on Figure 8-13, methane hazard zones exist within the Alternative 4 alignment. The Sawtelle Methane Hazard Zone begins at the base of the southern slope of the Santa Monica Mountains and follows I-405 south to approximately Santa Monica Boulevard. The Santa Monica Boulevard Station and the Wilshire/Metro D Line Station would be within the methane hazard zone (Metro, 2024c). Relatively low concentrations of methane and hydrogen sulfide were detected in soil gas vapor probes installed in Metro Purple Line monitoring wells, which are located along and adjacent to Wilshire Boulevard in the Westwood area and at the VA (Metro, 2024c). In addition, the methane zones map shows the methane zone and methane buffer zone near the southern end of the tunnel alignment (Geo Forward, 2021).

Figure 8-13. Alternative 4: Methane Hazard Zones



Source: Geo Forward, 2021

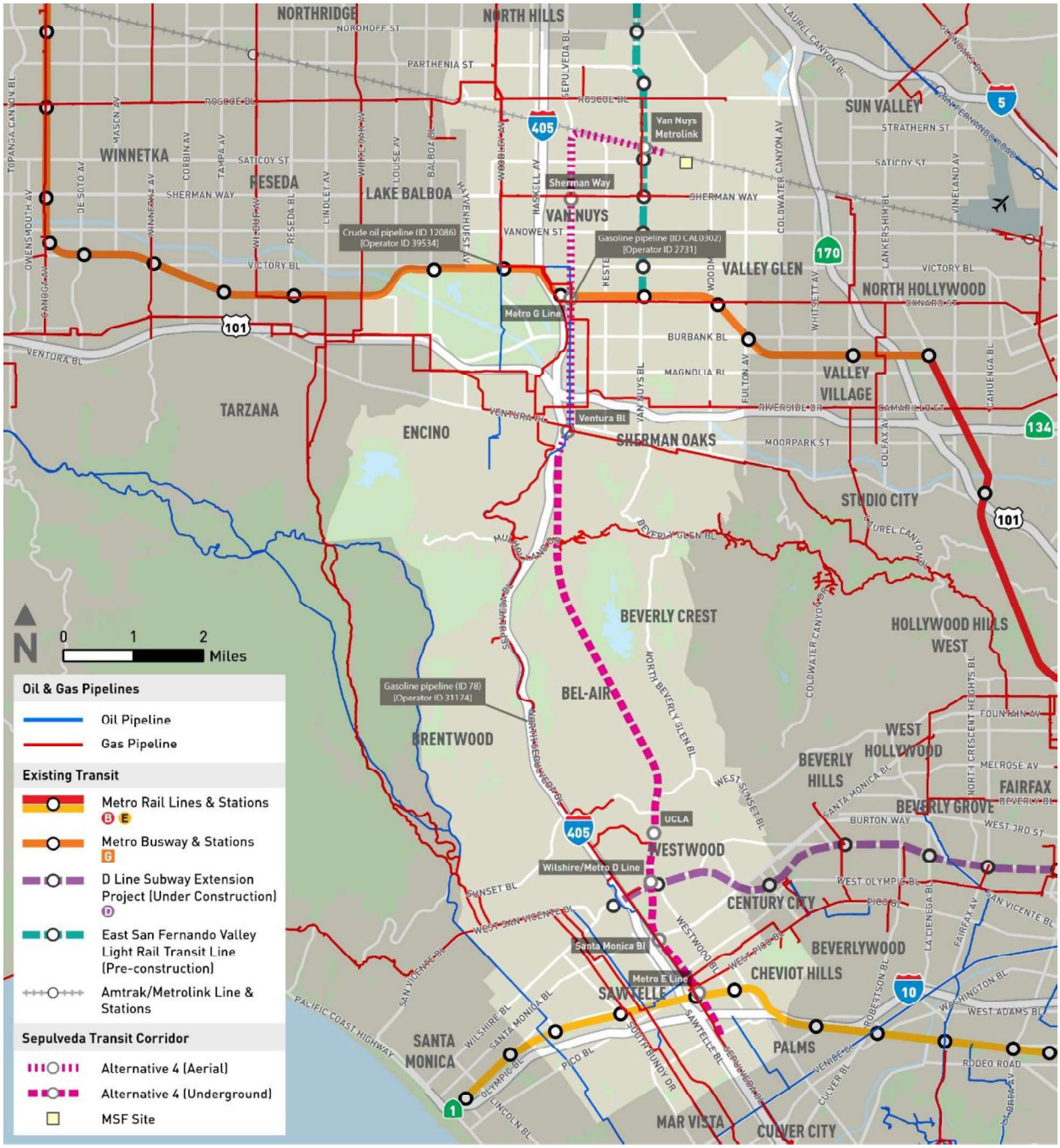
8.2.8 Petroleum and Natural Gas Pipelines

The Pipeline and Hazardous Materials Safety Administration (USDOT PHMSA) Public Map Viewer (PHMSA, 2023) identifies the following three hazardous liquid pipelines within and in the vicinity of Alternative 4, as shown on Figure 8-14:[25]

- Torrance Valley Pipeline Company (Operator ID 39534) operates a crude oil pipeline (ID 12086) as part of the Saticoy-Slauson system. As of May 20, 2022, the pipeline was reported active and filled. The 13.34-mile pipeline originates east of the Van Nuys Airport at Woodley Avenue. It travels south to the intersection of Woodley Avenue and Victory Boulevard, then turns east to travel along Victory Boulevard to the intersection of Victory Boulevard and Sepulveda Boulevard. The pipeline parallels Sepulveda Boulevard to its terminus at the intersection of Sepulveda Boulevard and Montana Avenue.
- Shell Pipeline Company (Operator ID 31174) operates a gasoline pipeline (ID 78) as part of the Ventura Products Line system. As of June 15, 2022, the pipeline was reported active and filled. The 12.25-mile pipeline originates near the intersection of Sepulveda Boulevard and Bellagio Road, where it travels south, parallel to Sepulveda Boulevard, continuing south beyond Interstate 10 (I-10).
- Chevron Pipeline Company (Operator ID 2731) operates a gasoline pipeline (ID CAL0302) as part of the El Segundo-Van Nuys Production subsystem. As of August 3, 2022, the pipeline was reported active and filled. The 17.14-mile pipeline originates near the intersection of Oxnard Street and Sepulveda Boulevard. The pipeline travels south parallel to Sepulveda Boulevard and continues south beyond I-10.

[25] In accordance with PHMSA's security policy, the scale of the Public Map Viewer is restricted to 1:24,000, and the minimum accuracy of the mapped pipeline locations is 500 feet.

Figure 8-14. Alternative 4: Pipelines



Source: USDOT PHMSA, 2023

8.2.9 Proximity to Schools

The following schools are located within 0.25 mile of Alternative 4:

- Head Start located at 15035 Valerio Steet in Van Nuys
- Valerio Street Elementary located at 15035 Valerio Street in Van Nuys

- Columbus Avenue Elementary located at 6700 Columbus Avenue in Van Nuys
- Lashon Academy located at 7477 Kester Avenue in Van Nuys
- Sylvan Park Elementary located at 6238 Noble Avenue in Van Nuys
- Robert Fulton College Preparatory located at 7477 Kester Avenue in Van Nuys
- Girls Athletic Leadership School located at 8015 Van Nuys Boulevard in Panorama City
- Ivy Bound Academy of Math, Science, and Technology Charter Middle located at 15355 Morrison Street in Sherman Oaks
- UCLA located at 405 Hilgard Avenue in Westwood (the UCLA campus also houses two university-affiliated schools, the Geffen Academy for students in grades 6-12 and the Lab School for children ages 4-12)

8.2.10 Proximity to Airports

Concentration of people and facilities in the vicinity of airports raises concerns about safety and aircraft hazards. Potential aircraft accidents pose a hazard if the proposed project is located near an airport or in the immediate area of the landing and approach zones. In addition, people can be exposed to excessive noise and aircraft pollution. The Van Nuys Airport and Santa Monica Municipal Airport are in the vicinity of Alternative 4. These airports are discussed further in Section 8.2.10.1 and Section 8.2.10.2.

8.2.10.1 Van Nuys Airport

The Van Nuys Airport is located at 16461 Sherman Way in Van Nuys. Van Nuys Airport is a 740-acre general aviation facility owned and operated by Los Angeles World Airports (LAWA). The airport is located in the west-central portion of the City of Los Angeles's incorporated boundaries, approximately 25 miles northwest of downtown Los Angeles in the center of the Valley. In general, the airport is bounded by Roscoe Boulevard on the north, Victory Boulevard on the south, Balboa Boulevard on the west, and Woodley Avenue on the east.

The airport houses 720 aircraft and operates 2 north-south parallel asphalt runways, one of which is 4,013 feet long (16L-24R) and the other which is 8,001 feet long (16R-34L). As of May 2023, the airport is averaging 615 flights per day (AirNav, 2023a).

The land development surrounding the airport is a combination of residential, commercial, industrial, and public uses, with single-family residential being the predominant land use. Much of the land immediately surrounding the airport is developed with light industrial and commercial manufacturing uses, with golf courses and public parks located immediately to the south.

Alternative 4 would be approximately 1.3 miles east of the Van Nuys Airport. The *Van Nuys Airport Plan* indicates that Alternative 4 would be located outside the airport's airport influence area (AIA).[26] A 55-acre temporary staging area potentially would be located north of the Van Nuys Airport, north of Roscoe Boulevard and within the AIA (Figure 8-15) (DCP, 2006; Los Angeles County Airport Land Use Commission [ALUC], 2003a, 2023).

[26] AIA is the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may substantially affect land uses or necessitate restrictions on those uses. The AIA constitutes the area within which certain land use actions are subject to review to determine consistency with the Airport Land Use Compatibility Plan policies.

8.2.10.2 Santa Monica Municipal Airport

The Santa Monica Municipal Airport is located at 3223 Donald Douglas Loop-South in the City of Santa Monica. The airport is approximately 2 miles east of the Pacific Ocean and 6 miles north of the City of Los Angeles. The airport houses various types of businesses, including art studios, office space, and event venues. In general, the airport is bounded by Ocean Park Boulevard on the north, Airport Avenue on the south, 23rd Street on the west, and Bundy Drive on the east. It includes recreational space for a city park, a restaurant, a theater, and an interim open space. The Santa Monica City Council approved a plan to formally close the Santa Monica Airport in 2028.

The airport houses 84 aircraft and operates 2 northeast-northwest parallel asphalt runways, both of which are 3,500 feet long, and a 1,600-square foot asphalt helipad. As of May 2023, the airport is averaging 452 flights per day (AirNav, 2023b).

The southern terminus of Alternative 4 would be approximately 1.2 miles northeast of the Santa Monica Municipal Airport. The *Los Angeles County Airport Land Use Plan* indicates that Alternative 4 would be located outside the airport's AIA. A 7-acre temporary staging area potentially would be located north of the Santa Monica Airport runway and within the AIA (Figure 8-15) (LA County Planning, 1991; ALUC, 2003b, 2023).

Figure 8-15. Alternative 4: Airport Influence Area



Source: ALUC, 2023a, 2023b

8.3 Impacts Evaluation

8.3.1 Impact HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

8.3.1.1 Operational Impacts

It is not anticipated that substantial quantities of hazardous materials would be routinely transported, used, stored, or disposed of during operation of Alternative 4. Operation of stations and the guideway would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous.[27] As mandated by Project Measure (PM) HAZ-1, cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage, and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions.

Compliance with existing regulations as mandated by PM HAZ-1 would assure proper transportation, use, storage, and disposal of hazardous materials, and the operational impacts of Alternative 4 would be less than significant.

8.3.1.2 Construction Impacts

Construction of Alternative 4 could expose the public or the environment to hazardous materials if the following situations occurred: improper handling or use of hazardous materials or hazardous wastes (particularly if used or handled by untrained personnel); transportation accident; environmentally unsound disposal methods; or fire, explosion, or other emergencies. The severity of potential effects varies with the activity conducted, the concentration of and type of hazardous material or wastes present, and the proximity of sensitive receptors.

As described throughout Section 2, there is an established, comprehensive federal, state, regional, and local framework independent of the California Environmental Quality Act (CEQA) process that is intended to reduce the risks associated with the use, transport, and disposal of hazardous materials. Transportation of hazardous materials on area roadways is regulated by the California Highway Patrol (CHP) and Caltrans. The use and disposal of hazardous materials is heavily regulated at both the federal and state level; these regulations are declared and enforced by agencies such as the EPA, SWRCB, DTSC, California Occupational Safety and Health Administration (Cal/OSHA), and the South Coast Air Quality Management District (SCAQMD). Metro would be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases. In accordance with the SWRCB and PM HAZ-2, Metro would obtain and comply with a National Pollutant Discharge Elimination System (NPDES) permit. In addition, coverage under the SWRCB's Construction General Permit would be obtained. As part of the Construction General Permit, the contractor would be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP), which would include best management practices (BMPs) as mandated by PM HAZ-2, including the following and/or similar measure to minimize the risk of accidental spills of hazardous materials during construction.

[27] Acutely hazardous materials are defined as waste containing chemicals so dangerous it could pose a threat to human health and the environment, even when properly managed.

The types and amounts of hazardous materials would vary according to the nature of the construction activity. Construction of Alternative 4 would require the use of typical construction equipment (e.g., gasoline- or diesel-powered machinery) and vehicles containing fuel, oil, and grease, as well as the use and transport of these materials. Limited quantities of certain hazardous materials such as paints, solvents, and glues would be used during construction. Construction staging and laydown would occur at multiple locations along the alignment and station sites and could include storage of excavated or demolished materials, construction offices, equipment storage, mechanical shops, and plants (grout, water treatment, foam, etc.) (Metro, 2024x). There is low likelihood that substantial quantities of hazardous materials would be stored during construction. Moreover, these hazardous materials would not include acutely hazardous materials or substances listed in 40 CFR 355 *Appendix A: Extremely Hazardous Substances and Their Threshold Planning Quantities* that could harm construction workers or the general public.

Whether a person exposed to a hazardous substance suffers adverse health effects as a result of that exposure depends upon a complex interaction of factors, including the following: the exposure pathway (the route by which a hazardous material enters the body); the amount of material to which the person is exposed; the physical form of the hazardous material (e.g., liquid, vapor) and its characteristics (e.g., toxicity); the frequency and duration of exposure; and the individual's unique biological characteristics, such as age, gender, weight, and general health. Adverse health effects from exposure to hazardous materials may be short-term (acute) or long-term (chronic). Acute effects can include damage to organs or systems in the body and possibly death. Chronic adverse effects, which may result from acute short-term or long-term exposure to a hazardous material, can also include organ or systemic damage, but chronic effects of particular concern include birth defects, genetic damage, and cancer.

Transportation of hazardous materials, such as contaminated soils; hazardous building materials, including asbestos, lead, PCB, and other hazardous wastes (i.e., TWW, roadway demolition debris, and hazardous building materials), would occur along designated truck routes within the Alternative 4 corridor and/or along major streets connecting to construction staging areas and the nearest freeways (e.g., I-405, I-10, US-101). Consistent with local plans, truck routes that may be used for transporting and hauling hazardous materials include Van Nuys Boulevard, Ventura Boulevard, Beverly Glen Boulevard, Santa Monica Boulevard, and Bundy Drive. As mandated by PM HAZ-2, transportation of hazardous materials would comply with state regulations governing hazardous materials transport as stated in the California Vehicle Code (Title 13 of the CCR), the State Fire Marshal Regulations (Title 19 of the CCR), and Title 22 of the CCR. Restrictions on haul routes can be incorporated into the construction specifications according to local permitting requirements.

Contaminated soils and hazardous building materials and wastes would be disposed of in accordance with federal, state, and local requirements at the following landfills:

- South Yuma County Landfill located at 19536 South Avenue 1E, Yuma, AZ
- Clean Harbors Buttonwillow Landfill located at 2500 West Lokern Road, Buttonwillow, CA
- U.S. Ecology located at Highway 95 South, Beatty, NV (EPA, 2023b)

The Los Angeles County Public Health Department manages enforcement and permitting for facilities that receive and dispose of solid waste, including hazardous waste. Table 8-7 provides a representative list of the hazardous waste disposal landfills and potential haul routes.

Table 8-7. Hazardous Waste Disposal Landfills and Potential Haul Routes

Landfill Site Name	Hazardous Waste Accepted	General Potential Haul Route
South Yuma County Landfill 19536 South Avenue 1E Yuma, AZ	Contaminated soil, PCBs, asbestos	I-405 South to SR-91 East to I-15 South to I-8 East to Yuma Arizona
Clean Harbors Buttonwillow 2500 West Lokern Road Buttonwillow, CA	Acutely hazardous materials[a], contaminated soil, PCBs, asbestos, RCRA waste with heavy metals	I-405 North to I-5 North to SR-58 West to Lokern Road
U.S. Ecology Highway 95 South Beatty, NV	Contaminated soil, PCBs, asbestos	I-405 South to I-10 East to I-15 North to US-95 North to Beatty, Nevada

Source: HTA, 2024

[a]Acutely hazardous materials are defined as waste containing such dangerous chemicals that it could pose a threat to human health and the environment, even when properly managed.

PCBs = polychlorinated biphenyls
RCRA = Resource Conservation and Recovery Act

Adherence to federal and state regulations stipulated by PM HAZ-2 reduces the risk of exposure to hazardous materials used during construction. Each of these regulations is specifically designed to protect the public health through improved procedures for handling hazardous materials, better technology in the equipment used to transport these materials, and a faster, more coordinated response to emergencies. With compliance with existing regulations, impacts related to the creation of significant hazards to the public or the environment through the routine transport, storage, use, and disposal of hazardous materials during construction of Alternative 4 would be less than significant.

8.3.1.3 Maintenance and Storage Facility Impacts

The types and amounts of hazardous materials would vary according to the nature of the activity. Construction of the MSF would require the use of typical construction equipment (e.g., gasoline- or diesel-powered machinery) and vehicles containing fuel, oil, and grease, as well as the use and transport of these materials. Limited quantities of certain hazardous materials such as paints, solvents, and glues would be used during construction.

Maintenance of trains, vehicles, and equipment would occur at an MSF. Multiple buildings would be constructed, including a multi-level MOW building, track storage area, wash bays, ancillary storage buildings, and TPSS structure. Operation of the MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, common household-type cleaning materials, and pesticides/herbicides. Cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions. The types and amounts of hazardous materials used at the MSF would not pose any greater risk than the existing uses at other similar development elsewhere in the vicinity of the MSF. Operation of the MSF would not require the use, handling, or storage of quantities of hazardous materials in excess of regulatory thresholds.[28] If the

[28]The thresholds are 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance, per Chapter 6.95 California Health and Safety Code.

quantity of hazardous materials used, handled, or stored on-site would exceed the regulatory thresholds, there is an established comprehensive regulatory framework independent of the CEQA process that would be followed, including preparation and submittal of a Hazardous Materials Business Plan (HMBP), as mandated by PM HAZ-1.

As previously discussed, adherence to federal and state regulations stipulated by PM HAZ-2 reduces the risk of exposure to hazardous materials used during construction and operation. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a more coordinated quicker response to emergencies. With compliance with existing regulations, impacts related to the creation of significant hazards to the public or the environment through the routine transport, use, storage and disposal of hazardous materials during construction of the MSF would be less than significant.

8.3.2 Impact HAZ-2: 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?

8.3.2.1 Operational Impacts

As discussed in Section 8.3.1, operation of stations and the guideway would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal and state regulatory requirements as mandated by PM HAZ-1, which are intended to prevent or manage hazards. If a spill does occur, it would be remediated accordingly.

As mandated by PM HAZ-3, tunnels and stations for the Project would be designed to provide a redundant protection system against gas intrusion hazard, such as those described in the City of Los Angeles Municipal Code, Chapter IX, Building Regulations, Article 1, Division 71, Methane Seepage Regulations. In compliance with these regulations, specific requirements would be determined according to the actual methane gas and/or hydrogen sulfide levels and pressures detected on a site, and the identified specific requirements will be incorporated into the design and construction. Therefore, the risk posed by hazardous subsurface gas such as methane gas and/or hydrogen sulfide to the operations of Alternative 4 would be minimized.

With adherence to PM HAZ-1 and PM HAZ-3, operational impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials under Alternative 4 would be less than significant.

8.3.2.2 Construction Impacts

Construction activities for the proposed Project, such as grading and excavation, could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. Exposure to unanticipated hazardous substances could occur from previously unidentified soil contamination caused by the contaminants originating at nearby listed sites (e.g., roadways and industrial uses). Or from construction-related soil contamination caused by spillage and/or mixing of construction trash and debris into the soil. EDR searched various regulatory databases and identified several sites in the surrounding area as being contaminated or having the potential to become

contaminated from the release of hazardous substances. A summary of these sites is presented in Table 8-6 and detailed in Attachment 1B. Exposure to hazardous materials during construction activities could occur as a result of any of the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

If any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons. The risks are particularly heightened during tunneling activities, which would involve deeper excavation and may encounter legacy contamination or naturally occurring hazardous materials that are less likely to be present near the surface.

If tunneling or station/guideway excavation is advanced through contaminated soil or groundwater, the excavated soil/slurry mix could be considered hazardous, depending on the levels of contamination encountered. Potentially affected parcels within one-quarter mile of Alternative 4 may have subsurface contamination from undocumented releases associated with current and/or historical use of the property(ies) (e.g., gas stations, dry cleaners, or industrial properties) (ICF, 2022b). During construction, there is the potential to encounter, dewater, and dispose of contaminated groundwater during ground-disturbing activities, shallow excavation, tunnel boring, excavation for the underground guideway, or relocation of utilities. During construction activities involving ground-disturbing activities, there is potential to encounter contaminated groundwater. This risk is heightened when performing shallow excavations, utilities relocation, or construction that requires dewatering. If contaminated groundwater is encountered, it would be managed and disposed of in compliance with local, state, and federal regulations. This could include treating the contaminated groundwater on-site or offsite or transporting it to a wastewater treatment facility capable of handling hazardous materials.

The Area 4 Pollock OU could potentially extend near the northern portions of Alternative 4 north of Saticoy Street (ICF, 2022b). A historical manufacturing work in the Valley groundwater basin, dating back to World War II, contaminated the groundwater in the region with volatile organic compounds (VOCs), including trichloroethylene (TCE) and tetrachloroethylene (PCE). Use of contaminated groundwater poses the greatest risk at this site. The Valley Area 4 groundwater contamination is being addressed through the coordination of federal, state and municipal agencies including EPA, DTS, SRWQCB, and Los Angeles Regional Water Quality Control Board (LARWQCB). EPA conducted rounds of indoor sampling in the Atwater Village area (outside of the RSA) and determined that the VOCs migrating from the groundwater did not impact the area. Based on these results, it can be inferred that VOCs would not affect proposed stations under Alternative 4.

The tunnel alignment for Alternative 4 would traverse the methane and methane buffer zones in the southern portion of the alignment. As shown on Figure 8-13, the Santa Monica Boulevard Station and the Wilshire/Metro D Line Station would be within the methane hazard zone. As described in Section 8.2.7, methane gas and/or hydrogen sulfide are highly flammable and can pose challenges during construction, particularly when tunneling activities disturb formations where methane gas and/or hydrogen sulfide may accumulate. The use of a TBM in such areas increase the potential for encountering pockets of methane gas and/or hydrogen sulfide, which could lead to fire or explosion

hazards if proper precautions are not taken. Pursuant to Section 91.7104.1 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619) and as outlined in PM HAZ-3, all construction activities within the methane hazard zone would implement the City's methane mitigation measures. These measures include subsurface testing of geological formations, compliance with Methane Mitigation Standards established by the Superintendent of Building, and installation of methane gas and/or hydrogen sulfide mitigation systems for all underground structures, such as stations and tunnels. During tunneling, monitoring for methane gas and/or hydrogen sulfide concentrations, maintaining ventilation systems to minimize accumulation of gas.

Several high-pressure pipelines containing crude oil traverse the RSA (refer to Figure 8-14). A review of the PHMSA Pipeline Map Viewer (PHMSA, 2023) indicated there have been no recorded pipeline releases within the RSA. However, Project-related excavation and earthmoving activities could encounter buried pipelines resulting in accidental rupture or leaks, which could cause a human health and environmental hazard. For security reasons, the PHMSA Pipeline Map Viewer (PHMSA, 2023) cannot be used for field verification of exact high-pressure pipeline locations, and the potential presence of other pipelines is unknown. In addition, it is possible buried underground utility lines may be within the RSA (such as stormwater, sewer, electrical, or communication cables).

Construction would require demolition of existing structures. Demolition of structures could potentially expose construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as asbestos-containing material (ACM), lead-based paint (LBP), or PCBs. Both the federal OSHA and Cal/OSHA regulate worker exposure during construction activities that disturb LBP. Any ACMs, if present, would need appropriate abatement of the identified asbestos prior to demolition, pursuant to the SCAQMD Rule 1403 and PM HAZ-4.

Additional effects from construction activities, such as excavation, tunneling, demolition, and grading, could include potential exposure of construction workers and/or the public to chemical compounds present in soils or soil gases. These activities may also result in the localized spread of contamination if disturbed soils or materials are improperly handled, leading to the migration of contaminants to previously uncontaminated areas. In addition, airborne chemical compounds released from construction or demolition areas, such as dust containing hazardous substances, could pose inhalation risks to workers, nearby residents, and the environment. Transportation of contaminated slurry or soils off-site for disposal could also result in accidental releases, such as spills or leaks, if proper containment measures are not implemented. Therefore, construction impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be potentially significant.

Alternative 4 would be required to implement MM HAZ-1 through MM HAZ-5, which would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling, transporting, and disposing of hazardous materials. Implementation of MM HAZ-1 through MM HAZ-5 would minimize the risk of exposing construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as ACM, LBP, or PCBs) during demolition activities. Regulations stipulated by PM HAZ-3 would ensure that the city's methane mitigation measures to reduce the potential exposure of construction workers and the public to methane ga and/or hydrogen sulfide s would be implemented. Therefore, implementation of MM HAZ-1 through MM HAZ-5, and adherence to PM HAZ-3, applicable local, state, and federal regulations would reduce impacts related to the upset and accidental release of hazardous materials to a less than significant level.

8.3.2.3 Maintenance and Storage Facility

Operation of the MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal and state regulatory requirements as mandated by PM HAZ-1, that are intended to prevent or manage hazards, and if a spill does occur, it would be remediated accordingly.

Construction activities for the proposed Project, such as grading and excavation, could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. Exposure to unanticipated hazardous substances could occur from previously unidentified soil contamination caused by the contaminants originating at nearby listed sites (e.g., roadways and industrial uses). Or from construction-related soil contamination caused by spillage and/or mixing of construction trash and debris into the soil. EDR searched various regulatory databases identified several sites in the surrounding area as being contaminated or having the potential to become contaminated from the release of hazardous substances. A summary of these sites identified by EDR are presented in Table 8-6 and detailed in Attachment 1B.

Exposure to hazardous materials during construction activities could occur as a result of any of the following:

- Direct dermal contact with hazardous materials;
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking); and
- Inhalation of airborne dust released from dried hazardous materials.

If any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons.

Construction would require demolition of existing structures. Demolition of structures could potentially expose construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials (such as ACM, LBP, or PCBs). Both the federal OSHA and Cal/OSHA regulate worker exposure during construction activities that disturb LBP. Any ACMs, if present, would need appropriate abatement of the identified asbestos before demolition begins, pursuant to the SCAQMD Rule 1403 and PM HAZ-4.

Additional effects could include the potential exposure of construction workers and/or the public to chemical compounds in soils, soil gases, and groundwater; potential localized spread of contamination; potential exposure of workers, the public, and the environment to airborne chemical compounds migrating from the construction or demolition areas; and potential accidents during transportation of contaminated slurry, soils, or groundwater. Therefore, construction impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be potentially significant.

The MSF would be required to implement MM HAZ-1 through MM HAZ-4, which would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling hazardous materials. Implementation of MM HAZ-1 through MM HAZ-4 would minimize potential exposure of construction workers and the public to

hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials. Therefore, implementation of MM HAZ-1 through MM HAZ-4, and adherence to applicable local, state, and federal regulations would reduce impacts related to the upset and accidental release of hazardous materials to a less than significant level.

8.3.3 Impact HAZ-3: 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?

8.3.3.1 Operational Impacts

As discussed in Section 8.3.1, operation of the underground and elevated stations and guideway would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials within 0.25 mile of schools (refer to Section 8.2.9). None of these substances would be acutely hazardous.

As mandated by PM HAZ-1, cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage, and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions. Therefore, impacts associated with handling hazardous materials within 0.25 mile of an existing school under Alternative 4 would be less than significant.

8.3.3.2 Construction Impacts

Construction of Alternative 4 would involve handling of hazardous materials and operation of diesel-powered equipment within 0.25 mile of schools (refer to Section 8.2.9). Such activities, if not appropriately managed, could result in hazardous emissions that would potentially affect nearby schools.

As described throughout Section 3, there is an established, comprehensive federal, state, regional, and local framework independent of the CEQA process that is intended to reduce the risks associated with handling of hazardous materials, including transport, use, storage, and disposal. The use and disposal of hazardous materials is heavily regulated at both the federal and state level; these regulations are declared and enforced by agencies such as the EPA, the SWRCB and DTSC, Cal/OSHA, and the SCAQMD. By implementing the SWPPP and associated BMPs, as mandated by the SWRCB Construction General Permit and described in PM HAZ-2, construction-related hazardous substances, such as oil and greases, would be managed through appropriate material handling and BMP. In addition, transportation of hazardous materials would comply with state regulations governing hazardous materials transport included in the California Vehicle Code (Title 13 of the CCR), the State Fire Marshal Regulations (Title 19 of the CCR), and Title 22 of the CCR. Cooperation with the corridor cities would occur throughout the construction process. Restrictions on haul routes can be incorporated into the construction specifications according to local permitting requirements, as set forth in PM HAZ-2.

Adherence to federal and state regulations reduces the risk of exposure to hazardous materials used during construction. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a faster, more coordinated response to emergencies. By adhering to existing regulations, construction of Alternative 4 would have less than significant

impacts associated with the transportation, use, storage, and handling of acutely hazardous materials within 0.25 mile of an existing school.

8.3.3.3 Maintenance and Storage Facilities

The MSF is not located within 0.25 mile of a school. Therefore, the MSF would have no impact related to emissions of hazardous materials within 0.25 mile of a school.

8.3.4 Impact HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

8.3.4.1 Operational Impacts

Alternative 4 includes 48 LUST sites that are identified on the Cortese List. These sites are identified in Table B-3 and on Figure 8-11 and Figure 8-12. All 48 LUST sites have a case closed status. The status of the LUST cases reported as "case closed" indicates that remedial action is completed, or was deemed unnecessary, by the local regulatory agency. Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the proposed Project site. In addition, during operations, no ground-disturbing activities would occur at the Cortese-listed hazardous materials sites such that hazardous releases of contaminated soils could create a significant hazard to the public or the environment. Alternative 4 is located on a site that is included on one or more hazardous materials lists compiled in accordance with Government Code Section 65962.5. With adherence to existing regulations, operation of the Alternative 4 would not create or result in a significant hazard to people or the environment, and Alternative 4 during operation would result in a less than significant impact.

8.3.4.2 Construction Impacts

Alternative 4 includes 48 LUST sites that are identified on the Cortese list as having confirmed releases of hazardous materials, including petroleum hydrocarbons, VOCs, and metals to soil and groundwater. These sites are identified in Table B-3 and on Figure 8-11 and Figure 8-12. The LUST sites have been remediated and are classified as "Closed" by the regulatory agency, which signifies that they have been remediated to the satisfaction of the agency with oversight. Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the project site. Alternative 4 is located on a site that is included on one or more hazardous materials lists compiled in accordance with Government Code Section 65962.5. With adherence to existing regulations, Alternative 4 would not create or result in a significant hazard to people or the environment, and the Alternative 4 would result in a less than significant impact.

8.3.4.3 Maintenance and Storage Facility

The hazardous site conditions for the MSF related to Government Code Section 65962.5, commonly known as the Cortese list, are associated with contaminated soils, and these sites are listed as "Closed," which signifies that they have been remediated to the satisfaction of the agency with oversight (refer to Section 8.3.4.2). Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the project site. With adherence to existing regulations, MSF would not create or result in a significant hazard to people or the environment, and the MSF would result in a less than significant impact.

8.3.5 Impact HAZ-5: 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?

8.3.5.1 Operational Impacts

Alternative 4 is 1.3 mile from the Van Nuys Airport and 1.2 miles from the Santa Monica Municipal Airport. The *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport implements relevant policies and guidelines for land-use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA, airport safety zones, and noise impact zones. These plans also address airport land-use compatibility concerns regarding exposure to aircraft noise, land use safety with respect both to people and property on the ground and the occupants of the aircraft, protection of airport airspace, and general concerns related to aircraft overflights. According to the *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport, during operation Alternative 4 is located outside the AIA for both airports (Figure 8-15). Alternative 4 during operation is not located within the safety zone or the noise impact zone for the airports. (DCP, 2006; LA County Planning, 1991; ALUC, 2003a, 2003b, 2023).

Alternative 4 would not interfere with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval. The Alternative 4 is not within the AIA, Safety Zones, and Noise Impact Zones. Adherence to existing local, state, and federal regulations would ensure that during operation of the Alternative 4, impacts associated with potential aviation hazards would be less than significant.

8.3.5.2 Construction Impacts

Alternative 4 is 1.3 mile from the Van Nuys Airport and 1.2 miles from the Santa Monica Municipal Airport. The *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport implements relevant policies and guidelines for land-use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA, airport safety zones, and noise impact zones. These plans also address airport land-use compatibility concerns regarding exposure to aircraft noise, land use safety with respect both to people and property on the ground and the occupants of the aircraft, protection of airport airspace, and general concerns related to aircraft overflights. According to the *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport, staging area for Alternative 4 would be located within the Van Nuys Airport AIA. During construction, a 55-acre temporary staging area would potentially be located north of the Van Nuys Airport, north of Roscoe Boulevard, and within the AIA and a 7-acre temporary staging area would potentially be located north of the Santa Monica Airport runway and within the AIA (Figure 8-15). Staging areas are used principally for the operation of contractors' equipment, receipt of deliveries and storage of materials, site offices as well as other construction activities such as maintenance, parking, and removal of spoils. There would be no other construction equipment or activities that could penetrate the Airspace Protection Zone or create or cause visual, electronic, or wildlife hazards. There are no safety compatibility policies related to temporary construction staging.

Alternative 4 would not interfere with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for

project approval. Construction activities would be temporary. Adherence to existing local, state, and federal regulations would ensure that during construction of Alternative 4, impacts associated with potential aviation hazards remain less than significant.

8.3.5.3 Maintenance and Storage Facility

The MSF is approximately 2.6 miles from the Van Nuys Airport. The MSF is not located within the AIA, Safety Zones, and Noise Impact Zones. With adherence to existing federal, state and local regulations, the MSF would not result in a safety hazard or excessive noise related airports during operation and the impact would be less than significant.

8.4 Project Measures and Mitigation Measures

8.4.1 Operational Impacts

8.4.1.1 Project Measures

The following PMs are design features, BMPs, or other measures required by law and/or permit approvals. These measures are components of the Project and are applicable to Alternative 4.

PM HAZ-1: *Operational (post Project) BMPs shall be implemented by the Project and include but not be limited to:*

- *Cleaning and maintenance products shall be required to be labeled with appropriate cautions and instructions for handling, storage, and disposal. Staff shall be trained and required to use, store, and dispose of these materials properly in accordance with label directions.*
- *If the quantity of hazardous materials used, handled, or stored on-site at the maintenance and storage facility exceeds the regulatory thresholds of 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance per Chapter 6.95 of the California Health and Safety Code, the Project shall prepare a Hazardous Materials Business Plan in accordance with all related requirements of the California Health and Safety Code (Chapter 6.95, Articles 1 and 2). The plan shall be reviewed and recertified every year and amended as required by the California Health and Safety Code (Chapter 6.95, Articles 1 and 2).*
- *Storage and disposal of hazardous materials and waste shall be conducted in accordance with all applicable federal and state regulatory requirements, such as the Resource Conservation and Recovery Act; the Comprehensive Environmental Response, Compensation, and Liability Act; the Hazardous Materials Release Response Plans and Inventory Law; and the Hazardous Waste Control Act, and if a spill does occur, it shall be remediated in accordance with all applicable federal and state regulatory requirements and in coordination with the Department of Toxic Substances Control and/or Los Angeles Regional Water Quality Control Board.*
- *Compliance with applicable Los Angeles County and City of Los Angeles requirements pertaining to emergency vehicle access as well as the California Building Code and California Fire Code standards shall ensure that sufficient ingress and egress routes are maintained and provided to the new stations.*

8.4.1.2 Mitigation Measures

No mitigation measures are required.

8.4.2 Construction Impacts

8.4.2.1 Project Measures

The following project measures are design features, BMPs, or other measures required by law and/or permit approvals. These measures are components of the Project and are applicable to Alternative 4.

PM HAZ-2: *Construction BMPs shall include but not be limited to:*

- *The Project shall be required to obtain permits before construction begins and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases in accordance with the U.S. Environmental Protection Agency, State Water Resources Control Board, Department of Toxic Substances Control, California Division of Occupational Safety and Health, and the South Coast Air Quality Management District.*
- *The Project shall develop a Stormwater Pollution Prevention Plan in accordance with the State Water Resources Control Board's Construction Clean Water Act Section 402 General Permit conditions, and subject to regular inspections by applicable jurisdiction(s) to ensure compliance. The Stormwater Pollution Prevention Plan shall include specifications for, but not be limited to, the following:*
  - *Maintain proper working conditions for vehicles and equipment to minimize potential fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials.*
  - *Conduct servicing, refueling, and staging of construction equipment only at designated areas where a spill would not flow to drainages. Conduct equipment washing, if needed, only in designated locations where water would not flow into drainage channels.*
  - *Implement drainage best management practices to protect water quality (such as oil/water separators, catch basin inserts, storm drain inserts, media filtration, and catch basin screens).*
  - *Report hazardous spills to the designated Certified Unified Program Agency (i.e., Los Angeles County Fire Department Health Hazardous Materials Division or Santa Fe Springs Department of Fire and Rescue) and implement clean up immediately and proper disposal of contaminated soil at a licensed facility.*
  - *Establish properly designed, centralized storage areas to keep hazardous materials fully contained.*
  - *Keep spill cleanup materials (e.g., rags, absorbent materials, and secondary containment) properly stored and maintained at the work site when handling materials.*

  - *Implement monitoring program by the construction site supervisor that includes both dry and wet weather inspections.*

- *Transportation of hazardous materials by the Project shall comply with state regulations governing hazardous materials transport included in the California Vehicle Code (Title 13 of the California Code of Regulations), the State Fire Marshal Regulations (Title 19 of the California Code of Regulations), and Title 22 of the California Code of Regulations. These regulations include the following:*
  - *Require all motor carrier transporters of hazardous materials to have a Hazardous Materials Transportation license issued by the California Highway Patrol.*
  - *Require the transport of hazardous materials via routes with the least overall travel time.*
  - *Prohibit the transport of hazardous materials through residential neighborhoods.*
  - *Require transporters to take immediate action to protect human health and the environment in the event of spill, release, or mishap.*
  - *Incorporate restrictions on haul routes into the construction specifications according to local permitting requirements.*
- *Contaminated soils and hazardous building materials and wastes shall be disposed of in accordance with federal, state, and local requirements at landfills serving Los Angeles County. The removal and disposal of hazardous building materials shall be the responsibility of a California Division of Occupational Safety and Health-certified contractor in accordance with South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities).*
- *Traffic control during construction shall follow local jurisdiction guidelines. For specialized construction tasks, it may be necessary to work during nighttime hours to minimize traffic disruptions.*

PM HAZ-3: *Construction best management practices for activities within methane hazard zones, including tunneling operations and underground station construction shall include, but not be limited to, the following:*

- *Pursuant to Section 91.7104.1 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619), site testing of subsurface geological formations shall be conducted by a Project-approved testing agency under the supervision of a licensed architect or registered engineer or geologist. Testing shall address, but necessarily be limited to, methane concentrations and surface conditions along tunneling routes and at underground stations locations. The licensed architect or registered engineer or geologist shall indicate the testing instruments used and testing procedure followed. The testing procedure shall meet the Methane Mitigation Standards established by the Superintendent of Building.*

- *All paving work, building construction, tunneling and underground station construction within the methane zone or methane buffer zone as defined by Los Angeles Department of Building and Safety shall be required to comply with Methane Mitigation Standards established by the Superintendent of Building as well as the requirements outlined in Sections 91.7103 and 91.7104 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619).*
- *All building and underground structures, including tunneling and stations, located in the Methane Zone shall provide a methane mitigation system as required by Los Angeles Municipal Code Table 71 in Section 91.7104.2 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619) based on the appropriate Site Design Level. The Superintendent of Building may approve an equivalent methane mitigation system designed by an architect, engineer, or geologist.*

PM HAZ-4: *Construction best management practices for demolition of existing structures shall include, but shall not be limited to, the following:*

- *Both the federal Occupational Safety and Health Administration and California Division of Occupational Safety and Health regulate worker exposure during construction activities that disturb lead-based paint. Any asbestos-containing materials, if present, shall require appropriate abatement of identified asbestos prior to demolition pursuant to South Coast Air Quality Management District Rule 1403.*
- *Polychlorinated biphenyls (PCB)-containing fluorescent light fixtures and electrical transformers that are not labeled "No PCBs" shall be assumed to contain polychlorinated biphenyls and shall be removed prior to demolition activities and shall be disposed of by a licensed and certified polychlorinated biphenyls removal contractor, in accordance with local, state, and federal regulations. The removal and disposal of the electrical transformers shall be the responsibility of the utility owner in accordance with all standards and practices.*

PM HAZ-5: *Construction best management practices for the areas with known or previously undiscovered hazardous materials shall include, but not be limited to, the following:*

- *The Project shall hire a qualified professional to sample soil suspected of contamination (obvious signs of contamination include indicators such as odors, stains, or other suspect materials) for the purpose of classifying material and determining disposal requirements before construction begins. If excavated soil is suspected or known to be contaminated, the Project shall:*
  - *Segregate and stockpile the excavated material in a way that shall facilitate measurement of the stockpile volume.*
  - *Spray the stockpile with water or a South Coast Air Quality Management District-approved vapor suppressant and cover the stockpile with a heavy-duty plastic (i.e., Visqueen) to prevent soil volatilization in the atmosphere or exposure to nearby workers per South Coast Air Quality Management District Rule 1166.*

- *Existing groundwater monitoring wells shall remain under ongoing groundwater investigations associated with off-site sources.*

8.4.2.2 Mitigation Measures

MM HAZ-1: ***Phase II Environmental Site Assessment.*** *Prior to the issuance of a grading permit and before any substantial ground disturbance occurs on or near the properties with documented releases, the Project shall hire a qualified environmental professional to conduct a Phase II Environmental Site Assessment (ESA) to determine the potential presence of petroleum hydrocarbons, metals, and volatile organic compounds in soil and/or groundwater.*

- *If the Phase I ESA identifies any recognized environmental conditions or other indicators of potential contamination, a Phase II ESA shall be conducted. The Phase II Environmental Site Assessment shall include sufficient soil and groundwater sampling and laboratory analysis to identify the types of chemicals and their respective concentrations. The Phase II Environmental Site Assessment shall compare soil and groundwater sampling results against applicable environmental screening levels developed by the Los Angeles Regional Water Quality Control Board and/or Department of Toxic Substances Control. If the Phase II Environmental Site Assessment identifies contaminant concentrations above the screening levels, a site-specific Soil and Groundwater Management Plan shall be prepared and implemented as described in MM HAZ-2. The Project shall consult with the Department of Toxic Substances Control, California Environmental Protection Agency, and/or other appropriate regulatory agencies to ensure sufficient minimization of risk to human health and the environment is completed.*

MM HAZ-2: ***Soil and Groundwater Management Plan.*** *Prior to the issuance of a grading permit, a site-specific Soil and Groundwater Management Plan shall be prepared by a qualified professional environmental contractor to address handling and disposal of contaminated soil and groundwater prior to demolition, excavation, and construction activities.*

- *The Project shall implement the Soil and Groundwater Management Plan during construction activities. The Soil and Groundwater Management Plan shall specify all necessary procedures to ensure the safe handling and disposing of excavated soil, groundwater, and/or dewatering effluent in a manner that is protective of human health and in accordance with federal and state hazardous waste disposal laws, and with state and local stormwater and sanitary sewer requirements. At a minimum, the plan shall include the following:*
  - *Identification and delineation of contaminated areas and procedures for limiting access to such areas to properly trained personnel.*
  - *Step-by-step procedures for handling, excavating, characterizing, and managing excavated soils and dewatering effluent, including procedures for containing, handling, and disposing of hazardous waste; procedures for containing, handling, and disposing of groundwater generated from construction dewatering; the method used to analyze excavated materials*

and groundwater for hazardous materials likely to be encountered at specific locations; appropriate treatment and/or disposal methods. Removal of soil and materials shall be performed by a licensed engineering contractor with a Class A license and hazardous-substance removal certification.

- *Requirements to water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, and staging.*
- *Requirements to cover or maintain at least 2 feet of free board space on haul trucks transporting soil or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.*
- *Requirements to use wet power vacuum street sweepers to remove any visible track out mud or dirt onto adjacent public roads at least once a day. Use of dry powered sweeping is prohibited.*
- *Procedures for handling volatile organic compound-contaminated soil, including, but not limited to, segregating volatile organic compound-contaminated stockpiles from non-volatile organic compound-contaminated stockpiles, spraying volatile organic compound-contaminated soil stockpiles with water and/or approved vapor suppressant and covering them with plastic sheeting for all periods of inactivity lasting more than 1 hour, conducting a daily visual inspection of all covered volatile organic compound-contaminated soil stockpiles to ensure the integrity of the plastic covered surfaces, and removing contaminated soil from an excavation or grading site within 30 days from the time of excavation to a licensed facility.*
- *Procedures for notification and reporting, including notifying and reporting to internal management and to local agencies.*
- *Minimum requirements for site-specific Health and Safety Plans to protect the general public and workers in the construction area. Prior to the issuance of grading permits, the Soil and Groundwater Management Plan and the results of environmental sampling shall be provided to contractors who shall be responsible for developing their own construction worker Health and Safety Plan and training requirements, per MM HAZ-4.*
- *The Project shall hire a qualified environmental professional to sample groundwater suspected of contamination. If any suspected groundwater contamination is encountered during construction, the contractor shall stop work in the vicinity, cordon off the area, and contact Los Angeles County Metropolitan Transportation Authority who shall immediately notify the Regional Water Quality Control Board. In coordination with the Regional Water Quality Control Board, an investigation and remediation plan shall be developed by a qualified environmental professional in order to protect public health and the environment. Any hazardous or toxic materials shall be disposed of according to local, state, and federal regulations.*

- *Trucking operations shall comply with Caltrans and any other applicable regulations, and all trucks shall be licensed and permitted to carry the appropriate waste classification. The tracking of dirt by trucks leaving the project site shall be minimized by cleaning the wheels upon exit and cleaning the loading zone and exit area as needed.*

MM HAZ-3: ***Contractor Specifications.*** *The Project shall include in its contractor specifications the following requirement relating to hazardous materials:*

- *During all ground-disturbing activities, the contractor(s) shall inspect the exposed soil and groundwater for obvious signs of contamination, such as odors, stains, or other suspect materials. Qualified personnel shall monitor for volatile organic compounds and other subsurface gases for concentrations exceeding South Coast Air Quality Management District levels with a Photoionization Detector. Should signs of unanticipated contamination be encountered, work shall be suspended, and the Los Angeles County Department of Public Health shall be notified, and the area secured. Contaminated soil and/or groundwater shall be segregated and characterized, and a site-specific Soil and Groundwater Management Plan, as described under MM HAZ-2, shall be prepared and implemented.*

MM HAZ-4: ***Worker Health and Safety Plan.*** *The contractor shall prepare site-specific Worker Health and Safety Plan to protect the general public and workers in the construction area. The Health and Safety Plan shall be prepared in accordance with California and federal Occupational Safety and Health Administration regulations. Copies of the Health and Safety Plan shall be made available to construction workers for review during their orientation and/or regular health and safety meetings. The Health and Safety Plan shall identify chemicals of concern, potential hazards, worker training requirements, personal protective equipment and devices, decontamination procedures, the need for personal or area monitoring, and emergency response procedures. The Health and Safety Plan shall be amended, as necessary, if new information becomes available that could affect implementation of the plan.*

MM HAZ-5: ***Hazardous Building Survey and Abatement.*** *Prior to demolition activities of any structures, the Project shall retain a California Division of Occupational Safety and Health-certified contractor to determine the presence or absence of building materials or equipment that contains hazardous materials, including asbestos, lead-based paint, and polychlorinated biphenyls-containing equipment. If such substances are found to be present, the contractor shall prepare and submit a workplan to the relevant oversight agency to demonstrate how these hazardous materials would be properly removed and disposed of in accordance with federal and state law, including South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities). The removal and disposal of hazardous building materials shall be the responsibility of a California Division of Occupational Safety and Health-certified contractor. Following completion of removal activities, the Project shall submit documentation to the relevant oversight agency verifying that all hazardous materials were properly removed and disposed of.*

8.4.3 Impacts After Mitigation

Implementation of MM HAZ-1 through MM HAZ-5 would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling hazardous materials, and would minimize potential exposure of construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as ACM, LBP, or PCBs during demolition activities; thus, impacts would be reduced to less than significant.

9 ALTERNATIVE 5

9.1 Alternative Description

Alternative 5 consists of a heavy rail transit (HRT) system with a primarily underground guideway track configuration, including seven underground stations and one aerial station. This alternative would include five transfers to high-frequency fixed guideway transit and commuter rail lines, including the Los Angeles County Metropolitan Transportation Authority's (Metro) E, Metro D, and Metro G Lines, East San Fernando Valley Light Rail Transit Line, and the Metrolink Ventura County Line. The length of the alignment between the terminus stations would be approximately 13.8 miles, with 0.7 miles of aerial guideway and 13.1 miles of underground configuration.

The seven underground and one aerial HRT stations would be as follows:

1. Metro E Line Expo/Sepulveda Station (underground)
2. Santa Monica Boulevard Station (underground)
3. Wilshire Boulevard/Metro D Line Station (underground)
4. UCLA Gateway Plaza Station (underground)
5. Ventura Boulevard/Sepulveda Boulevard Station (underground)
6. Metro G Line Sepulveda Station (underground)
7. Sherman Way Station (underground)
8. Van Nuys Metrolink Station (aerial)

9.1.1 Operating Characteristics

9.1.1.1 Alignment

As shown on Figure 9-1, from its southern terminus station at the Metro E Line Expo/Sepulveda Station, the alignment of Alternative 5 would run underground north through the Westside of Los Angeles (Westside), the Santa Monica Mountains, and the San Fernando Valley (Valley) to a tunnel portal east of Sepulveda Boulevard and south of Raymer Street. As it approaches the tunnel portal, the alignment would curve eastward and begin to transition to an aerial guideway along the south side of the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor that would continue to the northern terminus station adjacent to the Van Nuys Metrolink/Amtrak Station.

The proposed southern terminus station would be located underground east of Sepulveda Boulevard, between the existing elevated Metro E Line tracks and Pico Boulevard. Tail tracks for vehicle storage would extend underground south of National Boulevard, east of Sepulveda Boulevard. The alignment would continue north beneath Bentley Avenue before curving northwest to an underground station at the southeast corner of Santa Monica Boulevard and Sepulveda Boulevard. From the Santa Monica Boulevard Station, the alignment would continue and curve eastward to the Wilshire Boulevard/Metro D Line Station beneath the Metro D Line Westwood/UCLA Station, which is currently under construction as part of the Metro D Line Extension Project. From there, the underground alignment would curve slightly to the northeast and continue beneath Westwood Boulevard before reaching the UCLA Gateway Plaza Station.

Figure 9-1. Alternative 5: Alignment



Source: STCP, 2024; HTA, 2024

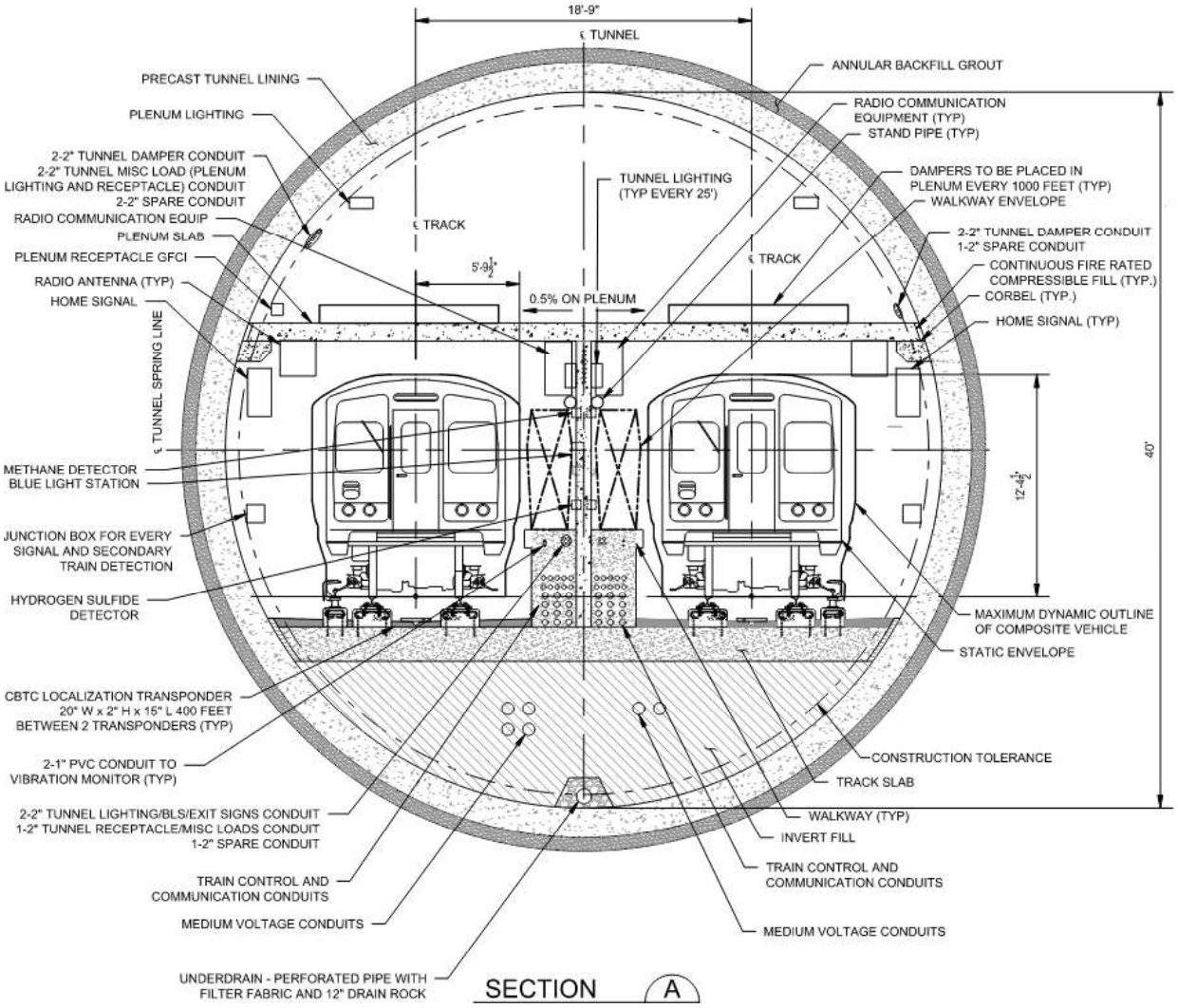
From the UCLA Gateway Plaza Station, the alignment would turn to the northwest beneath the Santa Monica Mountains, to the east of Interstate 405 (I-405). South of Mulholland Drive, the alignment would curve to the north, aligning with Saugus Avenue south of Valley Vista Boulevard. The Ventura Boulevard Station would be located under Saugus Avenue, between Greenleaf Street and Dickens Street. The alignment would then continue north beneath Sepulveda Boulevard to the Metro G Line Sepulveda Station, immediately south of the Metro G Line Busway. After leaving the Metro G Line Sepulveda

Station, the alignment would continue beneath Sepulveda Boulevard to reach the Sherman Way Station, the final underground station along the alignment, immediately south of Sherman Way. From the Sherman Way Station, the alignment would continue north before curving slightly to the northeast to the tunnel portal south of Raymer Street. The alignment would then transition from an underground configuration to an aerial guideway structure after exiting the tunnel portal. East of the tunnel portal, the alignment would transition to a cut-and-cover U-structure segment followed by a trench segment before transitioning to an aerial guideway that would run east along the south side of the LOSSAN rail corridor. Parallel to the LOSSAN rail corridor, the guideway would conflict with the existing Willis Avenue Pedestrian Bridge, which would be demolished. The alignment would follow the LOSSAN rail corridor before reaching the proposed northern terminus Van Nuys Metrolink Station located adjacent to the existing Metrolink/Amtrak Station. The tail tracks and yard lead tracks would descend to the proposed at-grade maintenance and storage facility (MSF) east of the proposed northern terminus station. Modifications to the existing pedestrian underpass to the Metrolink platforms to accommodate these tracks would result in reconfiguration of an existing rail spur serving City of Los Angeles Department of Water and Power (LADWP) property.

9.1.1.2 Guideway Characteristics

For underground sections, Alternative 5 would utilize a single-bore tunnel configuration with an outside diameter of approximately 43.5 feet. The tunnel would include two parallel tracks at 18.75-foot spacing in tangent sections separated by a continuous central dividing wall throughout the tunnel. Inner walkways would be constructed adjacent to the two tracks. Inner and outer walkways would be constructed within tunnel sections near the track crossovers. At the crown of tunnel, a dedicated air plenum would be provided by constructing a concrete slab above the railway corridor. The air plenum would allow for ventilation throughout the underground portion of the alignment. Figure 9-2 illustrates these components at a typical cross-section of the underground guideway.

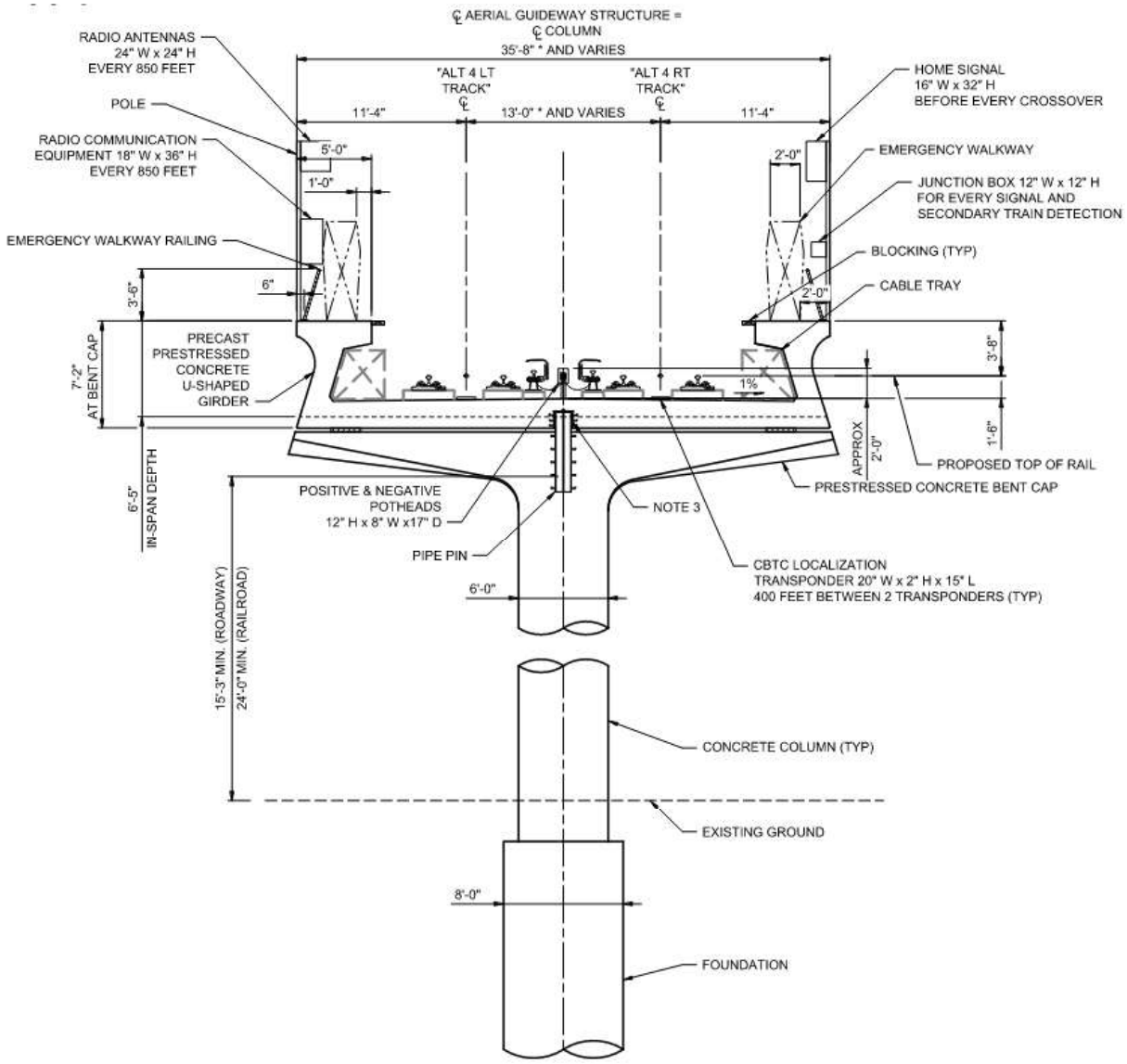
Figure 9-2. Typical Underground Guideway Cross-Section



Source: STCP, 2024

In aerial sections adjacent to Raymer Street and the LOSSAN rail corridor, the guideway would consist of single-column spans. The single-column spans would include a U-shaped concrete girder structure that supports the railway track atop a series of individual columns. The single-column aerial guideway would be approximately 36 feet wide. The track would be constructed on the concrete girders with direct fixation and would maintain a minimum of 13 feet between the two-track centerlines. On the outer side of the tracks, emergency walkways would be constructed with a minimum width of 2 feet. The single-column aerial guideway would be the primary aerial structure throughout the aerial portion of the alignment. Figure 9-3 shows a typical cross-section of the single-column aerial guideway.

Figure 9-3. Typical Aerial Guideway Cross-Section



Source: STCP, 2024

9.1.1.3 Vehicle Technology

Alternative 5 would utilize steel-wheel HRT trains, with automated train operations and planned peak-period headways of 2.5 minutes and off-peak-period headways ranging from 4 to 6 minutes. Each train could consist of three or four cars with open gangways between cars. The HRT vehicle would have a maximum operating speed of 70 miles per hour; actual operating speeds would depend on the design of the guideway and distance between stations. Train cars would be approximately 10 feet wide, with three double doors on each side. Each car would be approximately 72 feet long, with capacity for 170 passengers. Trains would be powered by a third rail.

9.1.1.4 Stations

Alternative 5 would include seven underground stations and one aerial station with station platforms measuring 280 feet long for both station configurations. The aerial station would be constructed a minimum of 15.25 feet above ground level, supported by rows of dual columns with 8-foot diameters. The southern terminus station would be adjacent to the Metro E Line Expo/Sepulveda Station, and the northern terminus station would be adjacent to the Van Nuys Metrolink/Amtrak Station.

All stations would be side-platform stations where passengers would select and travel up to station platforms depending on their direction of travel. All stations would include 20-foot-wide side platforms separated by 30 feet for side-by-side trains. Each underground station would include an upper and lower concourse level prior to reaching the train platforms. The Van Nuys Metrolink Station would include a mezzanine level prior to reaching the station platforms. Each station would have a minimum of two elevators, two escalators, and one stairway from ground level to the concourse or mezzanine.

Stations would include automatic, bi-parting fixed doors along the edges of station platforms. These platform screen doors would be integrated into the automatic train control system and would not open unless a train is stopped at the platform.

The following information describes each station, with relevant entrance, walkway, and transfer information. Bicycle parking would be provided at each station.

Metro E Line Expo/Sepulveda Station

- This underground station would be located just north of the existing Metro E Line Expo/Sepulveda Station, on the east side of Sepulveda Boulevard.
- A station entrance would be located on the east side of Sepulveda Boulevard, north of the Metro E Line.
- A direct internal transfer to the Metro E Line would be provided at street level within the fare paid zone.
- A 126-space parking lot would be located immediately north of the station entrance, east of Sepulveda Boulevard. Passengers would also be able to park at the existing Metro E Line Expo/Sepulveda Station parking facility, which provides 260 parking spaces.

Santa Monica Boulevard Station

- This underground station would be located under the southeast corner of Santa Monica Boulevard and Sepulveda Boulevard.
- The station entrance would be located on the south side of Santa Monica Boulevard, between Sepulveda Boulevard and Bentley Avenue.
- No dedicated station parking would be provided at this station.

Wilshire Boulevard/Metro D Line Station

- This underground station would be located beneath the Metro D Line tracks and platform under Gayley Avenue, between Wilshire Boulevard and Lindbrook Drive.
- Station entrances would be provided on the northeast corner of Wilshire Boulevard and Gayley Avenue and on the northeast corner of Lindbrook Drive and Gayley Avenue. Passengers would also be able to use the Metro D Line Westwood/UCLA Station entrances to access the station platform.

- A direct internal station transfer to the Metro D Line would be provided at the south end of the station.
- No dedicated station parking would be provided at this station.

UCLA Gateway Plaza Station

- This underground station would be located underneath Gateway Plaza on the University of California, Los Angeles (UCLA) campus.
- Station entrances would be provided on the north side of Gateway Plaza and on the east side of Westwood Boulevard, across from Strathmore Place.
- No dedicated station parking would be provided at this station.

Ventura Boulevard/Sepulveda Boulevard Station

- This underground station would be located under Saugus Avenue, between Greenleaf Street and Dickens Street.
- A station entrance would be located on the southeast corner of Saugus Avenue and Dickens Street.
- Approximately 92 parking spaces would be supplied at this station west of Sepulveda Boulevard, between Dickens Street and the U.S. Highway 101 (US-101) On-Ramp.

Metro G Line Sepulveda Station

- This underground station would be located under Sepulveda Boulevard immediately south of the Metro G Line Busway.
- A station entrance would be provided on the west side of Sepulveda Boulevard south of the Metro G Line Busway.
- Passengers would be able to park at the existing Metro G Line Sepulveda Station parking facility, which has a capacity of 1,205 parking spaces. Currently, only 260 parking spaces are currently used for transit parking. No new parking would be constructed.

Sherman Way Station

- This underground station would be located below Sepulveda Boulevard, between Sherman Way and Gault Street.
- The station entrance would be located near the southwest corner of Sepulveda Boulevard and Sherman Way.
- Approximately 122 parking spaces would be supplied at this station on the west side of Sepulveda Boulevard with vehicle access from Sherman Way.

Van Nuys Metrolink Station

- This aerial station would span Van Nuys Boulevard, just south of the LOSSAN rail corridor.
- The primary station entrance would be located on the east side of Van Nuys Boulevard, just south of the LOSSAN rail corridor. A secondary station entrance would be located between Raymer Street and Van Nuys Boulevard.
- An underground pedestrian walkway would connect the station plaza to the existing pedestrian underpass to the Metrolink/Amtrak platform outside the fare paid zone.

- Existing Metrolink Station parking would be reconfigured, maintaining approximately the same number of spaces, but 66 parking spaces would be relocated west of Van Nuys Boulevard. Metrolink parking would not be available to Metro transit riders.

9.1.1.5 Station-to-Station Travel Times

Table 9-1 presents the station-to-station distance and travel times at peak period for Alternative 5. The travel times include both run time and dwell time. Dwell time is 30 seconds for transfer stations and 20 seconds for other stations. Northbound and southbound travel times vary slightly because of grade differentials and operational considerations at end-of-line stations.

Table 9-1. Alternative 5: Station-to-Station Travel Times and Station Dwell Times

From Station	To Station	Distance (miles)	Northbound Station-to-Station Travel Time (seconds)	Southbound Station-to-Station Travel Time (seconds)	Dwell Time (seconds)
Metro E Line Station					*30*
Metro E Line	Santa Monica Boulevard	0.9	89	86	—
Santa Monica Boulevard Station					*20*
Santa Monica Boulevard	Wilshire/Metro D Line	0.9	91	92	—
Wilshire/Metro D Line Station					*30*
Wilshire/Metro D Line	UCLA Gateway Plaza	0.7	75	69	—
UCLA Gateway Plaza Station					*20*
UCLA Gateway Plaza	Ventura Boulevard	6.0	368	359	—
Ventura Boulevard Station					*20*
Ventura Boulevard	Metro G Line	2.0	137	138	—
Metro G Line Station					*30*
Metro G Line	Sherman Way	1.4	113	109	—
Sherman Way Station					*20*
Sherman Way	Van Nuys Metrolink	1.9	166	162	—
Van Nuys Metrolink Station					*30*

Source: STCP, 2024

9.1.1.6 Special Trackwork

Alternative 5 would include 10 double crossovers throughout the alignment, enabling trains to cross over to the parallel track. Each terminus station would include a double crossover immediately north and south of the station. Except for the Santa Monica Boulevard Station, each station would have a double crossover immediately south of the station. The remaining crossover would be located along the alignment midway between the UCLA Gateway Plaza Station and the Ventura Boulevard Station.

9.1.1.7 Maintenance and Storage Facility

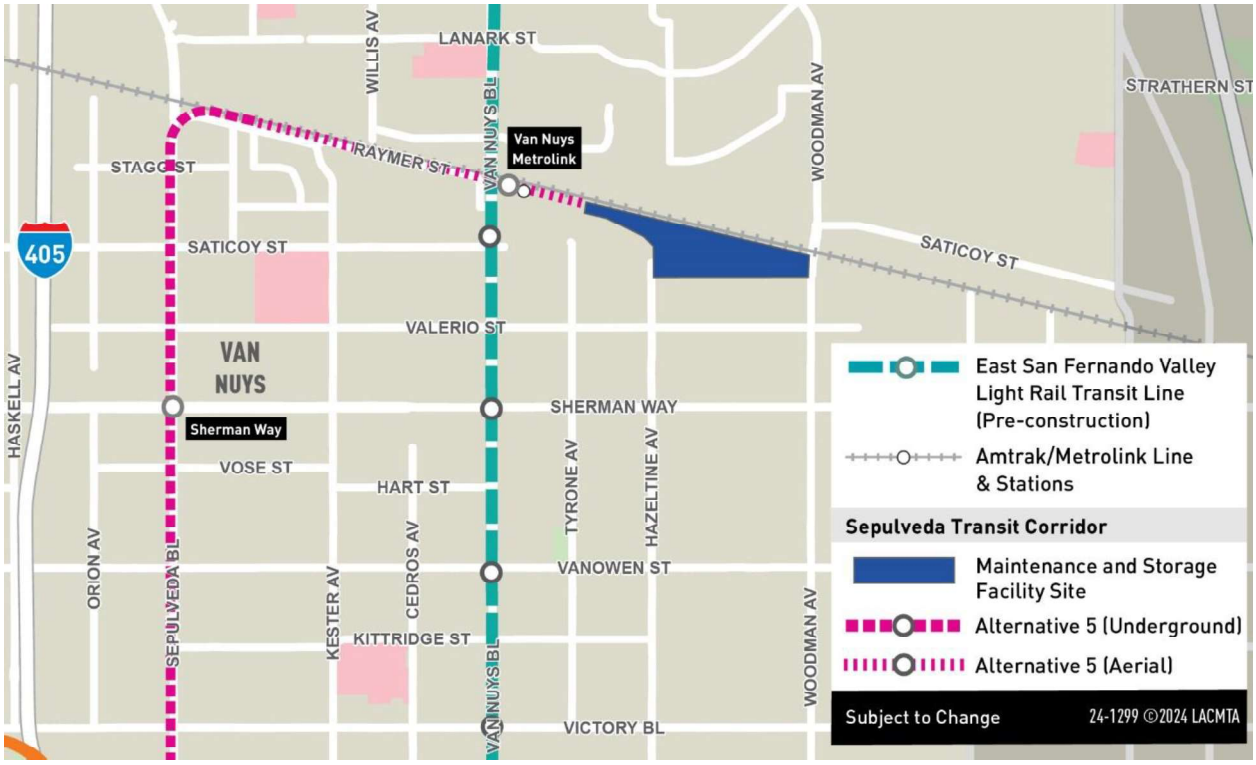
The MSF for Alternative 5 would be located east of the Van Nuys Metrolink Station and would encompass approximately 46 acres. The MSF would be designed to accommodate 184 rail cars and would be bounded by single-family residences to the south, the LOSSAN rail corridor to the north, Woodman Avenue on the east, and Hazeltine Avenue and industrial manufacturing enterprises to the west. Trains would access the site from the fixed guideway's tail tracks at the northwest corner of the site. Trains would then travel southeast to maintenance facilities and storage tracks.

The site would include the following facilities:

- Two entrance gates with guard shacks
- Main shop building
- Maintenance-of-way (MOW) building
- Storage tracks
- Carwash building
- Cleaning and inspections platforms
- Material storage building
- Hazmat storage locker
- Traction power substation (TPSS) located on the west end of the MSF to serve the mainline
- TPSS located on the east end of the MSF to serve the yard and shops
- Parking area for employees
- Grade-separated access roadway (over the HRT tracks at the east end of the facility) and necessary drainage

Figure 9-4 shows the location of the MSF site for Alternative 5.

Figure 9-4. Alternative 5: Maintenance and Storage Facility Site



Source: STCP, 2024; HTA, 2024

9.1.1.8 Traction Power Substations

TPSSs transform and convert high voltage alternating current supplied from power utility feeders into direct current suitable for transit operation. Twelve TPSS facilities would be located along the alignment and would be spaced approximately 0.5 to 2.5 miles apart. All TPSS facilities would be located within the stations, adjacent to the tunnel through the Santa Monica Mountains, or within the MSF. Table 9-2 lists the TPSS locations for Alternative 5.

Figure 9-5 shows the TPSS locations along the Alternative 5 alignment

Table 9-2. Alternative 5: Traction Power Substation Locations

TPSS No.	TPSS Location Description	Configuration
1	TPSS 1 would be located east of Sepulveda Boulevard and north of the Metro E Line.	Underground (within station)
2	TPSS 2 would be located south of Santa Monica Boulevard, between Sepulveda Boulevard and Bentley Avenue.	Underground (within station)
3	TPSS 3 would be located at the southeast corner of UCLA Gateway Plaza.	Underground (within station)
4	TPSS 4 would be located south of Bellagio Road and west of Stone Canyon Road.	Underground (adjacent to tunnel)
5	TPSS 5 would be located west of Roscomare Road, between Donella Circle and Linda Flora Drive.	Underground (adjacent to tunnel)
6	TPSS 6 would be located east of Loom Place, between Longbow Drive and Vista Haven Road.	Underground (adjacent to tunnel)
7	TPSS 7 would be located west of Sepulveda Boulevard, between the I-405 Northbound On-Ramp and Dickens Street.	Underground (within station)
8	TPSS 8 would be located west of Sepulveda Boulevard, between the Metro G Line Busway and Oxnard Street.	Underground (within station)
9	TPSS 9 would be located at the southwest corner of Sepulveda Boulevard and Sherman Way.	Underground (within station)
10	TPSS 10 would be located south of the LOSSAN rail corridor and north of Raymer Street and Kester Avenue.	At-grade
11	TPSS 11 would be located south of the LOSSAN rail corridor and east of the Van Nuys Metrolink Station.	At-grade (within MSF)
12	TPSS 12 would be located south of the LOSSAN rail corridor and east of Hazeltine Avenue.	At-grade (within MSF)

Source: STCP, 2024; HTA, 2024

Note: Sepulveda Transit Corridor Partners (STCP) has stated that Alternative 5 TPSS locations are derived from and assumed to be similar to the Alternative 4 TPSS locations.

Figure 9-5. Alternative 5: Traction Power Substation Locations



Source: STCP, 2024; HTA, 2024

9.1.1.9 Roadway Configuration Changes

Table 9-3 lists the roadway changes necessary to accommodate the guideway of Alternative 5. Figure 9-6 shows the location of the roadway changes within the Sepulveda Transit Corridor Project (Project) Study Area. In addition to the changes made to accommodate the guideway, as listed in Table 9-3, roadways and sidewalks near stations would be reconstructed, resulting in modifications to curb ramps and driveways.

Table 9-3. Alternative 5: Roadway Changes

Location	From	To	Description of Change
Raymer Street	Kester Avenue	Keswick Street	Reconstruction resulting in narrowing of width and removal of parking on the westbound side of the street to accommodate aerial guideway columns.
Cabrito Road	Raymer Street	Marson Street	Closure of Cabrito Road at the LOSSAN rail corridor at-grade crossing. A new segment of Cabrito Road would be constructed from Noble Avenue and Marson Street to provide access to extra space storage from the north.

Source: STCP, 2024; HTA, 2024

Figure 9-6. Alternative 5: Roadway Changes



Source: STCP, 2024; HTA, 2024

9.1.1.10 Ventilation Facilities

For ventilation, a plenum within the crown of the tunnel would provide a separate compartment for air circulation and allow multiple trains to operate between stations. Each underground station would include a fan room with additional ventilation facilities. Alternative 5 would also include a stand-alone ventilation facility at the tunnel portal on the northern end of the tunnel segment, located east of Sepulveda Boulevard and south of Raymer Street. Within this facility, ventilation fan rooms would

provide both emergency ventilation, in case of a tunnel fire, and regular ventilation, during non-revenue hours. The facility would also house sump pump rooms to collect water from various sources, including storm water; wash-water (from tunnel cleaning); and water from a fire-fighting incident, system testing, or pipe leaks.

9.1.1.11 Fire/Life Safety – Emergency Egress

Within the tunnel segment, emergency walkways would be provided between the center dividing wall and each track. Sliding doors would be located in the central dividing wall at required intervals to connect the two sides of the railway with a continuous walkway to allow for safe egress to a point of safety (typically at a station) during an emergency. Similarly, the aerial guideway near the LOSSAN rail corridor would include two emergency walkways with safety railing located on the outer side of the tracks. Access to tunnel segments for first responders would be through stations and the portal.

9.1.2 Construction Activities

Temporary construction activities for Alternative 5 would include project work zones at permanent facility locations, construction staging and laydown areas, and construction office areas. Construction of the transit facilities through substantial completion is expected to have a duration of 8 ¼ years. Early works, such as site preparation, demolition, and utility relocation, could start in advance of construction of the transit facilities.

For the guideway, Alternative 5 would consist of a single-bore tunnel through the Westside, Valley, and Santa Monica Mountains. The tunnel would comprise three separate segments, one running north from the southern terminus to the UCLA Gateway Plaza Station (Westside segment), one running south from the Ventura Boulevard Station to the UCLA Gateway Plaza Station (Santa Monica Mountains segment), and one running north from the Ventura Boulevard Station to the portal near Raymer Street (Valley segment). Tunnel boring machines (TBMs) with approximately 45-foot-diameter cutting faces would be used to construct the tunnel segments underground. For the Westside segment, the TBM would be launched from Staging Area No. 1 in Table 9-4 at Sepulveda Boulevard and National Boulevard. For the Santa Monica Mountains segment, the TBMs would be launched from the Ventura Boulevard Station. Both TBMs would be extracted from the UCLA Gateway Plaza Station Staging Area No. 3 in Table 9-4. For the Valley segment, the TBM would be launched from Staging Area No. 8, as shown in Table 9-4, and extracted from the Ventura Boulevard Station. Figure 9-7 shows the location of construction staging locations along the Alternative 5 alignment.

Table 9-4. Alternative 5: On-Site Construction Staging Locations

No.	Location Description
1	Commercial properties on southeast corner of Sepulveda Boulevard and National Boulevard
2	North side of Wilshire Boulevard between Veteran Avenue and Gayley Avenue
3	UCLA Gateway Plaza
4	Commercial property on southwest corner of Sepulveda Boulevard and Dickens Street
5	West of Sepulveda Boulevard between US-101 and Sherman Oaks Castle Park
6	Lot behind Los Angeles Fire Department Station 88
7	Property on the west side of Sepulveda Boulevard between Sherman Way and Gault Street
8	Industrial property on both sides of Raymer Street, west of Burnet Avenue
9	South of the LOSSAN rail corridor east of Van Nuys Metrolink Station, west of Woodman Avenue

Source: STCP, 2024; HTA, 2024

Figure 9-7. Alternative 5: On-Site Construction Staging Locations



Source: STCP, 2024; HTA, 2024

The distance from the surface to the top of the tunnel for the Westside tunnel would vary from approximately 40 feet to 90 feet depending on the depth needed to construct the underground stations. The depth of the Santa Monica Mountains tunnel segment varies greatly from approximately 470 feet as it passes under the Santa Monica Mountains to 50 feet near UCLA. The depth of the Valley segment would vary from approximately 40 feet near the Ventura Boulevard/Sepulveda Station and north of the Metro G Line Sepulveda Station to 150 feet near Weddington Street. The tunnel segments through the Westside and Valley would be excavated in soft ground while the tunnel through the Santa Monica Mountains would be excavated primarily in hard ground or rock as geotechnical conditions transition from soft to hard ground near the UCLA Gateway Plaza Station.

Construction work zones would also be co-located with future MSF and station locations. All work zones would comprise the permanent facility footprint with additional temporary construction easements from adjoining properties.

All underground stations would be constructed using a “cut-and-cover” method, whereby the underground station structure would be constructed within a trench excavated from the surface with a portion or all being covered by a temporary deck and backfilled during the later stages of station construction. Traffic and pedestrian detours would be necessary during underground station excavation until decking is in place and the appropriate safety measures are taken to resume cross traffic.

In addition to work zones, Alternative 5 would include construction staging and laydown areas at multiple locations along the alignment as well as off-site staging areas. Construction staging areas would provide the necessary space for the following activities:

- Contractors’ equipment
- Receiving deliveries
- Testing of soils for minerals or hazards
- Storing materials
- Site offices
- Work zone for excavation
- Other construction activities (including parking and change facilities for workers, location of construction office trailers, storage, staging, and delivery of construction materials and permanent plant equipment, and maintenance of construction equipment).

A larger, off-site staging area would be used for temporary storage of excavated material from both tunneling and station cut-and-cover excavation activities. Table 9-4 and Figure 9-7 present the potential construction staging areas along the alignment for Alternative 5. Table 9-5 and Figure 9-8 present candidate sites for off-site staging and laydown areas.

Table 9-5. Alternative 5: Potential Off-Site Construction Staging Locations

No.	Location Description
S1	East of Santa Monica Airport Runway
S2	Ralph's Parking Lot in Westwood Village
N1	West of Sepulveda Basin Sports Complex, south of the Los Angeles River
N2	West of Sepulveda Basin Sports Complex, north of the Los Angeles River
N3	Metro G Line Sepulveda Station Park & Ride Lot
N4	North of Roscoe Boulevard and Hayvenhurst Avenue
N5	LADWP property south of the LOSSAN rail corridor, east of Van Nuys Metrolink Station

Source: STCP, 2024; HTA, 2024

Figure 9-8. Alternative 5: Potential Off-Site Construction Staging Locations



Source: STCP, 2024; HTA, 2024

Construction of the HRT guideway between the Van Nuys Metrolink Station and the MSF would require reconfiguration of an existing rail spur serving LADWP property. The new location of the rail spur would require modification to the existing pedestrian undercrossing at the Van Nuys Metrolink Station.

Alternative 5 would require construction of a concrete casting facility for tunnel lining segments because no existing commercial fabricator capable of producing tunnel lining segments for a large-diameter tunnel exists within a practical distance of the Project Study Area. The site of the MSF would initially be

used for this casting facility. The casting facility would include casting beds and associated casting equipment, storage areas for cement and aggregate, and a field quality control facility, which would need to be constructed on-site. When a more detailed design of the facility is completed, the contractor would obtain all permits and approvals necessary from the City of Los Angeles, the South Coast Air Quality Management District, and other regulatory entities.

As areas of the MSF site begin to become available following completion of pre-casting operations, construction of permanent facilities for the MSF would begin, including construction of surface buildings such as maintenance shops, administrative offices, train control, traction power, and systems facilities. Some of the yard storage track would also be constructed at this time to allow delivery and inspection of passenger vehicles that would be fabricated elsewhere. Additional activities occurring at the MSF during the final phase of construction would include staging of trackwork and welding of guideway rail.

9.2 Existing Conditions

9.2.1 Regional Setting

The Resource Study Area (RSA) consists of portions of the City of Los Angeles neighborhoods, including West Los Angeles, Westwood, Brentwood, Sherman Oaks, and Van Nuys. Existing land uses within the RSA include those typically found in mature urban and suburban communities such as residential, office, commercial, retail, mixed-use development, education facilities, museums, parks, and open space. The majority of single-family residential land uses within the RSA are located in Brentwood, Bel-Air, Encino, and Sherman Oaks, while multi-family residential land uses are concentrated in the Westwood, Sawtelle, and Van Nuys neighborhoods. Businesses and industrial parks are concentrated within Van Nuys along Van Nuys Boulevard. Commercial uses within the RSA range from local neighborhood/commercial main street retail operations to large regional malls and shopping centers within West Los Angeles, Westwood, Santa Monica, Van Nuys, Brentwood and Sherman Oaks. Activity centers within the RSA include the Fox 11 Los Angeles, UCLA, the Getty Museum, Los Angeles National Cemetery, Ronald Reagan Medical Center, West Los Angeles U.S. Veterans Affairs (VA) Medical Center, Hammer Museum, Sherman Oaks Hospital, Sherman Oaks Galleria, Valley Presbyterian Hospital, the Bad News Bears Park, Southern California Behavioral Health Hospital, and the Department of Public Social Services. (Refer to the *Sepulveda Transit Corridor Project Land Use and Development Technical Report* [Metro, 2025] for additional information related to existing land uses in the RSA).

9.2.2 Hazardous Materials from Known Release Sites

In June 2023, several publicly available databases maintained under Government Code Section65962.5 (i.e., the Cortese List) were searched to determine whether any known hazardous materials are present in the RSA. The Hazardous Waste and Substances Site List (EnviroStor database [DTSC, 2023]) is maintained by the DTSC as part of the requirements of Government Code Section 65962.5. SWRCB maintains the GeoTracker database, an information management system for tracking leaking underground storage tank (LUST) cleanup sites, permitted underground storage tanks (USTs), Cleanup

Program Sites, Military Cleanup sites, Land Disposal sites, Waste Discharge Requirement sites, and Oil and Gas Monitoring sites (SWRCB, 2023).[29]

On October 24, 2022, EDR, Inc. (EDR) conducted a government database search for listings within the appropriate American Society for Testing and Materials (ASTM) minimum search distance (Attachment 1B). The search radius (distance from Alternative 5) depends on the applicable standards for each database and is identified in Table 9-6 for each of the respective database listings. A variety of identified sites within the vicinity of Alternative 5 are listed in the databases as shown in Table 9-6. Many of the facilities are permitted for more than one hazardous material use and, therefore, could be found in more than one database.

Table 9-6. Alternative 5: EDR Database Search Results

Agency Database (* Indicates that Alternative 5 ROW is listed in this database)	Survey Distance	Number of Sites Identified
AST—Aboveground Petroleum Storage Tank Facilities: A listing of aboveground storage tank petroleum storage tank locations.	0.25 mile	34
CERS HAZ WASTE—California Environmental Reporting System (CERS) HAZ Waste: A list of sites in the California Environmental Protection Agency Regulated Site Portal that fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and Resource Conservation and Recovery Act LQ HW Generator programs.	0.25 mile	268*
CERS TANKS—California Environmental Reporting System (CERS) Tanks: A list of sites in the California Environmental Protection Agency Regulated Site Portal that fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.	0.25 mile	73*
CERS—California Environmental Reporting System (CERS): Provides an overview of regulated hazardous materials and waste, state, and federal cleanups, impacted ground and surface waters, and toxic materials activities across the spectrum of environmental programs for any given location in California.	0.25 mile	443*
CHMIRS—California Hazardous Material Incident Report System: California Hazardous Material Incident Report System contains information on reported hazardous material incidents (accidental releases or spills).	0.25 mile	121*
CIWQS—California Integrated Water Quality System: The California Integrated Water Quality System (CIWQS) is a computer system used by the state and Regional Water Quality Control Board to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.	0.25 mile	149*

[29] Cleanup Program Sites (CPSs), also known as Site Cleanups (SCs), are formerly known as Spills, Leaks, Investigations, and Cleanups (SLIC) sites. CPSs include all "non-federally owned" sites that are regulated under the SWRCB's Site Cleanup Program and/or similar programs conducted by each of the nine Regional Water Quality Control Boards. These sites are highly variable and hazardous materials found at them include, but are not limited to, hydrocarbon solvents, pesticides, perchlorate, nitrate, heavy metals, and petroleum constituents. LUST cleanup sites include all UST sites that have had an unauthorized release (i.e., leak or spill) of a hazardous substance, usually fuel hydrocarbons, and are being (or have been) cleaned up. In GeoTracker, LUST sites consist almost entirely of fuel-contaminated LUST sites (also known as "Leaking Underground Fuel Tank", or "LUFT" sites) which are regulated pursuant to Title 23 of the California Code of Regulations, Chapter 16, Article 11.

Agency Database (* Indicates that Alternative 5 ROW is listed in this database)	Survey Distance	Number of Sites Identified
CORTESE—Hazardous Waste & Substances Sites List: Identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with underground storage tanks (USTs) having a reportable release and all solid waste disposal facilities from which there is known migration. The sites for the list are designated by State Water Resources Control Board leaking underground storage tank, Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).	0.25 mile	64*
HIST CORTESE: Identifies historical public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The sites for the list are designated by State Water Resources Control Board leaking underground storage tank, Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.	0.5 mile	61*
CPS-SLIC—Statewide Spills, Leaks, Investigations, and Cleanup Cases (GEOTRACKER): Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Regional Water Quality Control Board data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.	0.5 mile	8
DRYCLEANERS—Cleaner Facilities: A list of drycleaner related facilities that have U.S. Environmental Protection Agency ID numbers. These are facilities with certain Standard Industrial Classification (SIC) codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; dry-cleaning plants, except rugs; carpet and upholstery cleaning; industrial launderers; laundry and garment services.	0.25 mile	95
EMI—Emissions Inventory Data: Toxics and criteria pollutant emissions data collected by the California Air Resources Board (CARB) and local air pollution agencies.	0.25 mile	209*
ENVIROSTOR—EnviroStor Database: The Department of Toxic Substances Control 's Site Mitigation and Brownfields Reuse Program's (SMBRP) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List [NPL]); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to that which was available in the CalSites, and provides additional site information, including, but not limited to, identification of formerly contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.	1 mile	17
FID UST—Facility Inventory Database Underground Storage Tank: Contains a historical listing of active and inactive UST locations from State Water Resources Control Board. Refer to local/county sources for current data.	0.25 mile	222
HAULERS—Registered Waste Tire Haulers Listing: A listing of registered waste tire haulers.	0.25 mile	52

Agency Database (* Indicates that Alternative 5 ROW is listed in this database)	Survey Distance	Number of Sites Identified
HAZNET—Facility and Manifest Data: The data is extracted from the copies of hazardous waste manifests received each year by the Department of Toxic Substances Control. The annual volume of manifests is typically 700,000 to 1,000,000 annually, representing approximately 350,000 to 500,000 shipments. Data are from the manifests submitted without correction; therefore, many contain some invalid values for data elements such as generator ID, treatment, storage, and disposal (TSD) ID, waste category, and disposal method. This database begins with calendar year 1993.	0.25 mile	2,933*
HIST CalSites—CalSites Database: The CalSites database contains potential or confirmed hazardous substance release properties. In 1996, California Environmental Protection Agency reevaluated and significantly reduced the number of sites in the CalSites database. It is no longer updated by the state agency. It has been replaced by ENVIROSTOR.	1 mile	1
HWP—EnviroStor Permitted Facilities Listing: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.	1 mile	1
HWTS— Hazardous Waste Tracking System: The Department of Toxic Substances Control maintains the Hazardous Waste Tracking System, which stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.	0.25 mile	4,441*
UST— Active Underground Storage Tank Facilities: Active UST facilities gathered from the local regulatory agencies.	0.25 mile	449*
LUST—Leaking Underground Fuel Tank Report (GEOTRACKER): LUST Sites included in GeoTracker. GeoTracker is the Regional Water Quality Control Board data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.	0.5 mile	102
SWEEPS UST—Statewide Environmental Evaluation and Planning System Underground Storage Tank: This UST listing was updated and maintained by a company contacted by State Water Resources Control Board in the early 1990s. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.	0.25 mile	226
HIST UST—Hazardous Substances Storage Contained Database: Facilities on a historic list of UST sites.	0.25 mile	172
NPDES—National Pollutant Discharge Elimination System (NPDES) Permits Listing: A listing of NPDES permits, including stormwater.	0.25 mile	78*
SWF/LF (SWIS)—Solid Waste Information System: Active, Closed, and Inactive Landfills. Solid Waste Information System records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet Resource Conservation and Recovery Act Section 4004 criteria for solid waste landfills or disposal sites.	0.5 mile	7
WDS—Waste Discharge System: Sites which have been issued waste discharge requirements.	0.25 mile	2
ECHO—Enforcement & Compliance History Information: Enforcement & Compliance History Information provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.	0.125 mile	1,211*

Agency Database (* Indicates that Alternative 5 ROW is listed in this database)	Survey Distance	Number of Sites Identified
EDR Exclusive Historical Auto Stations: EDR has searched selected national collections of business directories and has compiled listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, and service stations.	0.125 mile	222
EDR Exclusive Historical Cleaners: EDR has searched selected national collections of business directories and has compiled listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, and wash & dry.	0.125 mile	114*
FINDS—Facility Index System/Facility Registry System: Contains both facility information and "pointers" to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCBs Activity Data System).	0.125 mile	1,370*
RCRA NonGen/NLR—Resource Conservation and Recovery Act Non-Generators/No Longer Regulated: RCRA Info is the U.S. Environmental Protection Agency's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act of 1976 and the Hazardous and Solid Waste Amendments of 1984. The database includes selective information on sites that generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act. Non-Generators do not presently generate hazardous waste.	0.25 mile	951*
RCRA-LQG—Resource Conservation and Recovery Act Information System Large Quantity Generators: Sites that generate, transport, store, treat, and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Facilities permitted to generate more than 1,000 kilograms (kg) of hazardous waste or over 1 kg of acutely hazardous waste per month.	0.25 mile	45
RCRA-SQG—Resource Conservation and Recovery Act Information System Small Quantity Generators: Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Facilities permitted to generate more than 100 kg per month but less than 1,000 kg per month of non-acutely hazardous materials.	0.25 mile	203
RCRA-TSDF—Resource Conservation and Recovery Act Information System Small Quantity Generators: Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. Treatment, storage, and disposal facilities (TSDFs) treat, store, or dispose of the waste.	0.5 mile	1

Agency Database (* Indicates that Alternative 5 ROW is listed in this database)	Survey Distance	Number of Sites Identified
RCRA-VSQG—Resource Conservation and Recovery Act Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators): Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.	0.25 mile	2
SEMS—Superfund Enterprise Management System: Hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support the U.S. Environmental Protection Agency's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to Superfund Enterprise Management System by the U.S. Environmental Protection Agency in 2015. The list contains data on potentially hazardous waste sites that have been reported to the U.S. Environmental Protection Agency by states, municipalities, private companies, and private persons, pursuant to Section 103 of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites that are already on or proposed to be on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.	0.5 mile	1
SEMS-ARCHIVE—Superfund Enterprise Management System Archive: Sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to Superfund Enterprise Management System ARCHIVE by the U.S. Environmental Protection Agency in 2015.	0.5 mile	5

Source: ICF, 2022b

As stated in Section 3, many listings in the report were identified as not having the potential to impact the Project. Thus, this discussion focuses on the potential for recognized environmental conditions (REC), LUST, and Cortese list sites that could potentially result in a hazard to the public and/or environment during construction and operation.

There are 48 closed LUST cases, nine Cleanup Program Sites, one State Response, one Corrective Action site, and four Tiered Permit sites within 0.5 mile of Alternative 5 (Attachment 2, Table B 4).[30] No Brownfields sites were identified within or in the vicinity of Alternative 5. All 48 closed LUST cases are on the Cortese list. Sites listed as sites are listed as "Closed" signify that they have been remediated to the satisfaction of the agency with oversight. Table B 4 summarizes the identified affected properties, including business addresses, a summary of the status of each property, and proximity of the property to the alternative alignment. The site numbers identified for each property in Table B 4 correspond with the numbers that appear on Figure 9-9 and Figure 9-10.

[30] Tiered Permit: Sites with permits granted by the Resource Conservation and Recovery Act.

Figure 9-9. Alternative 5: Hazardous Material Sites within 0.5 Mile (North)



Source: DTSC, 2023; SWRCB, 2023, ICF 2022b

Figure 9-10. Alternative 5: Hazardous Material Sites within 0.5 Mile of (South)



Source: DTSC, 2023; SWRCB, 2023, ICF 2022b

9.2.2.1 San Fernando Valley Superfund Site

The Area 4 Pollock Operable Unit (OU) is one of the four San Fernando Valley Superfund Site areas. The Valley (Area 4) Superfund site is located south of Los Feliz Avenue to State Route 110, east of the RSA. The four Valley Superfund Site area are designated as the following:

- Area 1 North Hollywood (North Hollywood and Burbank OU)

- Area 2 Glendale (Crystal Springs Wellfield)
- Area 3 Glendale (Verdugo Study Area) (Note: Area 3 was removed from Superfund site list in 2004.)
- Area 4 Pollock OU (Pollock Wellfield)

The Valley (Area 4) Pollock OU Superfund site is a 5,860-acre area with areas of contaminated groundwater near the LADWP Pollock Well Field in the City of Los Angeles. Historical manufacturing work in the Valley groundwater basin, dating back to World War II, contaminated the groundwater in the region with volatile organic compounds (VOCs), including trichloroethylene (TCE) and tetrachloroethylene (PCE). The Valley groundwater basin provides drinking water to residents of the Cities of Los Angeles, Burbank, and Glendale, as well as the La Crescenta Water District. In 2022, LADWP stated that the San Fernando Basin provides approximately 10 percent of the City of Los Angeles's water supply annually, but that it has the potential to provide up to 21 percent in an average year.

The regional plume of the Area 4 Pollock OU could potentially affect the northern portions of Alternative 5 north of Saticoy Street. In addition, the eastern portion of the plume is depicted as moving south, just east of Alternative 5 (ICF, 2022b).

Use of contaminated groundwater poses the greatest risk at this site. The San Fernando Valley Area 4 groundwater contamination is being addressed through the coordination of federal, state, and municipal agencies, including EPA, DTSC, State Regional Water Quality Control Board (SRWQCB), and the Los Angeles Regional Water Quality Control Board (LARWQCB).

EPA completed an interim investigation of the Pollock Well Field in 1994. EPA did not select a remedy for the site because the LADWP constructed a wellhead treatment project to clean the water in the Valley Basin. Since 1999, LADWP's Granular Activated Carbon Treatment Plant at the Pollock Well Field has been treating groundwater to meet drinking water standards and return it to the public water supply system.

Because the LADWP built a VOC treatment facility to treat groundwater, EPA determined that further cleanup was not immediately necessary. EPA is evaluating the effectiveness of the Pollock wellhead treatment project as part of its ongoing basin-wide studies and will determine the need for additional cleanup actions at the site. While the site awaits further investigation on the nature and extent of contamination in this area, the Pollock wellhead treatment operation continues to treat groundwater to meet drinking water standards and reduce the potential of exposure to contaminated water.

EPA Remedial Investigation field activities at the Pollock OU began in 2017 and have included the following:

- Groundwater assessment and sampling of existing monitoring wells
- Soil sampling during the installation of new monitoring wells
- Installation and sampling of soil gas monitoring probes
- Indoor air sampling to evaluate vapor intrusion

EPA conducted an initial round of indoor air sampling of homes in the Atwater Village area in February 2022. Sampling results from this first sampling event indicated that indoor air in the homes sampled was not impacted by VOCs migrating from the groundwater into homes. To verify that VOCs from the contaminated groundwater are not impacting indoor air quality in the area, an additional round of indoor air sampling of homes, businesses, and schools in the Atwater Village neighborhood was conducted in winter 2023 (EPA, 2023a). Based on these results, it can be inferred that VOCs would not affect proposed stations under Alternative 5.

9.2.3 Hazardous Materials from Roadway Corridors

Yellow-thermoplastic and yellow-painted traffic stripe and pavement markings that were applied to roadways before 1997 contained as much as 2.6 percent lead (Caltrans, 2019). Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably paint. The use of lead as an additive to paint was discontinued in 1978 because the EPA and OSHA determined that exposure to lead presents an adverse human health risk. Residue from removing this yellow-thermoplastic and yellow-painted traffic stripe and pavement marking contains heavy metals such as lead chromate in concentrations that exceed thresholds established by the California Health and Safety Code and Title 22 of the California Code of Regulations (CCR) Division 4.5 (Caltrans, 2019).

Aerially deposited lead (ADL) can be present along major roadway corridors, such as I-405, Van Nuys Boulevard and Sepulveda Boulevard. Lead alkyl compounds were first added to gasoline in the 1920s to boost octane levels and improve engine performance. Beginning in 1973, the EPA ordered a gradual phase-out of lead from gasoline, substantially reducing the use of leaded gasoline by the mid-1980s. However, the EPA estimated that prior to the 1970s, vehicles emitted approximately 75 percent of the lead consumed in leaded gasoline as particulate matter through tailpipe exhaust (DTSC, 2004). A portion of this particulate matter settled into soils near major roadways. DTSC regulations specify the levels at which lead in soil is considered to be a risk. In areas where road construction would occur, the California Department of Transportation (Caltrans) has found lead within 30 feet of the edge of the pavement and within the top 6 inches of the soil. In some cases, lead has been found as deep as 2 to 3 feet below the surface. Therefore, soils in major roadway corridors, including those within the Alternative 5 alignment, have the potential to be contaminated with ADL from car emissions that occurred prior to the elimination of lead in gasoline (DTSC, 2016).

9.2.4 Treated Wood Waste

Wood utility poles may be treated with preserving chemicals that, if removed, can result in a substance called treated wood waste (TWW). TWW contains hazardous chemicals that pose a risk to human health and the environment. Arsenic, chromium, copper, creosote, and pentachlorophenol are among the chemicals added to preserve wood. These chemicals are known to be toxic or carcinogenic. Harmful exposure to these chemicals may result from dermal contact with TWW, or from inhalation or ingestion of TWW particulate (DTSC, 2024).

9.2.5 Hazardous Building Materials

Asbestos is designated as a hazardous substance when the fibers have potential to come in contact with air because the fibers are small enough to inhale and lodge in the lung tissue, which can cause health problems. The presence of asbestos-containing material (ACM) in buildings, natural gas pipelines, and cementitious water pipelines poses an inhalation threat only if the ACMs are found to be in a friable state. If the ACMs are not friable, no inhalation hazard is not present, because asbestos fibers remain bound in the material matrix. Emissions of asbestos fibers to the ambient air, which can occur during activities such as renovation or demolition of structures made with ACMs (e.g., insulation), are regulated in accordance with Section 112 of the Federal Clean Air Act.

Lead is a highly toxic metal that the EPA and OSHA have determined to be an adverse health risk, particularly to young children. In 1978, the federal government required the reduction of lead in house paint to less than 0.06 percent (600 parts per million). Because of its toxic properties, lead is regulated as a hazardous material. Excessive exposure to lead can result in the accumulation of lead in the blood, soft tissues, and bones. Primary sources of lead exposure include the following: deteriorating lead-based

paint, including painted curbs, poles, protective bollards, bridges, and fire hydrants along the right-of-way (ROW) and existing buildings within the alternative alignment; lead-contaminated dust; and lead-contaminated soil. Buildings that have been constructed prior to 1978 and that contain lead-based paints could require abatement prior to construction activities.

Polychlorinated biphenyls (PCBs) are organic chemicals, usually in the form of an oil, that were historically used in electrical equipment. PCBs are most commonly associated with pole-mounted electrical transformers, but they were also used in insulators and capacitors in building electrical equipment. PCBs were commonly used in the small capacitor within fluorescent light ballasts. Ballasts manufactured through 1979 may contain PCBs. On-site fluorescent light features and electrical transformers that were manufactured prior to and throughout 1979, or reasonably suspected to have been manufactured before or throughout 1979, shall be assumed to contain PCBs. PCBs-containing florescent light bulbs would be of concern if they are leaking as they may expose workers handling the fixtures to a variety of adverse health effects. According to EPA TSCA regulations, the material must be incinerated. The entire lighting fixture does not need special handling and disposal as long as the ballast (electrical box) is not leaking. The non-leaking ballasts can be removed and recycled or disposed of properly. PCBs are considered hazardous materials because of their toxicity; they have been shown to cause cancer in animals, along with effects on the immune, reproductive, nervous, and endocrine systems, and studies have shown evidence of similar effects in humans (EPA, 2013).

9.2.6 Other Potential Hazardous Materials

9.2.6.1 Residual Pesticides

Chemicals used in agricultural activities could result in residual concentrations of persistent pesticides in the soil. Persistent pesticides leave residues that remain in the environment without breaking down, such as organochlorine pesticides (e.g., dichlorodiphenyltrichloroethane, Toxaphene, and Dieldrin).

Lead arsenate is used as an herbicide, insecticide, or rodenticide. Lead arsenates were historically used by railroad companies as a means of weed control along a railroad ROW. Pesticide residues from lead arsenate bind tightly to the surface soil layer, where they can remain for decades. As a result, such residues, if present, could pose a human health risk when the soil is excavated. Lead and arsenic are the primary constituents of lead arsenate pesticide. Both lead and arsenic could be toxic at high concentrations in soil and are highly toxic to humans.

9.2.6.2 Household Hazardous Waste

EPA defines household hazardous waste as “leftover products such as paints, cleaners, oils, batteries, and pesticides that contain potentially hazardous ingredients that could be corrosive, toxic, ignitable, or reactive.” According to EPA, Americans generate approximately 1.6 million tons of household hazardous waste per year, with the average home accumulating as much as 100 pounds of household hazardous waste annually. Improper disposal of household hazardous wastes commonly includes pouring them down the drain, on the ground, into storm sewers, and in some cases putting them out with the trash. Though the dangers of such disposal methods might not be immediately obvious, improper disposal of these wastes can pollute the environment and pose a threat to human health.

9.2.7 Methane Hazard Zones

Methane gas, commonly known as natural gas, may underlay the site. Potential hazards associated with methane include fire or explosion due to methane gas accumulations, since it is a highly flammable substance, and human health risks associated with natural gas poisoning. Exposure to high

concentrations of methane can result in long-term health effects such as respiratory, cardiovascular, and neurological issues, though this is generally a concern in confined spaces rather than outdoor environments. Methane and other flammable or toxic gases, notably hydrogen sulfide, are often associated with naturally occurring petroleum deposits or active and former oil fields. These areas may have a potential for subsurface accumulations of methane and other volatile gases. Both methane and hydrogen sulfide are highly flammable and, in high concentrations, pose explosion hazards to the public. Exposure to high levels of hydrogen sulfide can also cause long-term health effects, including impaired cognitive function, respiratory irritation, and neurological impacts.

In the City of Los Angeles, two types of methane hazard zones exist: methane zones and methane buffer zones. A methane zone is the area closest to the source of the subsurface methane gas, whereas a methane buffer zone surrounds the outer limits of a methane zone. Both of these zones are typically a result of naturally surfacing tar and crude oil. These subsurface hazards can also occur by soil contamination issues, such as historical oil wells (Geo Forward, 2021).

As shown on Figure 9-11, methane hazard zones exist within the Alternative 5 alignment. The Sawtelle Methane Hazard Zone begins at the base of the southern slope of the Santa Monica Mountains and follows I-405 south to approximately Santa Monica Boulevard. The Santa Monica Boulevard Station and the Wilshire/Metro D Line Station would be within the methane hazard zone (Metro, 2024c). Relatively low concentrations of methane and hydrogen sulfide were detected in soil gas vapor probes installed in Metro Purple Line Reaches 6 and 7, which are located along and adjacent to Wilshire Boulevard in the Westwood neighborhood and at the VA (Metro, 2024c). In addition, the methane zones map shows the methane zone and methane buffer zone near the southern end of the tunnel alignment (Geo Forward, 2021).

Figure 9-11. Alternative 5: Methane Hazard Zones



Source: Geo Forward, 2021

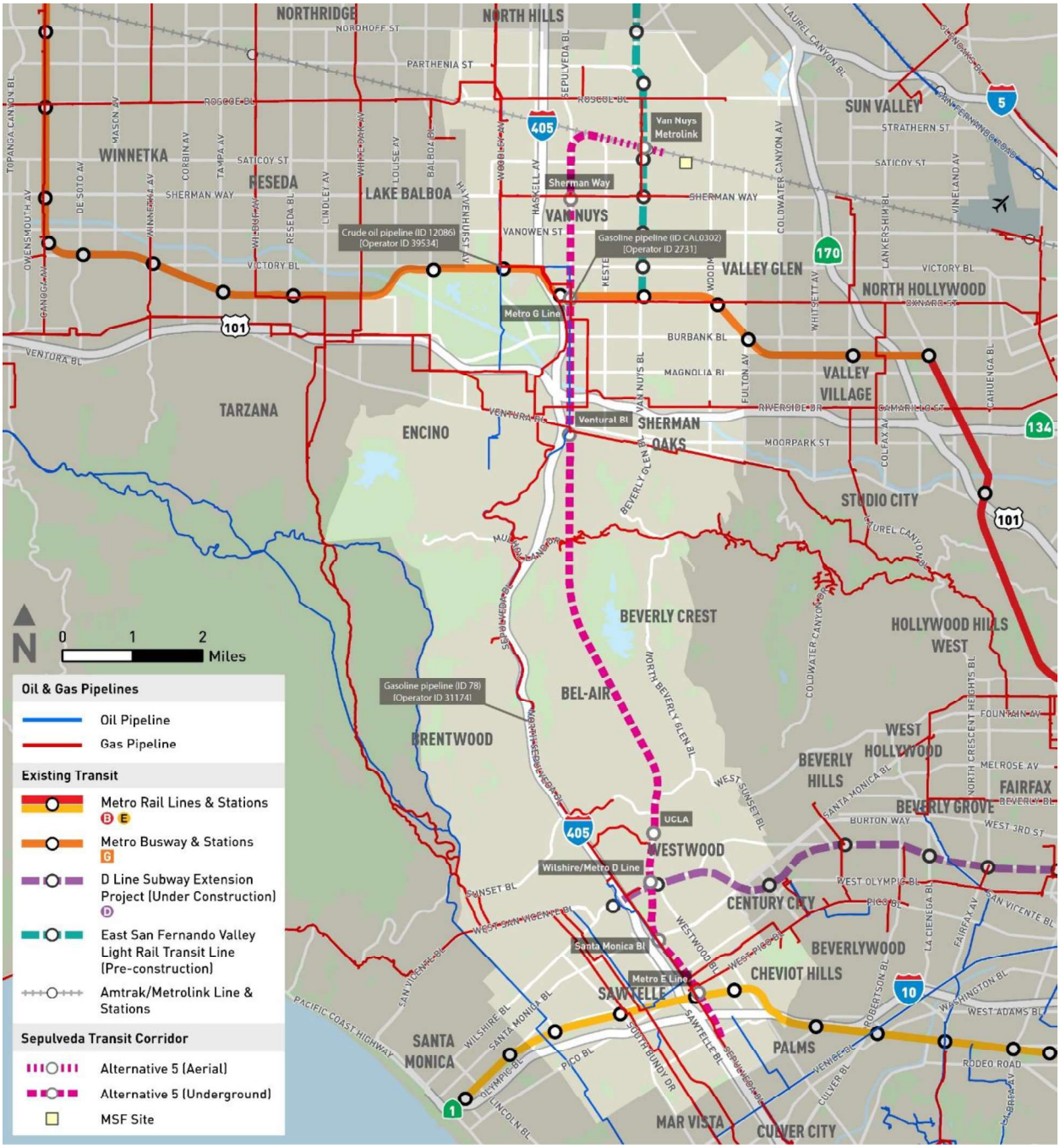
9.2.8 Petroleum and Natural Gas Pipelines

The Pipeline and Hazardous Materials Safety Administration (PHMSA) Public Map Viewer (USDOT PHMSA, 2023) identifies the following three hazardous liquid pipelines within and in the vicinity of Alternative 5, as shown on Figure 9-12: [31]

- Torrance Valley Pipeline Company (Operator ID 39534) operates a crude oil pipeline (ID 12086) as part of the Saticoy-Slauson system. As of May 20, 2022, the pipeline was reported active and filled. The 13.34-mile pipeline originates east of the Van Nuys Airport at Woodley Avenue. It travels south to the intersection of Woodley Avenue and Victory Boulevard, then turns east to travel along Victory Boulevard to the intersection of Victory Boulevard and Sepulveda Boulevard. The pipeline parallels Sepulveda Boulevard to its terminus at the intersection of Sepulveda Boulevard and Montana Avenue.
- Shell Pipeline Company (Operator ID 31174) operates a gasoline pipeline (ID 78) as part of the Ventura Products Line system. As of June 15, 2022, the pipeline was reported active and filled. The 12.25-mile pipeline originates near the intersection of Sepulveda Boulevard and Bellagio Road where it travels south parallel to Sepulveda Boulevard and continues south beyond Interstate 10 (I-10).
- Chevron Pipeline Company (Operator ID 2731) operates a gasoline pipeline (ID CAL0302) as part of the El Segundo-Van Nuys Production subsystem. As of August 3, 2022, the pipeline was reported active and filled. The 17.14-mile pipeline originates near the intersection of Oxnard Street and Sepulveda Boulevard. The pipeline travels south parallel to Sepulveda Boulevard and continues south beyond I-10.

[31] In accordance with PHMSA's security policy, the scale of the Public Map Viewer is restricted to 1:24,000, and the minimum accuracy of the mapped pipeline locations is 500 feet.

Figure 9-12. Alternative 5: Pipelines



Source: USDOT PHMSA, 2023

9.2.9 Proximity to Schools

The following schools are located within .0.25 mile of Alternative 5:

- Head Start located at 15035 Valerio Steet in Van Nuys
- Valerio Street Elementary located at 15035 Valerio Street in Van Nuys

- Columbus Avenue Elementary located at 6700 Columbus Avenue in Van Nuys
- Lashon Academy located at 7477 Kester Avenue in Van Nuys
- Sylvan Park Elementary located at 6238 Noble Avenue in Van Nuys
- Robert Fulton College Preparatory located at 7477 Kester Avenue in Van Nuys
- Girls Athletic Leadership School located at 8015 Van Nuys Boulevard in Panorama City
- Ivy Bound Academy of Math, Science, and Technology Charter Middle located at 15355 Morrison Street in Sherman Oaks
- UCLA located at 405 Hilgard Avenue in Westwood (the UCLA campus also houses two university-affiliated schools, the Geffen Academy for students in grades 6-12 and the Lab School for children ages 4-12)

9.2.10 Proximity to Airports

Concentration of people and facilities in the vicinity of airports raises concerns about safety and aircraft hazards. Potential aircraft accidents pose a hazard if the proposed project is located near an airport or in the immediate area of the landing and approach zones. In addition, people can be exposed to excessive noise and aircraft pollution. The Van Nuys Airport and Santa Monica Municipal Airport are in the vicinity of Alternative 5. These airports are discussed further in Section 9.2.10.1 and Section 9.2.10.2.

9.2.10.1 Van Nuys Airport

The Van Nuys Airport is located at 16461 Sherman Way in Van Nuys. Van Nuys Airport is a 740-acre general aviation facility owned and operated by Los Angeles World Airports (LAWA). The airport is located in the west-central portion of the City of Los Angeles's incorporated boundaries, approximately 25 miles northwest of downtown Los Angeles in the center of the Valley. In general, the airport is bounded by Roscoe Boulevard on the north, Victory Boulevard on the south, Balboa Boulevard on the west, and Woodley Avenue on the east.

The airport houses 720 aircraft and operates two north-south parallel asphalt runways, one of which is 4,013 feet long (16L-24R) and the other which is 8,001 feet long (16R-34L). As of May 2023, the airport is averaging 615 flights per day (AirNav, 2023a).

The land development surrounding the airport is a combination of residential, commercial, industrial, and public uses, with single-family residential being the predominant land use. Much of the land immediately surrounding the airport is developed with light industrial and commercial manufacturing uses, with golf courses and public parks located immediately to the south.

Alternative 5 would be approximately 1.3 miles east of the Van Nuys Airport. The *Van Nuys Airport Plan* indicates that Alternative 5 would be located outside the airport's airport influence area (AIA).[32] A 55-acre temporary staging area would potentially be located north of the Van Nuys Airport, north of Roscoe Boulevard, and within the AIA (Figure 9-13) (DCP, 2006; Los Angeles County Airport Land Use Commission [ALUC], 2003a, 2023).

[32] Airport influence area (AIA) is the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may substantially affect land uses or necessitate restrictions on those uses. The AIA constitutes the area within which certain land use actions are subject to review to determine consistency with the Airport Land Use Compatibility Plan policies.

9.2.10.2 Santa Monica Municipal Airport

The Santa Monica Municipal Airport is located at 3223 Donald Douglas Loop-South in the City of Santa Monica. The airport is approximately 2 miles east of the Pacific Ocean and 6 miles north of the City of Los Angeles. The airport houses various types of businesses, including art studios, office space, and event venues. In general, the airport is bounded by Ocean Park Boulevard on the north, Airport Avenue on the south, 23rd Street on the west, and Bundy Drive on the east. It includes recreational space for a city park, a restaurant, a theater, and an interim open space. The Santa Monica City Council approved a plan to formally close the Santa Monica Airport in 2028.

The airport houses 84 aircraft and operates two northeast-northwest parallel asphalt runways, both of which are 3,500 feet long, and a 1,600-square foot asphalt helipad. As of May 2023, the airport is averaging 452 flights per day (AirNav, 2023b).

The southern terminus of Alternative 5 would be approximately 1.2 miles northeast of the Santa Monica Municipal Airport. The *Los Angeles County Airport Land Use Plan* indicates that Alternative 5 would be located outside the airport's AIA. A 7-acre temporary staging area would potentially be located north of the Santa Monica Airport runway and within the AIA (Figure 9-13) (LA County Planning, 1991; ALUC, 2003b, 2023).

Figure 9-13. Alternative 5: Airport Influence Area



Source: ALUC, 2023a, 2023b

9.3 Impacts Evaluation

9.3.1 Impact HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

9.3.1.1 Operational Impacts

It is not anticipated that substantial quantities of hazardous materials would be routinely transported, used, stored, or disposed of during operation of Alternative 5. Operation of stations and the guideway would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous.[33] As mandated by Project Measure (PM) HAZ-1, cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage, and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions.

Compliance with existing regulations as mandated by PM HAZ-1 would assure proper transportation, use, storage, and disposal of hazardous materials, and the operational impacts of Alternative 5 would be less than significant.

9.3.1.2 Construction Impacts

Construction of Alternative 5 could expose the public or the environment to hazardous materials if the following situations occurred: improper handling or use of hazardous materials or hazardous wastes, (particularly by untrained personnel); transportation accident; environmentally unsound disposal methods; or fire, explosion, or other emergencies. The severity of potential effects varies with the activity conducted, the concentration of and type of hazardous material or wastes present, and the proximity of sensitive receptors.

As described throughout Section 2, there is an established, comprehensive federal, state, regional, and local framework independent of the California Environmental Quality Act (CEQA) process that is intended to reduce the risks associated with the use, transport, and disposal of hazardous materials. Transportation of hazardous materials on area roadways is regulated by the California Highway Patrol (CHP) and Caltrans. The use and disposal of hazardous materials is heavily regulated at both the federal and state level; these regulations are declared and enforced by agencies such as the EPA, SWRCB, DTSC, California Occupational Safety and Health Administration (Cal/OSHA), and the South Coast Air Quality Management District (SCAQMD). Metro would be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases. In accordance with the SWRCB and PM HAZ-2, Metro would obtain and comply with a National Pollutant Discharge Elimination System (NPDES) permit. In addition, coverage under the SWRCB's Construction General Permit would be obtained. As part of the Construction General Permit, the contractor would be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP), which would include best management practices (BMPs) as mandated by PM HAZ-2, including the following and/or similar measure to minimize the risk of accidental spills of hazardous materials during construction.

[33] Acutely hazardous materials are defined as waste containing chemicals so dangerous it could pose a threat to human health and the environment even when properly managed.

The types and amounts of hazardous materials would vary according to the nature of the construction activity. Construction of Alternative 5 would require the use of typical construction equipment (e.g., gasoline- or diesel-powered machinery) and vehicles containing fuel, oil, and grease, as well as the use and transport of these materials. Limited quantities of certain hazardous materials such as paints, solvents, and glues would be used during construction. Construction staging and laydown would occur at multiple locations along the alignment and station sites and could include storage of excavated or demolished materials, construction offices, equipment storage, mechanical shops, and plants (grout, water treatment, foam, etc.) (Metro, 2024x). There is low likelihood that substantial quantities of hazardous materials would be stored during construction. Moreover, these hazardous materials would not include acutely hazardous materials or substances listed in 40 CFR 355 *Appendix A: Extremely Hazardous Substances and Their Threshold Planning Quantities* that could harm construction workers or the general public.

Whether a person exposed to a hazardous substance suffers adverse health effects as a result of that exposure depends upon a complex interaction of factors, including the following: the exposure pathway (the route by which a hazardous material enters the body); the amount of material to which the person is exposed; the physical form of the hazardous material (e.g., liquid or vapor) and its characteristics (e.g., toxicity); the frequency and duration of exposure; and the Individual's unique biological characteristics, such as age, gender, weight, and general health. Adverse health effects from exposure to hazardous materials may be short-term (acute) or long-term (chronic). Acute effects can include damage to organs or systems in the body and possibly death. Chronic adverse effects, which may result from acute short-term or long-term exposure to a hazardous material, can also include organ or systemic damage, but chronic effects of particular concern include birth defects, genetic damage, and cancer.

Transportation of hazardous materials, such as contaminated soils; hazardous building materials, including asbestos, lead, and PCBs; and other hazardous wastes (i.e., TWW, roadway demolition debris, hazardous building materials), would occur along designated truck routes within the Alternative 5 corridor and/or along major streets connecting to construction staging areas and the nearest freeways (e.g., I-405, I-10, US-101). Consistent with local plans, truck routes that may be used for transporting and hauling hazardous materials include Van Nuys Boulevard, Ventura Boulevard, Beverly Glen Boulevard, Santa Monica Boulevard, and Bundy Drive. As mandated by PM HAZ-2, transportation of hazardous materials would comply with state regulations governing hazardous materials transport included in the California Vehicle Code (Title 13 of the CCR), the State Fire Marshal Regulations (Title 19 of the CCR), and Title 22 of the CCR. Restrictions on haul routes can be incorporated into the construction specifications according to local permitting requirements.

Contaminated soils and hazardous building materials and wastes would be disposed of in accordance with federal, state, and local requirements at the following landfills:

- South Yuma County Landfill located at 19536 South Avenue 1E, Yuma, AZ
- Clean Harbors Buttonwillow Landfill located at 2500 West Lokern Road, Buttonwillow, CA
- U.S. Ecology located at Highway 95 South, Beatty, NV (EPA, 2023b)

The Los Angeles County Public Health Department manages enforcement and permitting for facilities that receive and dispose of solid waste, including hazardous waste. Table 9-7 provides a representative list of the hazardous waste disposal landfills and potential haul routes.

Table 9-7. Hazardous Waste Disposal Landfills and Potential Haul Routes

Landfill Site Name	Hazardous Waste Accepted	General Potential Haul Route
South Yuma County Landfill 19536 South Avenue 1E Yuma, AZ	Contaminated soil, PCBs, asbestos	I-405 South to SR-91 East to I-15 South to I-8 East to Yuma Arizona
Clean Harbors Buttonwillow 2500 West Lokern Road Buttonwillow, CA	Acutely hazardous materials[a], contaminated soil, PCBs, asbestos, RCRA waste with heavy metals	I -405 North to I-5 North to SR-58 West to Lokern Road
U.S. Ecology Highway 95 South Beatty, NV	Contaminated soil, PCBs, asbestos	I-405 South to I-10 East to I-15 North to US-95 North to Beatty, Nevada

Source: HTA, 2024

[a]Acutely hazardous materials are defined as waste containing such dangerous chemicals that it could pose a threat to human health and the environment even when properly managed.

PCB = polychlorinated biphenyl
RCRA = Resource Conservation and Recovery Act

Adherence to federal and state regulations stipulated by PM HAZ-2, reduces the risk of exposure to hazardous materials used during construction. Each of these regulations is specifically designed to protect the public health through improved procedures for handling hazardous materials, better technology in the equipment used to transport these materials, and a faster, more coordinated response to emergencies. With compliance with existing regulations, impacts related to the creation of significant hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials during construction of Alternative 5 would be less than significant.

9.3.1.3 Maintenance and Storage Facilities Impacts

The types and amounts of hazardous materials would vary according to the nature of the activity. Construction of the MSF would require the use of typical construction equipment (e.g., gasoline- or diesel-powered machinery) and vehicles containing fuel, oil, and grease, as well as the use and transport of these materials. Limited quantities of certain hazardous materials such as paints, solvents, and glues would be used during construction.

Maintenance of trains, vehicles, and equipment would occur at an MSF. Multiple buildings would be constructed, including a multi-level MOW building, track storage area, wash bays, ancillary storage buildings, and TPSS structure. Operation of the MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, common household-type cleaning materials, and pesticides/herbicides. Cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions. The types and amounts of hazardous materials used at the MSF would not pose any greater risk than the existing uses at other similar development elsewhere in the vicinity of the MSF. Operation of the MSF would not require the use, handling, or storage of quantities of hazardous materials in excess of regulatory thresholds.[34] If the

[34]The thresholds are 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance, per Chapter 6.95 California Health and Safety Code.

quantity of hazardous materials used, handled, or stored on-site would exceed the regulatory thresholds, there is an established comprehensive regulatory framework independent of the CEQA process that would be followed, including preparation and submittal of a Hazardous Materials Business Plan (HMBP), as mandated by PM HAZ-1.

As previously discussed, adherence to federal and state regulations stipulated by PM HAZ-2 reduces the risk of exposure to hazardous materials used during construction and operation. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a faster, more coordinated, quicker response to emergencies. With compliance with existing regulations, impacts related to the creation of significant hazards to the public or the environment through the routine transport, use, storage, and disposal of hazardous materials during construction of the MSF would be less than significant.

9.3.2 Impact HAZ-2: 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?

9.3.2.1 Operational Impacts

As discussed in Section 9.3.1, operation of stations, the guideway, and an MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal and state regulatory requirements as mandated by PM HAZ-1, which are intended to prevent or manage hazards. If a spill does occur, it would be remediated accordingly.

As mandated by PM HAZ-3, tunnels and stations for the Project would be designed to provide a redundant protection system against gas intrusion hazard, such as those described in the City of Los Angeles Municipal Code, Chapter IX, Building Regulations, Article 1, Division 71, Methane Seepage Regulations. In compliance with these regulations, specific requirements would be determined according to the actual methane gas and/or hydrogen sulfide levels and pressures detected on a site, and the identified specific requirements will be incorporated into the design and construction. Therefore, the risk posed by hazardous subsurface gas such as methane gas and/or hydrogen sulfide to the operations of Alternative 5 would be minimized.

With adherence to PM HAZ-1 and PM HAZ-3, operational impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials under Alternative 5 would be less than significant.

9.3.2.2 Construction Impacts

Construction activities for the proposed Project, such as grading and excavation, could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. Exposure to unanticipated hazardous substances could occur from previously unidentified soil contamination caused by the contaminants originating at nearby listed sites (e.g., roadways and industrial uses). Or from construction-related soil contamination caused by spillage and/or mixing of construction trash and debris into the soil. EDR searched various regulatory databases identified several sites in the surrounding area as being contaminated or having the potential to become contaminated

from the release of hazardous substances. A summary of these sites identified by EDR are presented in Table 9-6 and detailed in Attachment 2, Table B 4. Exposure to hazardous materials during construction activities could occur as a result of any of the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

If any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons. The risks are particularly heightened during tunneling activities, which would involve deeper excavation and may encounter legacy contamination or naturally occurring hazardous materials that are less likely to be present near the surface.

If tunneling or station/guideway excavation is advanced through contaminated soil or groundwater, the excavated soil/slurry mix could be considered hazardous, depending on the levels of contamination encountered. Potentially affected parcels within 0.25 mile of Alternative 5 may have subsurface contamination from undocumented releases associated with current and/or historical use of the property(ies) (e.g., gas stations, dry cleaners, or industrial properties) (ICF, 2022b). During construction, there is the potential to encounter, dewater, and dispose of contaminated groundwater during ground-disturbing activities, shallow excavation, tunnel boring or excavation for the underground guideway, and relocation of utilities. During construction activities involving ground-disturbing activities, there is potential to encounter contaminated groundwater. This risk is heightened when performing shallow excavations, utilities relocation, or construction that requires dewatering. If contaminated groundwater is encountered, it would be managed and disposed of in compliance with local, state, and federal regulations. This could include treating the contaminated groundwater on-site or offsite or transporting it to a wastewater treatment facility capable of handling hazardous materials.

The Area 4 Pollock OU could potentially extend near the northern portions of Alternative 5 north of Saticoy Street (ICF, 2022b). A historical manufacturing work in the Valley groundwater basin, dating back to World War II, contaminated the groundwater in the region with volatile organic compounds (VOCs), including trichloroethylene (TCE) and tetrachloroethylene (PCE). Use of contaminated groundwater poses the greatest risk at this site. The Valley Area 4 groundwater contamination is being addressed through the coordination of federal, state and municipal agencies including EPA, DTS, SRWQCB, and Los Angeles Regional Water Quality Control Board (LARWQCB). EPA conducted rounds of indoor sampling in the Atwater Village area (outside of the RSA) and determined that the VOCs migrating from the groundwater did not impact the area. Based on these results, it can be inferred that VOCs would not affect proposed stations under Alternative 5.

The tunnel alignment for Alternative 5 would traverse the methane and methane buffer zones in the southern portion of the alignment. As shown on Figure 9-11, the Santa Monica Boulevard Station and the Wilshire/Metro D Line Station would be within the methane hazard zone. As described in Section 9.2.7, methane gas and hydrogen sulfide are highly flammable and can pose challenges during construction, particularly when tunneling activities disturb formations where methane gas and/or hydrogen sulfide may accumulate. The use of a TBM in such areas increase the potential for encountering pockets of methane gas and/or hydrogen sulfide, which could lead to fire or explosion

hazards if proper precautions are not taken. Pursuant to Section 91.7104.1 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619) and as outlined in PM HAZ-3, all construction activities within the methane hazard zone would implement the City's methane mitigation measures. These measures include subsurface testing of geological formations, compliance with Methane Mitigation Standards established by the Superintendent of Building, and installation of methane gas and/or hydrogen sulfide mitigation systems for all underground structures, such as stations and tunnels. During tunneling, monitoring for methane gas and/or hydrogen sulfide concentrations, maintaining ventilation systems to minimize accumulation of gas.

Several high-pressure pipelines containing crude oil traverse the RSA (refer to Figure 9-12). A review of the PHMSA Pipeline Map Viewer (PHMSA, 2023) indicated there have been no recorded pipeline releases within the RSA. However, Project-related excavation and earthmoving activities could encounter buried pipelines, resulting in accidental rupture or leaks, which could cause a human health and environmental hazard. For security reasons, the PHMSA Pipeline Map Viewer (PHMSA, 2023) cannot be used for field verification of exact high-pressure pipeline locations, and the potential presence of other pipelines is unknown. In addition, it is possible buried underground utility lines may be within the RSA (such as stormwater, sewer, electrical, or communication cables).

Construction would require demolition of existing structures. Demolition of structures could potentially expose construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as ACM, lead-based paint (LBP), or PCBs. Both the federal OSHA and Cal/OSHA regulate worker exposure during construction activities that disturb LBP. Any ACMs, if present, would need appropriate abatement of the identified asbestos prior to demolition pursuant to the SCAQMD Rule 1403 and PM HAZ-4.

Additional effects from construction activities, such as excavation, tunneling, demolition, and grading, could include potential exposure of construction workers and/or the public to chemical compounds present in soils or soil gases. These activities may also result in the localized spread of contamination if disturbed soils or materials are improperly handled, leading to the migration of contaminants to previously uncontaminated areas. In addition, airborne chemical compounds released from construction or demolition areas, such as dust containing hazardous substances, could pose inhalation risks to workers, nearby residents, and the environment. Transportation of contaminated slurry or soils off-site for disposal could also result in accidental releases, such as spills or leaks, if proper containment measures are not implemented. Therefore, construction impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be potentially significant.

Alternative 5 would be required to implement MM HAZ-1 through MM HAZ-5, which would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling, transporting, and disposing of hazardous materials. Implementation of MM HAZ-1 through MM HAZ-5 and would minimize potential exposure to construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as ACM, LBP, or PCBs) during demolition activities. Regulations stipulated by PM HAZ-3 would ensure that the city's methane mitigation measures to reduce the potential exposure of construction workers and the public to methane gas and/or hydrogen sulfide would be implemented Therefore, implementation of MM HAZ-1 through MM HAZ-5, and project measure PM HAZ-3, applicable local, state, and federal regulations would reduce impacts related to the upset and accidental release of hazardous materials to a less than significant level.

9.3.2.3 Maintenance and Storage Facilities

Operation of stations, guideway, and MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal and state regulatory requirements as mandated by PM HAZ-1, that are intended to prevent or manage hazards, and if a spill does occur, it would be remediated accordingly.

Construction activities for the proposed Project, such as grading and excavation, could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. Exposure to unanticipated hazardous substances could occur from previously unidentified soil contamination caused by the contaminants originating at nearby listed sites (e.g., roadways and industrial uses). Or from construction-related soil contamination caused by spillage and/or mixing of construction trash and debris into the soil. EDR searched various regulatory databases identified several sites in the surrounding area as being contaminated or having the potential to become contaminated from the release of hazardous substances. A summary of these sites identified by EDR are presented in Table 9-6 and detailed in Attachment 2, Table B 4. Exposure to hazardous materials during construction activities could occur as a result of any of the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

If any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons.

Construction would require demolition of existing structures. Demolition of structures could potentially expose construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as ACM, LBP, or PCBs. Both the federal OSHA and Cal/OSHA regulate worker exposure during construction activities that disturb LBP. Any ACMs, if present, would need appropriate abatement of identified asbestos before demolition begins pursuant to the SCAQMD Rule 1403 and PM HAZ-4.

Additional effects could include the potential exposure of construction workers and/or the public to chemical compounds in soils, soil gases, and groundwater; potential localized spread of contamination; potential exposure of workers, the public, and the environment to airborne chemical compounds migrating from the construction or demolition areas; and potential accidents during transportation of contaminated slurry, soils, or groundwater. Therefore, construction impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be potentially significant.

The proposed Project would be required to implement MM HAZ-1 through MM HAZ-4, which would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling hazardous materials. Implementation of MM HAZ-1 through MM HAZ-4 would minimize potential exposure of construction

workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials. Therefore, implementation of MM HAZ-1 through MM HAZ-4, and adherence to applicable local, state, and federal regulations would reduce impacts related to the upset and accidental release of hazardous materials to a less than significant level.

9.3.3 Impact HAZ-3: 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?

9.3.3.1 Operational Impacts

As discussed in Section 9.3.1, operation of the stations and guideway would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials within 0.25 mile of schools (refer to Section 9.2.9). None of these substances would be acutely hazardous.

As mandated by PM HAZ-1, cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage, and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions. Therefore, impacts associated with handling hazardous materials within 0.25 mile of an existing school under Alternative 5 would be less than significant.

9.3.3.2 Construction Impacts

Construction of Alternative 5 would involve handling of hazardous materials and use of diesel-powered equipment within 0.25 mile of schools (refer to Section 9.2.9). Such activities, if not appropriately managed, could result in hazardous emissions that would potentially affect nearby schools.

As described throughout Section 3, there is an established, comprehensive federal, state, regional, and local framework independent of the CEQA process that is intended to reduce the risks associated with handling of hazardous materials, including transport, use, storage, and disposal. The use and disposal of hazardous materials is heavily regulated at both the federal and state level; these regulations are promulgated and enforced by agencies such as the EPA, the SWRCB and DTSC, Cal/OSHA, and the SCAQMD. By implementing the SWPPP and associated BMPs, as mandated by the SWRCB Construction General Permit and described in PM HAZ-2, construction-related hazardous substances, such as oil and greases, would be managed through appropriate material handling and BMP. In addition, transportation of hazardous materials would comply with state regulations governing hazardous materials transport included in the California Vehicle Code (Title 13 of the CCR), the State Fire Marshal Regulations (Title 19 of the CCR), and Title 22 of the CCR. Cooperation with the corridor city would occur throughout the construction process. Restrictions on haul routes would be incorporated into the construction specifications according to local permitting requirements as set forth in PM HAZ-2.

Adherence to federal and state regulations reduces the risk of exposure to hazardous materials used during construction. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a faster, more coordinated response to emergencies. By adhering to existing regulations, construction of Alternative 5 would have less than significant impacts associated with the transportation, use, storage, and handling hazardous materials within 0.25 mile of an existing school.

9.3.3.3 Maintenance and Storage Facilities

The MSF is not located within 0.25 mile of a school. Therefore, the MSF would have no impact related to emissions of hazardous materials within 0.25 mile of a school.

9.3.4 Impact HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

9.3.4.1 Operational Impacts

Alternative 5 includes 48 LUST sites that are identified on the Cortese List. The hazardous site conditions for Alternative 5 related to Government Code Section 65962.5, commonly known as the Cortese list, are associated with contaminated soils and groundwater (refer to Section 9.3.4.2). All 48 LUST sites have a case closed status. The status of the LUST cases reported as "case closed" indicates that remedial action is completed, or was deemed unnecessary, by the local regulatory agency. Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the proposed Project site. In addition, during operations, no ground-disturbing activities would occur at the Cortese-listed hazardous materials sites such that hazardous releases of contaminated soils could create a significant hazard to the public or the environment. Alternative 5 is located on a site that is included on one or more hazardous materials lists compiled in accordance with Government Code Section 65962.5. With adherence to existing regulations, operation of the Alternative 5 would not create or result in a significant hazard to people or the environment, and Alternative 5 during operation would result in a less than significant impact.

9.3.4.2 Construction Impacts

Alternative 5 includes 48 LUST sites that are identified on the Cortese list as having confirmed releases of hazardous materials, including petroleum hydrocarbons, VOCs, and metals to soil and groundwater. These sites are identified in Table B 4 and on Figure 9-9 and Figure 9-10. The LUST sites have been remediated and are classified as "Closed" by the regulatory agency, which signifies that they have been remediated to the satisfaction of the agency with oversight. Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the project site. Alternative 5 is located on a site that is included on one or more hazardous materials lists compiled in accordance with Government Code Section 65962.5. With adherence to existing regulations, Alternative 5 would not create or result in a significant hazard to people or the environment, and the Alternative 5 would result in a less than significant impact.

9.3.4.3 Maintenance and Storage Facilities

The hazardous site conditions for the MSF related to Government Code Section 65962.5 (commonly known as the Cortese list) are associated with contaminated soils, and these sites are listed as "Closed," which signifies that they have been remediated to the satisfaction of the agency with oversight (refer to Section 9.3.4.2). Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the project site. With adherence to existing regulations, MSF would not create or result in a significant hazard to people or the environment, and the MSF would result in a less than significant impact.

9.3.5 Impact HAZ-5: 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?

9.3.5.1 Operational Impacts

Alternative 5 is 1.3 mile from the Van Nuys Airport and 1.2 miles from the Santa Monica Municipal Airport. The *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport implements relevant policies and guidelines for land-use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA, airport safety zones, and noise impact zones. These plans also address airport land-use compatibility concerns regarding exposure to aircraft noise, land use safety with respect both to people and property on the ground and the occupants of the aircraft, protection of airport airspace, and general concerns related to aircraft overflights. According to the *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport, during operation Alternative 5 is located outside the AIA for both airports (Figure 9-13) Alternative 5 during operation is not located within the safety zone or the noise impact zone for the airports. (DCP, 2006; LA County Planning, 1991; ALUC, 2003a, 2003b, 2023).

Alternative 5 would not interfere with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval. The Alternative 5 is not within the AIA, Safety Zones, and Noise Impact Zones. Adherence to existing local, state, and federal regulations would ensure that during operation of the Alternative 5, impacts associated with potential aviation hazards would be less than significant.

9.3.5.2 Construction Impacts

Alternative 5 is 1.3 mile from the Van Nuys Airport and 1.2 miles from the Santa Monica Municipal Airport. The *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport implements relevant policies and guidelines for land-use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA, airport safety zones, and noise impact zones. These plans also address airport land-use compatibility concerns regarding exposure to aircraft noise, land use safety with respect both to people and property on the ground and the occupants of the aircraft, protection of airport airspace, and general concerns related to aircraft overflights. According to the *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport, staging area for Alternative 5 would be located within the Van Nuys Airport AIA. During construction of Alternative 5, a 55-acre temporary staging area would potentially be located north of the Van Nuys Airport, north of Roscoe Boulevard, and within the AIA and a 7-acre temporary staging area would potentially be located north of the Santa Monica Airport runway and within the AIA (Figure 9-13). Staging areas are used principally for the operation of contractors' equipment, receipt of deliveries and storage of materials, site offices as well as other construction activities such as maintenance, parking, and removal of spoils. There would be no other construction equipment or activities that could penetrate the Airspace Protection Zone or create or cause visual, electronic, or wildlife hazards. There are no safety compatibility policies related to temporary construction staging.

Alternative 5 would not interfere with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval. Construction activities would be temporary. Adherence to existing local, state, and federal regulations would ensure that during construction of Alternative 5, impacts associated with potential aviation hazards remain less than significant.

9.3.5.3 Maintenance and Storage Facilities

The MSF is approximately 2.6 miles from the Van Nuys Airport. The MSF is not located within the AIA, Safety Zones, and Noise Impact Zones. With adherence to existing federal, state and local regulations, the MSF would not result in a safety hazard or excessive noise related airports during operation and the impact would be less than significant.

9.4 Project Measures and Mitigation Measures

9.4.1 Operational Impacts

9.4.1.1 Project Measures

The following PMs are design features, BMPs, or other measures required by law and/or permit approvals. These measures are components of the Project and are applicable to Alternative 5.

PM HAZ-1: *Operational (post Project) BMPs shall be implemented by the Project and include but not be limited to:*

- *Cleaning and maintenance products shall be required to be labeled with appropriate cautions and instructions for handling, storage, and disposal. Staff shall be trained and required to use, store, and dispose of these materials properly in accordance with label directions.*
- *If the quantity of hazardous materials used, handled, or stored on-site at the maintenance and storage facility exceeds the regulatory thresholds of 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance per Chapter 6.95 of the California Health and Safety Code, the Project shall prepare a Hazardous Materials Business Plan in accordance with all related requirements of the California Health and Safety Code (Chapter 6.95, Articles 1 and 2). The plan shall be reviewed and recertified every year and amended as required by the California Health and Safety Code (Chapter 6.95, Articles 1 and 2).*
- *Storage and disposal of hazardous materials and waste shall be conducted in accordance with all applicable federal and state regulatory requirements, such as the Resource Conservation and Recovery Act; the Comprehensive Environmental Response, Compensation, and Liability Act; the Hazardous Materials Release Response Plans and Inventory Law; and the Hazardous Waste Control Act, and if a spill does occur, it shall be remediated in accordance with all applicable federal and state regulatory requirements and in coordination with the Department of Toxic Substances Control and/or Los Angeles Regional Water Quality Control Board.*
- *Compliance with applicable Los Angeles County and City of Los Angeles requirements pertaining to emergency vehicle access as well as the California Building Code and California Fire Code standards shall ensure that sufficient ingress and egress routes are maintained and provided to the new stations.*

9.4.1.2 Mitigation Measures

No mitigation measures are required.

9.4.2 Construction Impacts

9.4.2.1 Project Measures

The following project measures are design features, BMPs, or other measures required by law and/or permit approvals. These measures are components of the Project and are applicable to Alternative 5.

PM HAZ-2: *Construction BMPs shall include but not be limited to:*

- *The Project shall be required to obtain permits before construction begins and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases in accordance with the U.S. Environmental Protection Agency, State Water Resources Control Board, Department of Toxic Substances Control, California Division of Occupational Safety and Health, and the South Coast Air Quality Management District.*
- *The Project shall develop a Stormwater Pollution Prevention Plan in accordance with the State Water Resources Control Board's Construction Clean Water Act Section 402 General Permit conditions, and subject to regular inspections by applicable jurisdiction(s) to ensure compliance. The Stormwater Pollution Prevention Plan shall include specifications for, but not be limited to, the following:*
  - *Maintain proper working conditions for vehicles and equipment to minimize potential fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials.*
  - *Conduct servicing, refueling, and staging of construction equipment only at designated areas where a spill would not flow to drainages. Conduct equipment washing, if needed, only in designated locations where water would not flow into drainage channels.*
  - *Implement drainage best management practices to protect water quality (such as oil/water separators, catch basin inserts, storm drain inserts, media filtration, and catch basin screens).*
  - *Report hazardous spills to the designated Certified Unified Program Agency (i.e., Los Angeles County Fire Department Health Hazardous Materials Division or Santa Fe Springs Department of Fire and Rescue) and implement clean up immediately and proper disposal of contaminated soil at a licensed facility.*
  - *Establish properly designed, centralized storage areas to keep hazardous materials fully contained.*
  - *Keep spill cleanup materials (e.g., rags, absorbent materials, and secondary containment) properly stored and maintained at the work site when handling materials.*
  - *Implement monitoring program by the construction site supervisor that includes both dry and wet weather inspections.*

- *Transportation of hazardous materials by the Project shall comply with state regulations governing hazardous materials transport included in the California Vehicle Code (Title 13 of the California Code of Regulations), the State Fire Marshal Regulations (Title 19 of the California Code of Regulations), and Title 22 of the California Code of Regulations. These regulations include the following:*
  - *Require all motor carrier transporters of hazardous materials to have a Hazardous Materials Transportation license issued by the California Highway Patrol.*
  - *Require the transport of hazardous materials via routes with the least overall travel time.*
  - *Prohibit the transport of hazardous materials through residential neighborhoods.*
  - *Require transporters to take immediate action to protect human health and the environment in the event of spill, release, or mishap.*
  - *Incorporate restrictions on haul routes into the construction specifications according to local permitting requirements.*
- *Contaminated soils and hazardous building materials and wastes shall be disposed of in accordance with federal, state, and local requirements at landfills serving Los Angeles County. The removal and disposal of hazardous building materials shall be the responsibility of a California Division of Occupational Safety and Health-certified contractor in accordance with South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities).*
- *Traffic control during construction shall follow local jurisdiction guidelines. For specialized construction tasks, it may be necessary to work during nighttime hours to minimize traffic disruptions.*

PM HAZ-3: *Construction best management practices for activities within methane hazard zones, including tunneling operations and underground station construction shall include, but not be limited to, the following:*

- *Pursuant to Section 91.7104.1 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619), site testing of subsurface geological formations shall be conducted by a Project-approved testing agency under the supervision of a licensed architect or registered engineer or geologist. Testing shall address, but necessarily be limited to, methane concentrations and surface conditions along tunneling routes and at underground stations locations. The licensed architect or registered engineer or geologist shall indicate the testing instruments used and testing procedure followed. The testing procedure shall meet the Methane Mitigation Standards established by the Superintendent of Building.*
- *All paving work, building construction, tunneling and underground station construction within the methane zone or methane buffer zone as defined by Los Angeles Department of Building and Safety shall be required to comply with*

Methane Mitigation Standards established by the Superintendent of Building as well as the requirements outlined in Sections 91.7103 and 91.7104 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619).

- *All building and underground structures, including tunneling and stations, located in the Methane Zone shall provide a methane mitigation system as required by Los Angeles Municipal Code Table 71 in Section 91.7104.2 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619) based on the appropriate Site Design Level. The Superintendent of Building may approve an equivalent methane mitigation system designed by an architect, engineer, or geologist.*

PM HAZ-4: *Construction best management practices for demolition of existing structures shall include, but shall not be limited to, the following:*

- *Both the federal Occupational Safety and Health Administration and California Division of Occupational Safety and Health regulate worker exposure during construction activities that disturb lead-based paint. Any asbestos-containing materials, if present, shall require appropriate abatement of identified asbestos prior to demolition pursuant to South Coast Air Quality Management District Rule 1403.*
- *Polychlorinated biphenyls (PCB)-containing fluorescent light fixtures and electrical transformers that are not labeled "No PCBs" shall be assumed to contain polychlorinated biphenyls and shall be removed prior to demolition activities and shall be disposed of by a licensed and certified polychlorinated biphenyls removal contractor, in accordance with local, state, and federal regulations. The removal and disposal of the electrical transformers shall be the responsibility of the utility owner in accordance with all standards and practices.*

PM HAZ-5: *Construction best management practices for the areas with known or previously undiscovered hazardous materials shall include, but not be limited to, the following:*

- *The Project shall hire a qualified professional to sample soil suspected of contamination (obvious signs of contamination include indicators such as odors, stains, or other suspect materials) for the purpose of classifying material and determining disposal requirements before construction begins. If excavated soil is suspected or known to be contaminated, the Project shall:*
  - *Segregate and stockpile the excavated material in a way that shall facilitate measurement of the stockpile volume.*
  - *Spray the stockpile with water or a South Coast Air Quality Management District-approved vapor suppressant and cover the stockpile with a heavy-duty plastic (i.e., Visqueen) to prevent soil volatilization in the atmosphere or exposure to nearby workers per South Coast Air Quality Management District Rule 1166.*
- *Existing groundwater monitoring wells shall remain under ongoing groundwater investigations associated with off-site sources.*

9.4.2.2 Mitigation Measures

MM HAZ-1: ***Phase II Environmental Site Assessment.*** *Prior to the issuance of a grading permit and before any substantial ground disturbance occurs on or near the properties with documented releases, the Project shall hire a qualified environmental professional to conduct a Phase II Environmental Site Assessment (ESA) to determine the potential presence of petroleum hydrocarbons, metals, and volatile organic compounds in soil and/or groundwater.*

- *If the Phase I ESA identifies any recognized environmental conditions or other indicators of potential contamination, a Phase II ESA shall be conducted. The Phase II Environmental Site Assessment shall include sufficient soil and groundwater sampling and laboratory analysis to identify the types of chemicals and their respective concentrations. The Phase II Environmental Site Assessment shall compare soil and groundwater sampling results against applicable environmental screening levels developed by the Los Angeles Regional Water Quality Control Board and/or Department of Toxic Substances Control. If the Phase II Environmental Site Assessment identifies contaminant concentrations above the screening levels, a site-specific Soil and Groundwater Management Plan shall be prepared and implemented as described in MM HAZ-2. The Project shall consult with the Department of Toxic Substances Control, California Environmental Protection Agency, and/or other appropriate regulatory agencies to ensure sufficient minimization of risk to human health and the environment is completed.*

MM HAZ-2: ***Soil and Groundwater Management Plan.*** *Prior to the issuance of a grading permit, a site-specific Soil and Groundwater Management Plan shall be prepared by a qualified professional environmental contractor to address handling and disposal of contaminated soil and groundwater prior to demolition, excavation, and construction activities.*

- *The Project shall implement the Soil and Groundwater Management Plan during construction activities. The Soil and Groundwater Management Plan shall specify all necessary procedures to ensure the safe handling and disposing of excavated soil, groundwater, and/or dewatering effluent in a manner that is protective of human health and in accordance with federal and state hazardous waste disposal laws, and with state and local stormwater and sanitary sewer requirements. At a minimum, the plan shall include the following:*
  - *Identification and delineation of contaminated areas and procedures for limiting access to such areas to properly trained personnel.*
  - *Step-by-step procedures for handling, excavating, characterizing, and managing excavated soils and dewatering effluent, including procedures for containing, handling, and disposing of hazardous waste; procedures for containing, handling, and disposing of groundwater generated from construction dewatering; the method used to analyze excavated materials and groundwater for hazardous materials likely to be encountered at specific locations; appropriate treatment and/or disposal methods. Removal*

of soil and materials shall be performed by a licensed engineering contractor with a Class A license and hazardous-substance removal certification.

- *Requirements to water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, and staging.*
- *Requirements to cover or maintain at least 2 feet of free board space on haul trucks transporting soil or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.*
- *Requirements to use wet power vacuum street sweepers to remove any visible track out mud or dirt onto adjacent public roads at least once a day. Use of dry powered sweeping is prohibited.*
- *Procedures for handling volatile organic compound-contaminated soil, including, but not limited to, segregating volatile organic compound-contaminated stockpiles from non-volatile organic compound-contaminated stockpiles, spraying volatile organic compound-contaminated soil stockpiles with water and/or approved vapor suppressant and covering them with plastic sheeting for all periods of inactivity lasting more than 1 hour, conducting a daily visual inspection of all covered volatile organic compound-contaminated soil stockpiles to ensure the integrity of the plastic covered surfaces, and removing contaminated soil from an excavation or grading site within 30 days from the time of excavation to a licensed facility.*
- *Procedures for notification and reporting, including notifying and reporting to internal management and to local agencies.*
- *Minimum requirements for site-specific Health and Safety Plans to protect the general public and workers in the construction area. Prior to the issuance of grading permits, the Soil and Groundwater Management Plan and the results of environmental sampling shall be provided to contractors who shall be responsible for developing their own construction worker Health and Safety Plan and training requirements, per MM HAZ-4.*
- *The Project shall hire a qualified environmental professional to sample groundwater suspected of contamination. If any suspected groundwater contamination is encountered during construction, the contractor shall stop work in the vicinity, cordon off the area, and contact Los Angeles County Metropolitan Transportation Authority who shall immediately notify the Regional Water Quality Control Board. In coordination with the Regional Water Quality Control Board an Investigation and Remediation Plan shall be developed by a qualified environmental professional in order to protect public health and the environment. Any hazardous or toxic materials shall be disposed of according to local, state, and federal regulations.*

- *Trucking operations shall comply with Caltrans and any other applicable regulations, and all trucks shall be licensed and permitted to carry the appropriate waste classification. The tracking of dirt by trucks leaving the project site shall be minimized by cleaning the wheels upon exit and cleaning the loading zone and exit area as needed.*

MM HAZ-3: ***Contractor Specifications.*** *The Project shall include in its contractor specifications the following requirement relating to hazardous materials:*

- *During all ground-disturbing activities, the contractor(s) shall inspect the exposed soil and groundwater for obvious signs of contamination, such as odors, stains, or other suspect materials. Qualified personnel shall monitor for volatile organic compounds and other subsurface gases for concentrations exceeding South Coast Air Quality Management District levels with a Photoionization Detector. Should signs of unanticipated contamination be encountered, work shall be suspended, and the Los Angeles County Department of Public Health shall be notified, and the area secured. Contaminated soil and/or groundwater shall be segregated and characterized, and a site-specific Soil and Groundwater Management Plan, as described under MM HAZ-2, shall be prepared and implemented.*

MM HAZ-4: ***Worker Health and Safety Plan.*** *The contractor shall prepare site-specific Worker Health and Safety Plan to protect the general public and workers in the construction area. The Health and Safety Plan shall be prepared in accordance with California and federal Occupational Safety and Health Administration regulations. Copies of the Health and Safety Plan shall be made available to construction workers for review during their orientation and/or regular health and safety meetings. The Health and Safety Plan shall identify chemicals of concern, potential hazards, worker training requirements, personal protective equipment and devices, decontamination procedures, the need for personal or area monitoring, and emergency response procedures. The Health and Safety Plan shall be amended, as necessary, if new information becomes available that could affect implementation of the plan.*

MM HAZ-5: ***Hazardous Building Survey and Abatement.*** *Prior to demolition activities of any structures, the Project shall retain a California Division of Occupational Safety and Health-certified contractor to determine the presence or absence of building materials or equipment that contains hazardous materials, including asbestos, lead-based paint, and polychlorinated biphenyls-containing equipment. If such substances are found to be present, the contractor shall prepare and submit a workplan to the relevant oversight agency to demonstrate how these hazardous materials would be properly removed and disposed of in accordance with federal and state law, including South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities). The removal and disposal of hazardous building materials shall be the responsibility of a California Division of Occupational Safety and Health-certified contractor. Following completion of removal activities, the Project shall submit documentation to the relevant oversight agency verifying that all hazardous materials were properly removed and disposed of.*

9.4.3 Impacts After Mitigation

Implementation of MM HAZ-1 through MM HAZ-5 would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling hazardous materials, and would minimize potential exposure of construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as ACM, LBP, or PCBs during demolition activities; thus, impacts would be reduced to less than significant.

10 ALTERNATIVE 6

10.1 Alternative Description

Alternative 6 is a heavy rail transit (HRT) system with an underground track configuration. This alternative would provide transfers to five high-frequency fixed guideway transit and commuter rail lines, including the Los Angeles County Metropolitan Transportation Authority's (Metro) E, Metro D, and Metro G Lines, East San Fernando Valley Light Rail Transit Line, and the Metrolink Ventura County Line. The length of the alignment between the terminus stations would be approximately 12.9 miles.

The seven underground HRT stations would be as follows:

1. Metro E Line Expo/Bundy Station (underground)
2. Santa Monica Boulevard Station (underground)
3. Wilshire Boulevard/Metro D Line Station (underground)
4. UCLA Gateway Plaza Station (underground)
5. Ventura Boulevard/Van Nuys Boulevard Station (underground)
6. Metro G Line Van Nuys Station (underground)
7. Van Nuys Metrolink Station (underground)

10.1.1 Operating Characteristics

10.1.1.1 Alignment

As shown on Figure 10-1, from its southern terminus station at the Metro E Line Expo/Bundy Station, the alignment of Alternative 6 would run underground through the Westside of Los Angeles (Westside), the Santa Monica Mountains, and the San Fernando Valley (Valley) to the alignment's northern terminus adjacent to the Van Nuys Metrolink/Amtrak Station.

The proposed southern terminus station would be located beneath the Bundy Drive and Olympic Boulevard intersection. Tail tracks for vehicle storage would extend underground south of the station along Bundy Drive for approximately 1,500 feet, terminating just north of Pearl Street. The alignment would continue north beneath Bundy Drive before turning to the east near Iowa Avenue to run beneath Santa Monica Boulevard. The Santa Monica Boulevard Station would be located between Barrington Avenue and Federal Avenue. After leaving the Santa Monica Boulevard Station, the alignment would turn to the northeast and pass under Interstate 405 (I-405) before reaching the Wilshire Boulevard/Metro D Line Station beneath the Metro D Line Westwood/UCLA Station, which is currently under construction as part of the Metro D Line Extension Project. From there, the underground alignment would curve slightly to the northeast and continue beneath Westwood Boulevard before reaching the UCLA Gateway Plaza Station.

Figure 10-1. Alternative 6: Alignment



Source: HTA, 2024

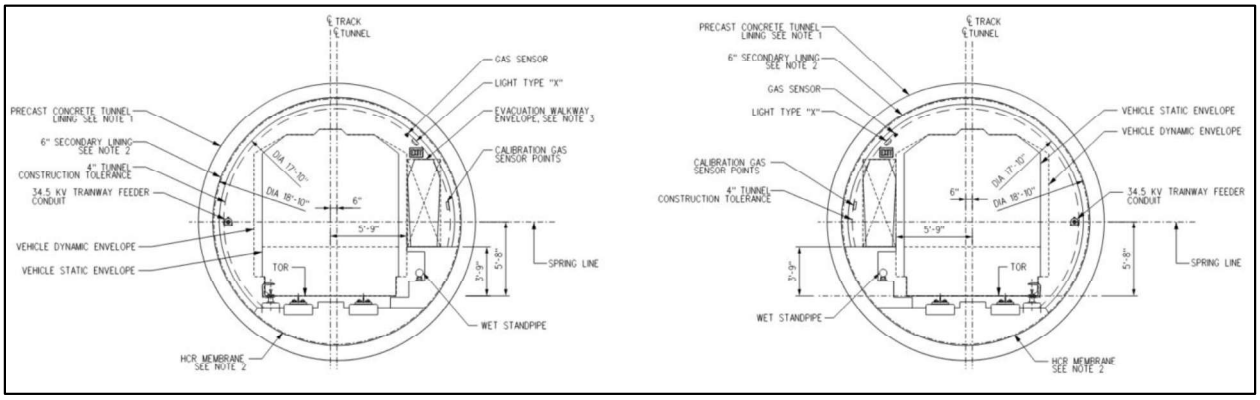
After leaving the UCLA Gateway Plaza Station, the alignment would continue to the north and travel under the Santa Monica Mountains. While still under the mountains, the alignment would shift slightly to the west to travel under the City of Los Angeles Department of Water and Power (LADWP) Stone Canyon Reservoir property to facilitate placement of a ventilation shaft on that property east of the reservoir. The alignment would then continue to the northeast to align with Van Nuys Boulevard at Ventura Boulevard as it enters the San Fernando Valley. The Ventura Boulevard Station would be

beneath Van Nuys Boulevard at Moorpark Street. The alignment would then continue under Van Nuys Boulevard before reaching the Metro G Line Van Nuys Station just south of Oxnard Street. North of the Metro G Line Van Nuys Station, the alignment would continue under Van Nuys Boulevard until reaching Sherman Way, where it would shift slightly to the east and run parallel to Van Nuys Boulevard before entering the Van Nuys Metrolink Station. The Van Nuys Metrolink Station would serve as the northern terminus station and would be located between Saticoy Street and Keswick Street. North of the station, a yard lead would turn sharply to the southeast and transition to an at-grade configuration and continue to the proposed maintenance and storage facility (MSF), east of the Van Nuys Metrolink Station.

10.1.1.2 Guideway Characteristics

The alignment of Alternative 6 would be underground using Metro's standard twin-bore tunnel design. Figure 10-2 shows a typical cross-section of the underground guideway. Cross-passages would be constructed at regular intervals in accordance with Metro Rail Design Criteria (MRDC). Each of the tunnels would have a diameter of 19 feet (not including the thickness of wall). Each tunnel would include an emergency walkway that measures a minimum of 2.5 feet wide for evacuation.

Figure 10-2. Typical Underground Guideway Cross-Section



Source: HTA, 2024

10.1.1.3 Vehicle Technology

Alternative 6 would utilize driver-operated steel-wheel HRT trains, as used on the Metro B and D Lines, with planned peak headways of 4 minutes and off-peak-period headways ranging from 8 to 20 minutes. Trains would consist of four or six cars and are expected to consist of six cars during the peak period. The HRT vehicle would have a maximum operating speed of 67 miles per hour; actual operating speeds would depend on the design of the guideway and distance between stations. Train cars would be 10.3 feet wide with three double doors on each side. Each car would be approximately 75 feet long, with capacity for 133 passengers. Trains would be powered by a third rail.

10.1.1.4 Stations

Alternative 6 would include seven underground stations with station platforms measuring 450 feet long. The southern terminus underground station would be adjacent to the existing Metro E Line Expo/Bundy Station, and the northern terminus underground station would be located south of the existing Van Nuys Metrolink/Amtrak Station. Except for the Wilshire Boulevard/Metro D Line, UCLA Gateway Plaza, and Metro G Line Van Nuys Stations, all stations would have a 30-foot-wide center platform. The Wilshire/Metro D Line Station would have a 32-foot-wide platform to accommodate the anticipated passenger transfer volumes, and the UCLA Gateway Plaza Station would have a 28-foot-wide platform

because of the width constraint between the existing buildings. At the Metro G Line Van Nuys Station, the track separation would increase significantly in order to straddle the future East San Fernando Valley Light Rail Transit Line Station piles. The platform width at this station would increase to 58 feet.

The following information describes each station, with relevant entrance, walkway, and transfer information. Bicycle parking would be provided at each station.

Metro E Line Expo/Bundy Station

- This underground station would be located under Bundy Drive at Olympic Boulevard.
- Station entrances would be located on either side of Bundy Drive, between the Metro E Line and Olympic Boulevard, as well as on the northeast corner of Bundy Drive and Mississippi Avenue.
- At the existing Metro E Line Expo/Bundy Station, escalators from the plaza to the platform level would be added to improve inter-station transfers.
- An 80-space parking lot would be constructed east of Bundy Drive and north of Mississippi Avenue. Passengers would also be able to park at the existing Metro E Line Expo/Bundy Station parking facility, which provides 217 parking spaces.

Santa Monica Boulevard Station

- This underground station would be located under Santa Monica Boulevard, between Barrington Avenue and Federal Avenue.
- Station entrances would be located on the southwest corner of Santa Monica Boulevard and Barrington Avenue and on the southeast corner of Santa Monica Boulevard and Federal Avenue.
- No dedicated station parking would be provided at this station.

Wilshire Boulevard/Metro D Line Station

- This underground station would be located under Gayley Avenue, between Wilshire Boulevard and Lindbrook Drive.
- A station entrance would be provided on the northwest corner of Midvale Avenue and Ashton Avenue. Passengers would also be able to use the Metro D Line Westwood/UCLA Station entrances to access the station platform.
- Direct internal station transfers to the Metro D Line would be provided at the south end of the station.
- No dedicated station parking would be provided at this station.

UCLA Gateway Plaza Station

- This underground station would be located underneath Gateway Plaza on the University of California, Los Angeles (UCLA) campus.
- Station entrances would be provided on the north side of Gateway Plaza, north of the Luskin Conference Center, and on the east side of Westwood Boulevard, across from Strathmore Place.
- No dedicated station parking would be provided at this station.

Ventura Boulevard/Van Nuys Boulevard Station

- This underground station would be located under Van Nuys Boulevard at Moorpark Street.
- The station entrance would be located on the northwest corner of Van Nuys Boulevard and Ventura Boulevard.
- Two parking lots with a total of 185 parking spaces would be provided on the west side of Van Nuys Boulevard, between Ventura Boulevard and Moorpark Street.

Metro G Line Van Nuys Station

- This underground station would be located under Van Nuys Boulevard, south of Oxnard Street.
- The station entrance would be located on the southeast corner of Van Nuys Boulevard and Oxnard Street.
- Passengers would be able to park at the existing Metro G Line Van Nuys Station parking facility, which provides 307 parking spaces. No additional automobile parking would be provided at the proposed station.

Van Nuys Metrolink Station

- This underground station would be located immediately east of Van Nuys Boulevard, between Saticoy Street and Keswick Street.
- Station entrances would be located on the northeast corner of Van Nuys Boulevard and Saticoy Street and on the east side of Van Nuys Boulevard, just south of the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor.
- Existing Metrolink Station parking would be reconfigured, maintaining approximately the same number of spaces. Metrolink parking would not be available to Metro transit riders.

10.1.1.5 Station-to-Station Travel Times

Table 10-1 presents the station-to-station distance and travel times for Alternative 6. The travel times include both run time and dwell time. Dwell time is 30 seconds for stations anticipated to have higher passenger volumes and 20 seconds for other stations. Northbound and southbound travel times vary slightly because of grade differentials and operational considerations at end-of-line stations.

Table 10-1. Alternative 6: Station-to-Station Travel Times and Station Dwell Times

From Station	To Station	Distance (miles)	Northbound Station-to-Station Travel Time (seconds)	Southbound Station-to-Station Travel Time (seconds)	Dwell Time (seconds)
Metro E Line Station					*20*
Metro E Line	Santa Monica Boulevard	1.1	111	121	—
Santa Monica Boulevard Station					*20*
Santa Monica Boulevard	Wilshire/Metro D Line	1.3	103	108	—
Wilshire/Metro D Line Station					*30*
Wilshire/Metro D Line	UCLA Gateway Plaza	0.7	69	71	—
UCLA Gateway Plaza Station					*30*
UCLA Gateway Plaza	Ventura Boulevard	5.9	358	358	—
Ventura Boulevard Station					*20*
Ventura Boulevard	Metro G Line	1.8	135	131	—
Metro G Line Station					*30*
Metro G Line	Van Nuys Metrolink	2.1	211	164	—
Van Nuys Metrolink Station					*30*

Source: HTA, 2024

10.1.1.6 Special Trackwork

Alternative 6 would include seven double crossovers within the revenue service alignment, enabling trains to cross over to the parallel track with terminal stations having an additional double crossover beyond the end of the platform.

10.1.1.7 Maintenance and Storage Facility

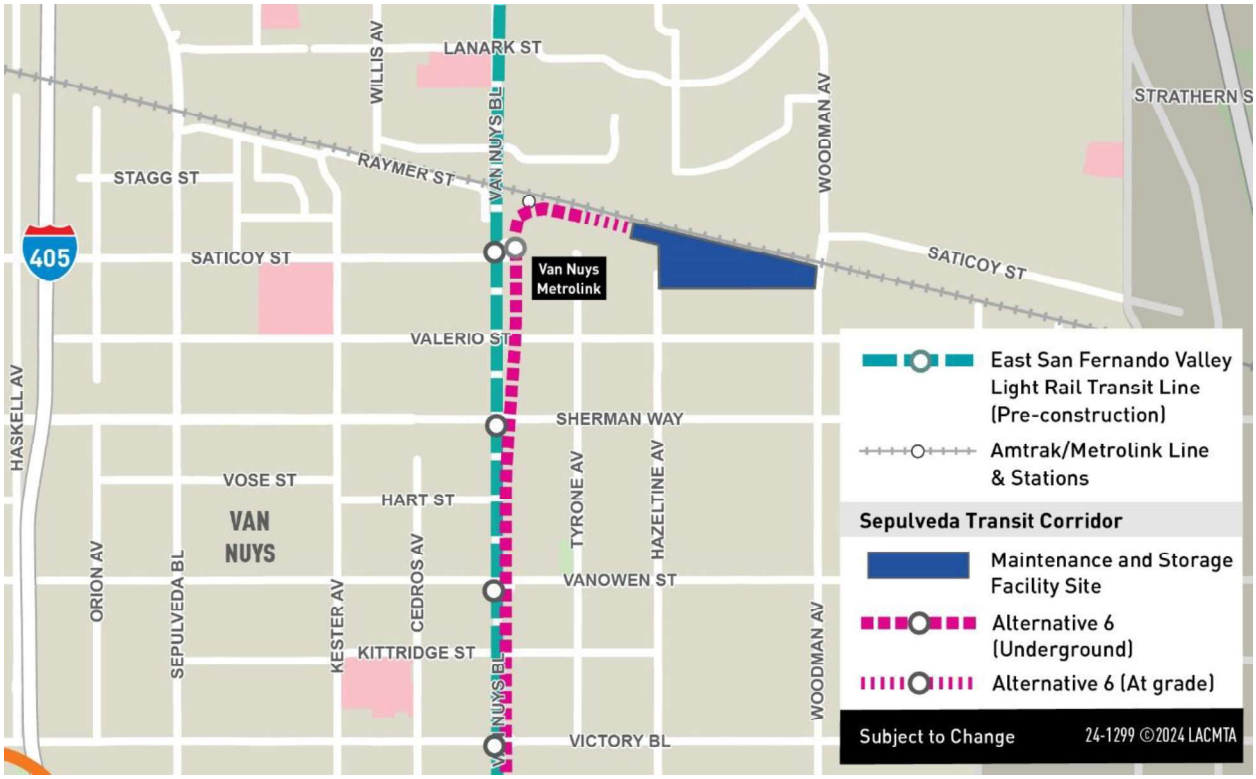
The MSF for Alternative 6 would be located east of the Van Nuys Metrolink Station and would encompass approximately 41 acres. The MSF would be designed to accommodate 94 vehicles and would be bounded by single-family residences to the south, the LOSSAN rail corridor to the north, Woodman Avenue to the east, and Hazeltine Avenue and industrial manufacturing enterprises to the west. Heavy rail trains would transition from underground to an at-grade configuration near the MSF, the northwest corner of the site. Trains would then travel southeast to maintenance facilities and storage tracks.

The site would include the following facilities:

- Two entrance gates with guard shacks
- Maintenance facility building
- Maintenance-of-way (MOW) facility
- Storage tracks
- Carwash
- Cleaning platform
- Administrative offices
- Pedestrian bridge connecting the administrative offices to employee parking
- Two traction power substations (TPSS)

Figure 10-3 shows the location of the MSF for Alternative 6.

Figure 10-3. Alternative 6: Maintenance and Storage Facility Site



Source: HTA, 2024

10.1.1.8 Traction Power Substations

TPSSs transform and convert high voltage alternating current supplied from power utility feeders into direct current suitable for transit operation. Twenty-two TPSS facilities would be located along the alignment and would be spaced approximately 1 mile apart, except within the Santa Monica Mountains. Each at-grade TPSS along the alignment would be approximately 5,000 square feet. Table 10-2 lists the TPSS locations for Alternative 6.

Figure 10-4 shows the TPSS locations along the Alternative 6 alignment.

Table 10-2. Alternative 6: Traction Power Substation Locations

TPSS No.	TPSS Location Description	Configuration
1 and 2	TPSSs 1 and 2 would be located immediately north of the Bundy Drive and Mississippi Avenue intersection.	Underground (within station)
3 and 4	TPSSs 3 and 4 would be located east of the Santa Monica Boulevard and Stoner Avenue intersection.	Underground (within station)
5 and 6	TPSSs 5 and 6 would be located southeast of the Kinross Avenue and Gayley Avenue intersection.	Underground (within station)
7 and 8	TPSSs 7 and 8 would be located at the north end of the UCLA Gateway Plaza Station.	Underground (within station)
9 and 10	TPSSs 9 and 10 would be located east of Stone Canyon Reservoir on LADWP property.	At-grade
11 and 12	TPSSs 11 and 12 would be located at the Van Nuys Boulevard and Ventura Boulevard intersection.	Underground (within station)
13 and 14	TPSSs 13 and 14 would be located immediately south of Magnolia Boulevard and west of Van Nuys Boulevard.	At-grade
15 and 16	TPSSs 15 and 16 would be located along Van Nuys Boulevard between Emelita Street and Califa Street.	Underground (within station)
17 and 18	TPSSs 17 and 18 would be located east of Van Nuys Boulevard and immediately north of Vanowen Street.	At-grade
19 and 20	TPSSs 19 and 20 would be located east of Van Nuys Boulevard between Saticoy Street and Keswick Street.	Underground (within station)
21 and 22	TPSSs 21 and 22 would be located south of the Metrolink tracks and east of Hazeltine Avenue.	At-grade (within MSF)

Source: HTA, 2024

Figure 10-4. Alternative 6: Traction Power Substation Locations



Source: HTA, 2024

10.1.1.9 Roadway Configuration Changes

In addition to the access road described in the following section, Alternative 6 would require reconstruction of roadways and sidewalks near stations.

10.1.1.10 Ventilation Facilities

Tunnel ventilation for Alternative 6 would be similar to existing Metro ventilation systems for light and heavy rail underground subways. In case of emergency, smoke would be directed away from trains and extracted through the use of emergency ventilation fans installed at underground stations and crossover locations adjacent to the stations. In addition, a mid-mountain facility located on LADWP property east of Stone Canyon Reservoir in the Santa Monica Mountains would include a ventilation shaft for the extraction of air, along with two TPSSs. An access road from the Stone Canyon Reservoir access road would be constructed to the location of the shaft, requiring grading of the hillside along its route.

10.1.1.11 Fire/Life Safety – Emergency Egress

Each tunnel would include an emergency walkway that measures a minimum of 2.5 feet wide for evacuation. Cross-passages would be provided at regular intervals to connect the two tunnels to allow for safe egress to a point of safety (typically at a station) during an emergency. Access to tunnel segments for first responders would be through stations.

10.1.2 Construction Activities

Temporary construction activities for Alternative 6 would include construction of ancillary facilities, as well as guideway and station construction and construction staging and laydown areas, which would be co-located with future MSF and station locations. Construction of the transit facilities through substantial completion is expected to have a duration of 7½ years. Early works, such as site preparation, demolition, and utility relocation, could start in advance of construction of the transit facilities.

For the guideway, twin-bore tunnels would be constructed using two tunnel boring machines (TBM). The tunnel alignment would be constructed over three segments—including the Westside, Santa Monica Mountains, and Valley—using a different pair of TBMs for each segment. For the Westside segment, the TBMs would be launched from the Metro E Line Station and retrieved at the UCLA Gateway Plaza Station. For the Santa Monica Mountains segment, the TBMs would operate from the Ventura Boulevard Station in a southerly direction for retrieval from UCLA Gateway Plaza Station. In the Valley, TBMs would be launched from the Van Nuys Metrolink Station and retrieved at the Ventura Boulevard Station.

The distance from the surface to the top of the tunnels would vary from approximately 50 feet to 130 feet in the Westside, between 120 feet and 730 feet in the Santa Monica Mountains, and between 40 feet and 75 feet in the Valley.

Construction work zones would also be co-located with future MSF and station locations. All work zones would comprise the permanent facility footprint with additional temporary construction easements from adjoining properties. In addition to permanent facility locations, TBM launch at the Metro E Line Station would require the closure of I-10 westbound off-ramps at Bundy Drive for the duration of the Sepulveda Transit Corridor Project (Project) construction.

Alternative 6 would include seven underground stations. All stations would be constructed using a “cut-and-cover” method, whereby the station structure would be constructed within a trench excavated from the surface that is covered by a temporary deck and backfilled during the later stages of station construction. Traffic and pedestrian detours would be necessary during underground station excavation until decking is in place and the appropriate safety measures have been taken to resume cross traffic. In addition, portions of the Wilshire Boulevard/Metro D Line Station crossing underneath the Metro D Line Westwood/UCLA Station and underneath a mixed-use building at the north end of the station would be

constructed using the sequential excavation method, as it would not be possible to excavate the station from the surface.

Construction of the MSF site would begin with demolition of existing structures, followed by earthwork and grading. Building foundations and structures would be constructed, followed by yard improvements and trackwork, including paving, parking lots, walkways, fencing, landscaping, lighting, and security systems. Finally, building mechanical, electrical, and plumbing systems, finishes, and equipment would be installed. The MSF site would also be used as a staging site.

Station and MSF sites would be used for construction staging areas. A construction staging area, shown on Figure 10-5, would also be located off Stone Canyon Road northeast of the Upper Stone Canyon Reservoir. In addition, temporary construction easements outside of the station and MSF footprints would be required along Bundy Drive, Santa Monica Boulevard, Wilshire Boulevard, and Van Nuys Boulevard. The westbound to southbound loop off-ramp of the I-10 interchange at Bundy Drive would also be used as a staging area and would require extended ramp closure. Construction staging areas would provide the necessary space for the following activities:

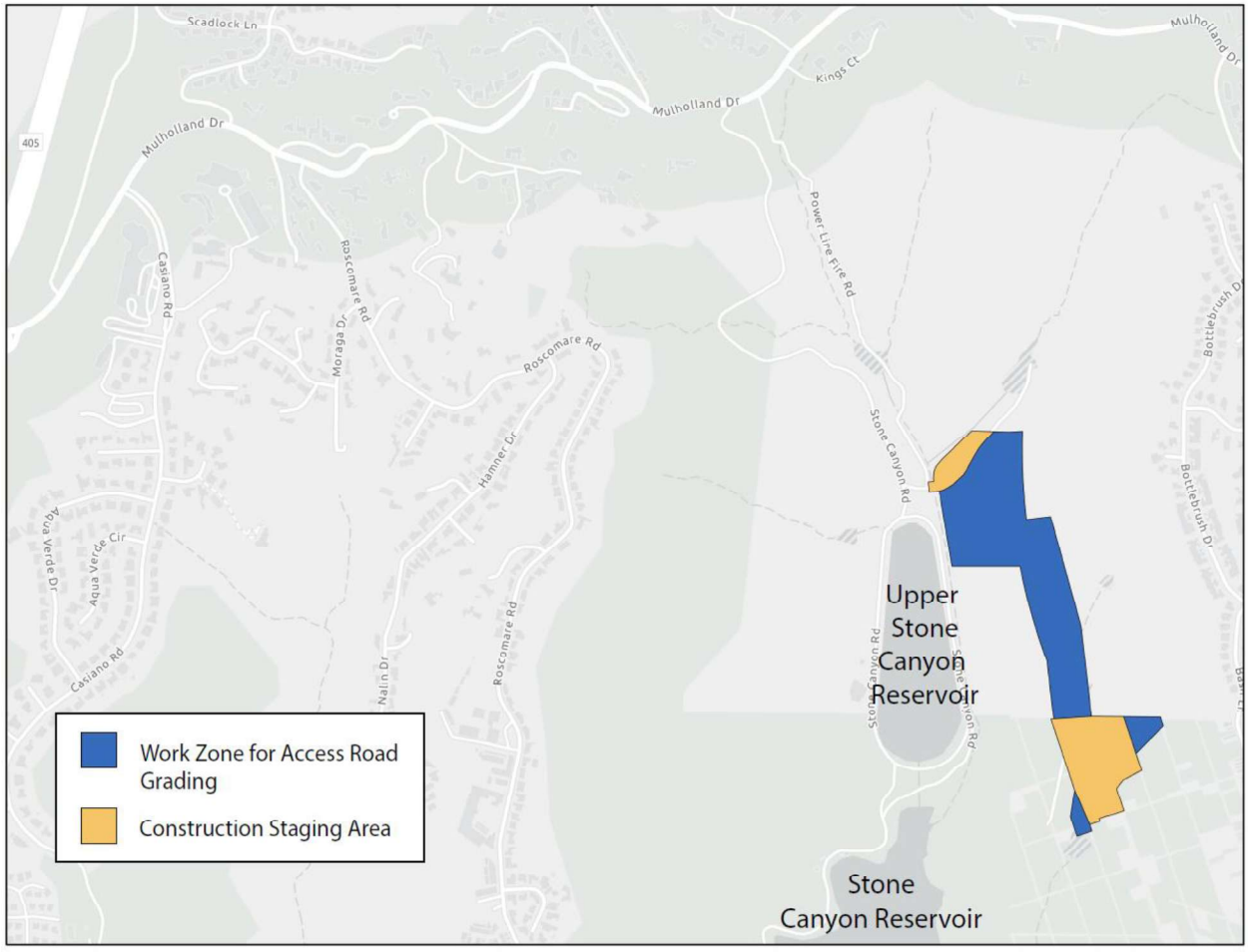
- Contractors' equipment
- Receiving deliveries
- Testing of soils for minerals or hazards
- Storing materials
- Site offices
- Work zone for excavation
- Other construction activities (including parking and change facilities for workers, location of construction office trailers, storage, staging and delivery of construction materials and permanent plant equipment, and maintenance of construction equipment)

The size of proposed construction staging areas for each station would depend on the level of work to be performed for a specific station and considerations for tunneling, such as TBM launch or extraction. Staging areas required for TBM launching would include areas for launch and access shafts, cranes, material and equipment, precast concrete segmental liner storage, truck wash areas, mechanical and electrical shops, temporary services, temporary power, ventilation, cooling tower, plants, temporary construction driveways, storage for spoils, and space for field offices.

Alternative 6 would also include several ancillary facilities and structures, including TPSS structures, a deep vent shaft structure at Stone Canyon Reservoir, as well as additional vent shafts at stations and crossovers. TPSSs would be co-located with MSF and station locations, except for two TPSSs at the Stone Canyon Reservoir vent shaft and four along Van Nuys Boulevard in the Valley. The Stone Canyon Reservoir vent shaft would be constructed using a vertical shaft sinking machine that uses mechanized shaft sinking equipment to bore a vertical hole down into the ground. Operation of the machine would be controlled and monitored from the surface. The ventilation shaft and two TPSSs in the Santa Monica Mountains would require an access road within the LADWP property at Stone Canyon Reservoir. Construction of the access road would require grading east of the reservoir. Construction of all mid-mountain facilities would take place within the footprint shown on Figure 10-5.

Additional vent shafts would be located at each station with one potential intermediate vent shaft where stations are spaced apart. These vent shafts would be constructed using the typical cut-and-cover method, with lateral bracing as the excavation proceeds. During station construction, the shafts would likely be used for construction crew, material, and equipment access.

Figure 10-5. Alternative 6: Mid-Mountain Construction Staging Site



Source: HTA, 2024

Alternative 6 would utilize precast tunnel lining segments in the construction of the transit tunnels. These tunnel lining segments would be similar to those used in recent Metro underground transit projects. Therefore, it is expected that the tunnel lining segments would be obtained from an existing casting facility in Los Angeles County and no additional permits or approvals would be necessary specific to the facility.

10.2 Existing Conditions

10.2.1 Regional Setting

The Resource Study Area (RSA) consists of portions of the City of Los Angeles neighborhoods, including West Los Angeles, Westwood, Brentwood, Sherman Oaks, and Van Nuys. Existing land uses within the RSA include those typically found in mature urban and suburban communities such as residential, office, commercial, retail, mixed-use development, education facilities, museums, parks, and open space. The majority of single-family residential land uses within the RSA are located in Brentwood, Bel-Air, Encino, and Sherman Oaks, while multi-family residential land uses are concentrated in the Westwood, Sawtelle, and Van Nuys neighborhoods. Businesses and industrial parks are concentrated within Van Nuys along Van Nuys Boulevard. Commercial uses within the RSA range from local neighborhood/commercial main

street retail operations to large regional malls and shopping centers within West Los Angeles, Westwood, Santa Monica, Van Nuys, Brentwood and Sherman Oaks. Activity centers within the RSA include the Fox 11 Los Angeles, UCLA, the Getty Museum, Los Angeles National Cemetery, Ronald Reagan Medical Center, West Los Angeles U.S. Veterans Affairs (VA) Medical Center, Hammer Museum, Sherman Oaks Hospital, Sherman Oaks Galleria, Valley Presbyterian Hospital, the Bad News Bears Park, Southern California Behavioral Health Hospital, and the Department of Public Social Services. (Refer to the *Sepulveda Transit Corridor Project Land Use and Development Technical Report* [Metro, 2025] for additional information related to existing land uses in the RSA).

10.2.2 Hazardous Materials from Known Release Sites

In June 2023, several publicly available databases maintained under Government Code Section 65962.5 (i.e., the Cortese List) were searched to determine whether any known hazardous materials are present in the RSA. The Hazardous Waste and Substances Site List (EnviroStor database [DTSC, 2023]) is maintained by the DTSC) as part of the requirements of Government Code Section 65962.5. SWRCB maintains the GeoTracker database, an information management system for tracking leaking underground storage tank (LUST) cleanup sites, permitted underground storage tanks (USTs), Cleanup Program Sites, Military Cleanup sites, Land Disposal sites, Waste Discharge Requirement sites, and Oil and Gas Monitoring sites (SWRCB, 2023).[35]

On October 24, 2022, EDR, Inc. (EDR) conducted a government database search for listings within the appropriate American Society for Testing and Materials (ASTM) minimum search distance (Attachment 1C). The search radius (distance from Alternative 6) depends on the applicable standards for each database and is identified in Table 10-3 for each of the respective database listings. A variety of identified sites within the vicinity of Alternative 6 are listed in the databases, as shown in Table 10-3. Many of the facilities are permitted for more than one hazardous material use and, therefore, could be listed in more than one database.

Table 10-3. Alternative 6: EDR Database Search Results

Agency Database (* Indicates that Alternative 6 ROW is listed in this database)	Survey Distance	Number of Sites Identified
AST—Aboveground Petroleum Storage Tank Facilities: A listing of aboveground storage tank petroleum storage tank locations.	0.25 mile	34
CERS HAZ WASTE—California Environmental Reporting System (CERS) Hazardous Waste: A list of sites in the California Environmental Protection Agency Regulated Site Portal that fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and Resource Conservation and Recovery Act LQ HW Generator programs.	0.25 mile	268*

[35] Cleanup Program Sites (CPSs), also known as Site Cleanups (SCs), are formerly known as Spills, Leaks, Investigations, and Cleanups (SLIC) sites. Cleanup Program Sites include all "non-federally owned" sites that are regulated under the SWRCB's Site Cleanup Program and/or similar programs conducted by each of the nine Regional Water Quality Control Boards. These sites are highly variable and hazardous materials found at them include, but are not limited to, hydrocarbon solvents, pesticides, perchlorate, nitrate, heavy metals, and petroleum constituents. LUST Cleanup Sites include all UST sites that have had an unauthorized release (i.e., leak or spill) of a hazardous substance, usually fuel hydrocarbons, and are being (or have been) cleaned up. In GeoTracker, LUST sites consist almost entirely of fuel-contaminated LUST sites (also known as "Leaking Underground Fuel Tank", or "LUFT" sites), which are regulated pursuant to Title 23 of the California Code of Regulations, Chapter 16, Article 11.

Agency Database (* Indicates that Alternative 6 ROW is listed in this database)	Survey Distance	Number of Sites Identified
CERS TANKS—California Environmental Reporting System (CERS) Tanks: A list of sites in the California Environmental Protection Agency Regulated Site Portal that fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.	0.25 mile	73*
CERS—California Environmental Reporting System: Provides an overview of regulated hazardous materials and waste; state, and federal cleanups; impacted ground and surface waters; and toxic materials activities across the spectrum of environmental programs for any given location in California.	0.25 mile	443*
CHMIRS—California Hazardous Material Incident Report System: California Hazardous Material Incident Report System contains information on reported hazardous material incidents (accidental releases or spills).	0.25 mile	121*
CIWQS—California Integrated Water Quality System: The California Integrated Water Quality System (CIWQS) is a computer system used by the state and Regional Water Quality Control Board to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.	0.25 mile	149*
CORTESE—Hazardous Waste & Substances Sites List: Identifies public drinking water wells with detectable levels of contamination; hazardous substance sites selected for remedial action; sites with known toxic material identified through the abandoned site assessment program; sites with underground storage tanks (USTs) having a reportable release; and all solid waste disposal facilities from which there is known migration. The sites for the list are designated by State Water Resources Control Board leaking underground storage tank, Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).	0.25 mile	64*
HIST CORTESE: Identifies historical public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The sites for the list are designated by the State Water Resources Control Board leaking underground storage tank, Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.	0.5 mile	61*
CPS-SLIC—Statewide Spills, Leaks, Investigations, and Cleanup Cases (GEOTRACKER): Cleanup Program Sites (CPSs); also known as Site Cleanups [SCs] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Regional Water Quality Control Board data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.	0.5 mile	8
DRYCLEANERS—Cleaner Facilities: A list of drycleaner related facilities that have U.S. Environmental Protection Agency Identification (ID) numbers. These are facilities with certain Standard Industrial Classification (SIC) codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; dry-cleaning plants, except rugs; carpet and upholstery cleaning; industrial launderers; laundry and garment services.	0.25 mile	95
EMI—Emissions Inventory Data: Toxics and criteria pollutant emissions data collected by the California Air Resources Board (CARB) and local air pollution agencies.	0.25 mile	209*

Agency Database (* Indicates that Alternative 6 ROW is listed in this database)	Survey Distance	Number of Sites Identified
ENVIROSTOR—EnviroStor Database: The Department of Toxic Substances Control's Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List [NPL]); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to that which was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.	1 mile	17
FID UST—Facility Inventory Database Underground Storage Tank: Contains a historical listing of active and inactive UST locations from the State Water Resources Control Board. Refer to local/county source for current data.	0.25 mile	222
HAULERS—Registered Waste Tire Haulers Listing: A listing of registered waste tire haulers.	0.25 mile	52
HAZNET—Facility and Manifest Data: The data is extracted from the copies of hazardous waste manifests received each year by the Department of Toxic Substances Control. The annual volume of manifests is typically 700,000 to 1,000,000 annually, representing approximately 350,000 to 500,000 shipments. Data are from the manifests submitted without correction; therefore, many contain some invalid values for data elements such as generator ID, treatment, storage, and disposal (TSD) ID, waste category, and disposal method. This database begins with calendar year 1993.	0.25 mile	2,933*
HIST Cal-Sites—Calsites Database: The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California Environmental Protection Agency reevaluated and significantly reduced the number of sites in the Calsites database. It is no longer updated by the state agency. It has been replaced by ENVIROSTOR.	1 mile	1
HWP—EnviroStor Permitted Facilities Listing: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.	1 mile	1
HWTS— Hazardous Waste Tracking System: The Department of Toxic Substances Control maintains the Hazardous Waste Tracking System, which stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.	0.25 mile	4,441*
UST— Active Underground Storage Tank Facilities: Active UST facilities gathered from the local regulatory agencies.	0.25 mile	449*
LUST—Leaking Underground Fuel Tank Report (GEOTRACKER): LUST Sites included in GeoTracker. GeoTracker is the Regional Water Quality Control Board data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.	0.5 mile	102
SWEEPS UST—Statewide Environmental Evaluation and Planning System Underground Storage Tank: This UST listing was updated and maintained by a company contacted by the State Water Resources Control Board in the early 1990s. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.	0.25 mile	226
HIST UST—Hazardous Substances Storage Contained Database: Facilities on a historic list of underground storage tank sites.	0.25 mile	172

Agency Database (* Indicates that Alternative 6 ROW is listed in this database)	Survey Distance	Number of Sites Identified
NPDES—National Pollutant Discharge Elimination System Permits Listing: A listing of NPDES permits, including stormwater.	0.25 mile	78*
SWF/LF (SWIS)—Solid Waste Information System: Active, Closed, and Inactive Landfills. Solid Waste Information System records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet Resource Conservation and Recovery Act Section 4004 criteria for solid waste landfills or disposal sites.	0.5 mile	7
WDS—Waste Discharge System: Sites that have been issued waste discharge requirements.	0.25 mile	2
ECHO—Enforcement & Compliance History Information: Enforcement & Compliance History Information provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.	0.125 mile	1,211*
EDR Exclusive Historical Auto Stations: EDR has searched selected national collections of business directories and has compiled listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, and service station.	0.125 mile	222
EDR Exclusive Historical Cleaners: EDR has searched selected national collections of business directories and has compiled listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, and wash & dry.	0.125 mile	114*
FINDS—Facility Index System/Facility Registry System: Contains both facility information and "pointers" to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCBs Activity Data System).	0.125 mile	1,370*
RCRA NonGen/NLR—Resource Conservation and Recovery Act Non-Generators/No Longer Regulated: Resource Conservation and Recovery Act info is the Environmental Protection Agency's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act of 1976 and the Hazardous and Solid Waste Amendments of 1984. The database includes selective information on sites that generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act. Non-Generators do not presently generate hazardous waste.	0.25 mile	951*
RCRA-LQG—Resource Conservation and Recovery Act Information System Large Quantity Generators: Sites that generate, transport, store, treat, and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Facilities permitted to generate more than 1,000 kilograms (kg) of hazardous waste or over 1 kg of acutely hazardous waste per month.	0.25 mile	45

Agency Database (* Indicates that Alternative 6 ROW is listed in this database)	Survey Distance	Number of Sites Identified
RCRA-SQG—Resource Conservation and Recovery Act Information System Small Quantity Generators: Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Facilities permitted to generate more than 100 kg per month but less than 1,000 kg per month of non-acutely hazardous materials.	0.25 mile	203
RCRA-TSDF—Resource Conservation and Recovery Act Information System Small Quantity Generators: Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. Treatment, storage, and disposal facilities (TSDFs) treat, store, or dispose of the waste.	0.5 mile	1
RCRA-VSQG—Resource Conservation and Recovery Act Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators): Sites that generate, transport, store, treat and/or dispose of hazardous wastes as defined by the Resource Conservation and Recovery Act. Very small quantity generators generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.	0.25 mile	2
SEMS—Superfund Enterprise Management System: Hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of the U.S. Environmental Protection Agency's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to Superfund Enterprise Management System by the U.S. Environmental Protection Agency in 2015. The list contains data on potentially hazardous waste sites that have been reported to the U.S. Environmental Protection Agency by states, municipalities, private companies, and private persons, pursuant to Section 103 of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are already on or proposed to be on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.	0.5 mile	1
SEMS-ARCHIVE—Superfund Enterprise Management System Archive: Sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to Superfund Enterprise Management System ARCHIVE by Environmental Protection Agency in 2015.	0.5 mile	5

Source: ICF, 2023

As stated in Section 3, many listings in the report were identified as not having the potential to impact the Project. Thus, this discussion focuses on the potential for recognized environmental conditions (REC), LUST, and Cortese list sites that could potentially result in a hazard to the public and/or environment during construction and operation.

There are 67 closed LUST cases, two open LUST case, 10 Cleanup Program Sites, one State Response site, and one Tiered Permit site within 0.5 mile of Alternative 6 (Attachment 2, Table B-5).[36] No Brownfields sites were identified within or in the vicinity of Alternative. All 69 LUST cases are on the Cortese list. Table B-5 summarizes the identified affected properties, including business addresses, a summary of the

[36] Tiered Permit: Sites with permits granted by the Resource Conservation and Recovery Act

status of each property, and proximity of the property to Alternative 6. The site numbers identified for each property in Table B-5 correspond with the numbers that appear on Figure 10-6 and Figure 10-7.

Figure 10-6. Alternative 6: Hazardous Material Sites within 0.5 Mile (North)



Source: DTSC, 2023; SWRCB, 2023, ICF 2022c

Figure 10-7. Alternative 6: Hazardous Material Sites within 0.5 Mile (South)



Source: DTSC, 2023; SWRCB, 2023, ICF 2022c

10.2.2.1 San Fernando Valley Superfund Site

The Area 4 Pollock Operable Unit (OU) is one of the four San Fernando Valley Superfund Site areas. The Valley (Area 4) Superfund site is located south of Los Feliz Avenue to State Route 110, east of the RSA. The four Valley Superfund Site area are designated as the following:

- Area 1 North Hollywood (North Hollywood and Burbank OU)

- Area 2 Glendale (Crystal Springs Well Field)
- Area 3 Glendale (Verdugo Study Area) (Note Area 3 was removed from Superfund site list in 2004)
- Area 4 Pollock OU (Pollock Wellfield)

The Valley (Area 4) Pollock OU Superfund site is a 5,860-acre area with areas of contaminated groundwater near the LADWP Pollock Well Field in the City of Los Angeles. Historical manufacturing work in the Valley groundwater basin, dating back to World War II, contaminated the groundwater in the region with volatile organic compounds (VOCs), including trichloroethylene (TCE) and tetrachloroethylene (PCE). The Valley groundwater basin provides drinking water to residents of the Cities of Los Angeles, Burbank and Glendale, as well as the La Crescenta Water District. In 2022, LADWP stated that the San Fernando Basin provides approximately 10 percent of the City of Los Angeles's water supply annually but has the potential to provide up to 21 percent in an average year.

The regional plume of the Area 4 Pollock OU could potentially affect the northern portions of Alternative 6 north of Saticoy Street. In addition, the eastern portion of the plume is depicted as moving south, just east of Alternative 6 (ICF, 2023).

Use of contaminated groundwater poses the greatest risk at this site. The Valley Area 4 groundwater contamination is being addressed through the coordination of federal, state, and municipal agencies, including EPA, DTSC, State Regional Water Quality Control Board (SRWQCB), and the Los Angeles Regional Water Quality Control Board (LARWQCB).

EPA completed an interim investigation of the Pollock Well Field in 1994. EPA did not select a remedy for the site because the LADWP constructed a wellhead treatment project to clean the water in the Valley Basin. Since 1999, LADWP's Granular Activated Carbon Treatment Plant at the Pollock Well Field has been treating groundwater to meet drinking water standards and return it to the public water supply system.

Because the LADWP built a VOC treatment facility to treat groundwater, EPA determined that further cleanup was not immediately necessary. EPA is evaluating the effectiveness of the Pollock wellhead treatment project as part of its ongoing basin-wide studies and will determine the need for additional cleanup actions at the site. While the site awaits further investigation on the nature and extent of contamination in this area, the Pollock wellhead treatment operation continues to treat groundwater to meet drinking water standards and reduce the potential of exposure to contaminated water.

EPA Remedial Investigation field activities at the Pollock OU began in 2017 and have included the following:

- Groundwater assessment and sampling of existing monitoring wells
- Soil sampling during the installation of new monitoring wells
- Installation and sampling of soil gas monitoring probes
- Indoor air sampling to evaluate vapor intrusion

EPA conducted an initial round of indoor air sampling of homes in the Atwater Village area in February 2022. Results from the first sampling event indicated that indoor air sampled was not impacted by VOCs migrating from the groundwater into homes. To verify that VOCs from the contaminated groundwater are not impacting indoor air quality in the area, an additional round of indoor air sampling of homes, businesses, and schools in the Atwater Village neighborhood will be conducted in winter 2023 (EPA, 2023a). Based on these results, it can be inferred that VOCs would not affect proposed stations under Alternative 6.

10.2.3 Hazardous Materials from Roadway Corridors

Yellow-thermoplastic and yellow-painted traffic stripe and pavement marking that was applied to roadways before 1997 contained as much as 2.6 percent lead (Caltrans, 2019). Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably paint. The use of lead as an additive to paint was discontinued in 1978 because human exposure to lead was determined by the EPA and OSHA to be an adverse human health risk. Residue produced from the removal of this yellow-thermoplastic and yellow-painted traffic stripe and pavement marking contains heavy metals such as lead chromate in concentrations that exceed thresholds established by the California Health and Safety Code and Title 22 of the California Code of Regulations (CCR) Division 4.5 (Caltrans, 2019).

Aerially deposited lead (ADL) can be present along major roadway corridors, such as I-405, Van Nuys Boulevard and Sepulveda Boulevard. Lead alkyl compounds were first added to gasoline in the 1920s to boost octane levels and improve engine performance. Beginning in 1973, EPA ordered a gradual phase-out of lead from gasoline, substantially reducing the use of leaded gasoline by the mid-1980s. However, the EPA estimated that prior to the 1970s, vehicles emitted approximately 75 percent of the lead consumed in leaded gasoline as particulate matter through tailpipe exhaust (DTSC, 2004). A portion of this particulate matter settled into soils near major roadways. DTSC regulations specify the levels at which lead in soil is considered to be a risk. In areas where road construction would occur, the California Department of Transportation (Caltrans) has found lead within 30 feet of the edge of the pavement and within the top 6 inches of the soil. In some cases, lead has been found as deep as 2 to 3 feet below the surface. Therefore, soils in major roadway corridors, including those within the Alternative 3 alignment, have the potential to be contaminated with ADL from car emissions that occurred prior to the elimination of lead in gasoline (DTSC, 2016).

10.2.4 Treated Wood Waste

Wood utility poles may be treated with preserving chemicals that, if removed, can result in a substance called treated wood waste (TWW). TWW contains hazardous chemicals that pose a risk to human health and the environment. Arsenic, chromium, copper, creosote, and pentachlorophenol are among the chemicals added to preserve wood. These chemicals are known to be toxic or carcinogenic. Harmful exposure to these chemicals may result from dermal contact with TWW, or from inhalation or ingestion of TWW particulate (DTSC, 2024).

10.2.5 Hazardous Building Materials

Asbestos is designated as a hazardous substance when the fibers have potential to come in contact with air because the fibers are small enough to inhale and lodge in the lung tissue, which can cause health problems. The presence of asbestos-containing material (ACM) in buildings, natural gas pipelines, and cementitious water pipelines poses an inhalation threat only if the ACMs are found to be in a friable state. If the ACMs are not friable, no inhalation hazard is present, because asbestos fibers remain bound in the material matrix. Emissions of asbestos fiber to the ambient air, which can occur during activities such as renovation or demolition of structures made with ACMs (e.g., insulation), are regulated in accordance with Section 112 of the Federal Clean Air Act.

Lead is a highly toxic metal that EPA and OSHA have determined to be an adverse health risk, particularly to young children. In 1978, the federal government required the reduction of lead in house paint to less than 0.06 percent (600 parts per million). Because of its toxic properties, lead is regulated as a hazardous material. Excessive exposure to lead can result in the accumulation of lead in the blood, soft tissues, and bones. Primary sources of lead exposure include the following: deteriorating lead-based

paint, including painted curbs, poles, protective bollards, bridges, and fire hydrants along the right-of-way (ROW) and existing buildings within the alternative alignment; lead-contaminated dust; and lead-contaminated soil. Buildings that have been constructed prior to 1978 and that contain lead-based paints could require abatement prior to construction activities.

Polychlorinated biphenyls (PCBs) are organic chemicals, usually in the form of an oil, that were historically used in electrical equipment. PCBs are most commonly associated with pole-mounted electrical transformers, but they were also used in insulators and capacitors in building electrical equipment. PCBs were commonly used in the small capacitor within fluorescent light ballasts. Ballasts manufactured through 1979 may contain PCBs. On-site fluorescent light features and electrical transformers that were manufactured prior to and throughout 1979, or reasonably suspected to have been manufactured before or throughout 1979, shall be assumed to contain PCBs. PCBs-containing florescent light bulbs would be of concern if they are leaking as they may expose workers handling the fixtures to a variety of adverse health effects. According to EPA TSCA regulations, the material must be incinerated. The entire lighting fixture does not need special handling and disposal as long as the ballast (electrical box) is not leaking. The non-leaking ballasts can be removed and recycled or disposed of properly. PCBs are considered hazardous materials because of their toxicity; they have been shown to cause cancer in animals, along with effects on the immune, reproductive, nervous, and endocrine systems, and studies have shown evidence of similar effects in humans (EPA, 2013).

10.2.6 Other Potential Hazardous Materials

10.2.6.1 Residual Pesticides

Chemicals potentially used in agricultural activities could result in residual concentrations of persistent pesticides in the soil. Persistent pesticides leave residues that remain in the environment without breaking down, such as organochlorine pesticides (e.g., dichlorodiphenyltrichloroethane, Toxaphene, and Dieldrin).

Lead arsenate is used as an herbicide, insecticide, or rodenticide. Lead arsenates were historically used by railroad companies as a means of weed control along a railroad ROW. Pesticide residues from lead arsenate bind tightly to the surface soil layer, where they can remain for decades. As a result, such residues, if present, could pose a human health risk when the soil is excavated. Lead and arsenic are the primary constituents of lead arsenate pesticide. Both lead and arsenic could be toxic at high concentrations in soil and are highly toxic to humans.

10.2.6.2 Household Hazardous Waste

EPA defines household hazardous waste as “leftover products such as paints, cleaners, oils, batteries, and pesticides that contain potentially hazardous ingredients that could be corrosive, toxic, ignitable, or reactive.” According to EPA, Americans generate approximately 1.6 million tons of household hazardous waste per year, with the average home accumulating as much as 100 pounds of household hazardous waste annually. Improper disposal of household hazardous wastes commonly includes pouring them down the drain, on the ground, or into storm sewers, and in some cases, putting them out with the trash. Though the dangers of such disposal methods might not be immediately obvious, improper disposal of these wastes can pollute the environment and pose a threat to human health.

10.2.7 Methane Hazard Zones

Methane gas, commonly known as natural gas, may underlay the site. Potential hazards associated with methane include fire or explosion due to methane gas accumulations, since it is a highly flammable

substance, and human health risks associated with natural gas poisoning. Exposure to high concentrations of methane can result in long-term health effects such as respiratory, cardiovascular, and neurological issues, though this is generally a concern in confined spaces rather than outdoor environments. Methane and other flammable or toxic gases, notably hydrogen sulfide, are often associated with naturally occurring petroleum deposits or active and former oil fields. These areas may have a potential for subsurface accumulations of methane and other volatile gases. Both methane and hydrogen sulfide are highly flammable and, in high concentrations, pose explosion hazards to the public. Exposure to high levels of hydrogen sulfide can also cause long-term health effects, including impaired cognitive function, respiratory irritation, and neurological impacts.

In the City of Los Angeles, two types of methane hazard zones exist: methane zones and methane buffer zones. A methane zone is the area closest to the source of the subsurface methane gas, whereas a methane buffer zone surrounds the outer limits of a methane zone. Both of these zones are typically a result of naturally surfacing tar and crude oil. These subsurface hazards can also be caused by soil contamination issues, such as historical oil wells (Geo Forward, 2021).

As shown on Figure 10-8, methane hazard zones exist within the Alternative 6 alignment. The Sawtelle Methane Hazard Zone begins at the base of the southern slope of the Santa Monica Mountains and follows I-405 south to approximately Santa Monica Boulevard. The tunnel alignment would traverse the methane and methane buffer zones from about STA 568+50 to STA 631+00. The Santa Monica Boulevard Station and the Wilshire/Metro D Line Station would be within the methane hazard zone. Relatively low concentrations of methane and hydrogen sulfide were detected in soil gas vapor probes installed in Metro Purple Line monitoring wells, which are located along and adjacent to Wilshire Boulevard in the Westwood neighborhood and at the VA (Metro, 2024c). In addition, the methane zones map shows the methane zone and methane buffer zone near the southern end of the tunnel alignment and a small methane and methane buffer zone near the northern portion of the Alternative 6 alignment (Metro, 2024c). The methane and methane buffer zones near the northern end of the alignment is near the location of an abandoned oil exploration well (Leadwell Well No. 1) on Van Nuys Boulevard between Valerio Street and Wyandotte Street (Geo Forward, 2021, EDR, 2021).

Figure 10-8. Alternative 6: Methane Hazard Zones



Source: Geo Forward, 2021

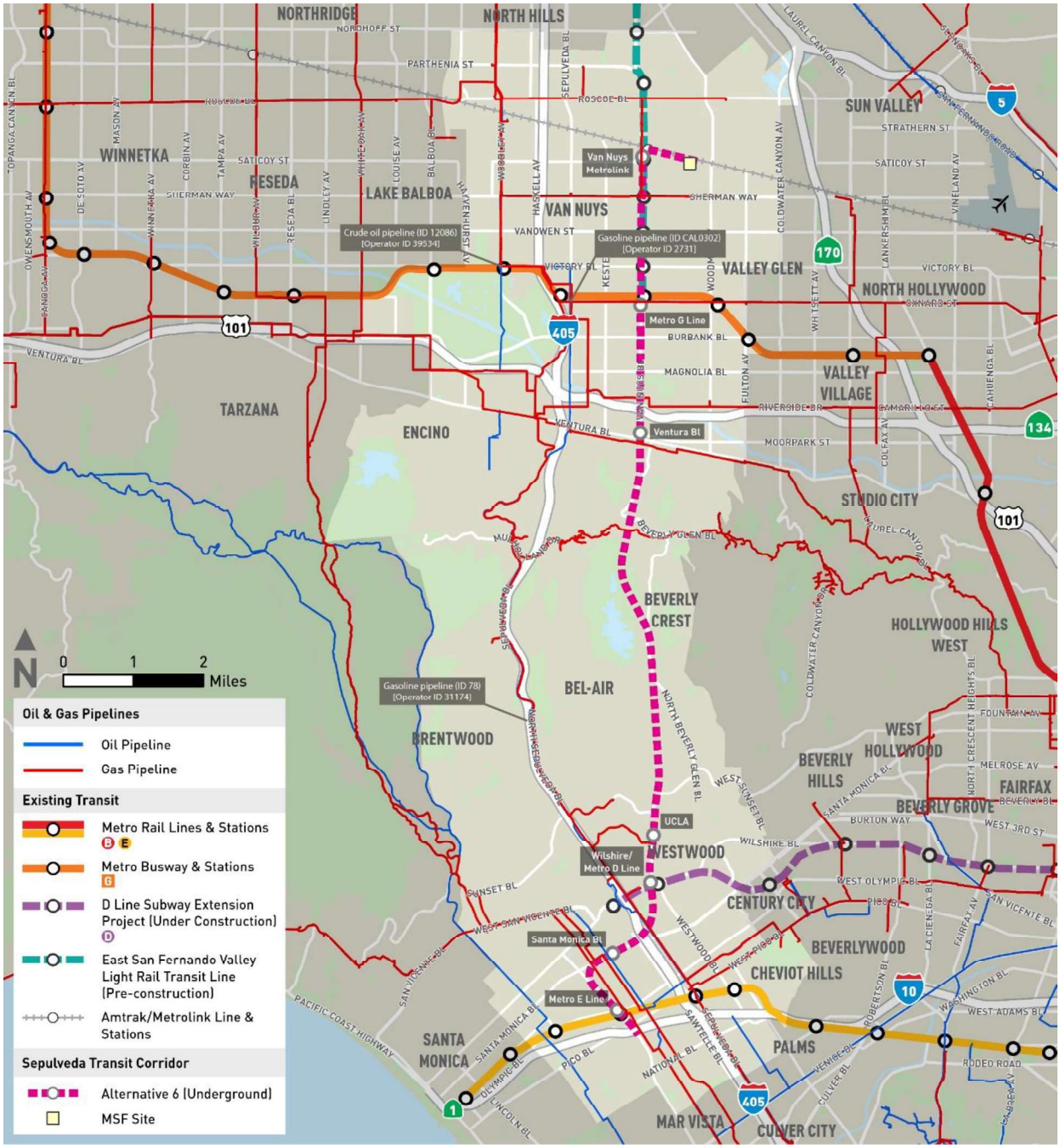
10.2.8 Petroleum and Natural Gas Pipelines

The Pipeline and Hazardous Materials Safety Administration (PHMSA) Public Map Viewer (USDOT PHMSA, 2023) identifies the following three hazardous liquid pipelines within and in the vicinity of Alternative 6, as shown on Figure 10-9: [37]

- Torrance Valley Pipeline Company (Operator ID 39534) operates a crude oil pipeline (ID 12086) as part of the Saticoy-Slauson system. As of May 20, 2022, the pipeline was reported active and filled. The 13.34-mile pipeline originates east of the Van Nuys Airport at Woodley Avenue. It travels south to the intersection of Woodley Avenue and Victory Boulevard, then turns east to travel along Victory Boulevard to the intersection of Victory Boulevard and Sepulveda Boulevard. The pipeline parallels Sepulveda Boulevard to its terminus at the intersection of Sepulveda Boulevard and Montana Avenue.
- Shell Pipeline Company (Operator ID 31174) operates a gasoline pipeline (ID 78) as part of the Ventura Products Line system. As of June 15, 2022, the pipeline was reported active and filled. The 12.25-mile pipeline originates near the intersection of Sepulveda Boulevard and Bellagio Road, where it travels south parallel to Sepulveda Boulevard and continues south beyond I-10.
- Chevron Pipeline Company (Operator ID 2731) operates a gasoline pipeline (ID CAL0302) as part of the El Segundo-Van Nuys Production subsystem. As of August 3, 2022, the pipeline was reported active and filled. The 17.14-mile pipeline originates near the intersection of Oxnard Street and Sepulveda Boulevard. The pipeline travels south parallel to Sepulveda Boulevard and continues south beyond I-10.

[37] In accordance with PHMSA's security policy, the scale of the Public Map Viewer is restricted to 1:24,000, and the minimum accuracy of the mapped pipeline locations is 500 feet.

Figure 10-9. Alternative 6: Pipelines



Source: USDOT PHMSA, 2023

10.2.9 Proximity to Schools

The following schools are located within 0.25 mile of Alternative 6:

- California Children's Academy - Saticoy Village located at 14649 Saticoy Steet in Van Nuys
- Van Nuys Elementary located at 6464 Sylmar Avenue in Van Nuys
- High Tech LA Middle located at 5435 Vesper Avenue in Van Nuys

- Van Nuys Middle located at 5435 Vesper Avenue in Van Nuys
- Charter HS of Arts-Multimedia & Performing located at 6842 Van Nuys Boulevard in Van Nuys
- Van Nuys Senior High located at 6535 Cedros Avenue in Van Nuys
- Valley Charter Middle located at 14646 Sherman Way in Van Nuys
- The Nurtury located at 14401 Dickens Steet in Sherman Oaks
- Brockton Avenue Elementary located at 1309 Armacost Avenue in West Los Angeles
- New West Charter located at 1905 Armacost Avenue in West Los Angeles
- Nora Sterry Elementary located at 1730 Corinth Avenue in West Los Angeles
- UCLA located at 405 Hilgard Avenue in Westwood (the UCLA campus also houses two university-affiliated schools, the Geffen Academy for students in grades 6-12 and the Lab School for children ages 4-12)

10.2.10 Proximity to Airports

Concentration of people and facilities in the vicinity of airports raises concerns about safety and aircraft hazards. Potential aircraft accidents pose a hazard if the proposed project is located near an airport or in the immediate area of the landing and approach zones. In addition, people can be exposed to excessive noise and aircraft pollution. The Van Nuys Airport and Santa Monica Municipal Airport are in the vicinity of Alternative 6. These airports are discussed further in Section 10.2.10.1 and Section 10.2.10.2.

10.2.10.1 Van Nuys Airport

The Van Nuys Airport is located at 16461 Sherman Way in Van Nuys. Van Nuys Airport is a 740-acre general aviation facility owned and operated by Los Angeles World Airports (LAWA). The airport is located in the west-central portion of the City of Los Angeles's incorporated boundaries, approximately 25 miles northwest of downtown Los Angeles in the center of the Valley. In general, the airport is bounded by Roscoe Boulevard on the north, Victory Boulevard on the south, Balboa Boulevard on the west, and Woodley Avenue on the east.

The airport houses 720 aircraft and operates 2 north-south parallel asphalt runways, one of which is 4,013 feet long (16L-24R) and the other which is 8,001 feet long (16R-34L). As of May 2023, the airport is averaging 615 flights per day (AirNav, 2023a).

The land development surrounding the airport is a combination of residential, commercial, industrial, and public uses, with single-family residential being the predominant land use. Much of the land immediately surrounding the airport is developed with light industrial and commercial manufacturing uses, with golf courses and public parks located immediately to the south.

Alternative 6 would be approximately 1.3 miles east of the Van Nuys Airport. The *Van Nuys Airport Plan* indicates that Alternative 6 would be located outside the airport's airport influence area (AIA)[38] (Figure 10-10) (DCP, 2006; Los Angeles County Airport Land Use Commission [ALUC], 2003a, 2023).

10.2.10.2 Santa Monica Municipal Airport

The Santa Monica Municipal Airport is located at 3223 Donald Douglas Loop-South in the City of Santa Monica. The airport is approximately 2 miles east of the Pacific Ocean and 6 miles north of the City of

[38] Airport influence area (AIA) is the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may substantially affect land uses or necessitate restrictions on those uses. The AIA constitutes the area within which certain land use actions are subject to review to determine consistency with the Airport Land Use Compatibility Plan policies.

Los Angeles. The airport houses various types of businesses, including art studios, office space, and event venues. In general, the airport is bounded by Ocean Park Boulevard on the north, Airport Avenue on the south, 23rd Street on the west, and Bundy Drive on the east. It includes recreational space for a city park, a restaurant, a theater, and an interim open space. The Santa Monica City Council approved a plan to formally close the Santa Monica Airport in 2028.

The airport houses 84 aircraft and operates two northeast-northwest parallel asphalt runways, both of which are 3,500 feet long, and a 1,600-square foot asphalt helipad. As of May 2023, the airport is averaging 452 flights per day (AirNav, 2023b).

The southern terminus of Alternative 6 would be approximately 1.3 miles northeast of the Santa Monica Municipal Airport. The *Los Angeles County Airport Land Use Plan* indicates that Alternative 6 would be located outside the airport's AIA (Figure 10-10) (LA County Planning, 1991; ALUC, 2003b, 2023).

Figure 10-10. Alternative 6: Airport Influence Area



Source: ALUC, 2023a, 2023b

10.3 Impacts Evaluation

10.3.1 Impact HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

10.3.1.1 Operational Impacts

It is not anticipated that substantial quantities of hazardous materials would be routinely transported, used, stored, or disposed of during operation of Alternative 6. Operation of stations and the guideway would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous.[39] As mandated by Project Measure (PM) HAZ-1, cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage, and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions.

Compliance with existing regulations as mandated by PM HAZ-1 would assure proper transportation, use, storage and disposal of hazardous materials, and the operational impacts of Alternative 6 would be less than significant.

10.3.1.2 Construction Impacts

Construction of Alternative 6 could expose the public or the environment to hazardous materials if the following situations occurred: improper handling or use of hazardous materials or hazardous wastes (particularly if used or handled by untrained personnel); transportation accident; environmentally unsound disposal methods; or fire, explosion, or other emergencies. The severity of potential effects varies with the activity conducted, the concentration of and type of hazardous material or wastes present, and the proximity of sensitive receptors.

As described throughout Section 2, there is an established, comprehensive federal, state, regional, and local framework independent of the California Environmental Quality Act (CEQA) process that is intended to reduce the risks associated with the use, transport, and disposal of hazardous materials. Transportation of hazardous materials on area roadways is regulated by the California Highway Patrol (CHP) and Caltrans. The use and disposal of hazardous materials is heavily regulated at both the federal and state level; these regulations are declared and enforced by agencies such as the EPA, SWRCB, DTSC, California Occupational Safety and Health Administration (Cal/OSHA), and the South Coast Air Quality Management District (SCAQMD). Metro would be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases. In accordance with the SWRCB and PM HAZ-2, Metro would obtain and comply with a National Pollutant Discharge Elimination System (NPDES) permit. In addition, coverage under the SWRCB's Construction General Permit would be obtained. As part of the Construction General Permit, the contractor would be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP), which would include best management practices (BMPs) as mandated by PM HAZ-2, including the following and/or similar measure to minimize the risk of accidental spills of hazardous materials during construction.

[39] Acutely hazardous materials are defined as waste containing chemicals so dangerous it could pose a threat to human health and the environment even when properly managed.

The types and amounts of hazardous materials would vary according to the nature of the construction activity. Construction of Alternative 6 would require use of typical construction equipment (e.g., gasoline- or diesel-powered machinery) and vehicles containing fuel, oil, and grease, as well as the use and transport of these materials. Limited quantities of certain hazardous materials such as paints, solvents, and glues would be used during construction. Construction staging and laydown would occur at multiple locations along the alignment and station sites and could include storage of excavated or demolished materials, construction offices, equipment storage, mechanical shops, and plants (grout, water treatment, foam, etc.) (Metro, 2024x). There is low likelihood that substantial quantities of hazardous materials would be stored during construction. Moreover, these hazardous materials would not include acutely hazardous materials or substances listed in 40 CFR 355 *Appendix A: Extremely Hazardous Substances and Their Threshold Planning Quantities* that could harm construction workers or the general public.

Whether a person exposed to a hazardous substance suffers adverse health effects as a result of that exposure depends upon a complex interaction of factors, including the following: the exposure pathway (the route by which a hazardous material enters the body); the amount of material to which the person is exposed; the physical form of the hazardous material (e.g., liquid or vapor) and its characteristics (e.g., toxicity); the frequency and duration of exposure; and the individual's unique biological characteristics, such as age, gender, weight, and general health. Adverse health effects from exposure to hazardous materials may be short-term (acute) or long-term (chronic). Acute effects can include damage to organs or systems in the body and possibly death. Chronic adverse effects, which may result from long-term exposure to a hazardous material, can also include organ or systemic damage, but chronic effects of particular concern include birth defects, genetic damage, and cancer.

Transportation of hazardous materials, such as contaminated soils; hazardous building materials, including asbestos, lead, and PCBs; and other hazardous wastes (i.e., TWW, roadway demolition debris, and hazardous building materials), would occur along designated truck routes within the Alternative 6 corridor and/or along major streets connecting to construction staging areas and the nearest freeways (e.g., I-405, I-10, U.S. Highway 101 [US-101]). Consistent with local plans, truck routes that may be used for transporting and hauling hazardous materials include Van Nuys Boulevard, Ventura Boulevard, Beverly Glen Boulevard, Santa Monica Boulevard, and Bundy Drive. As mandated by PM HAZ-2, transportation of hazardous materials would comply with state regulations governing hazardous materials transport as stated in the California Vehicle Code (Title 13 of the CCR), the State Fire Marshal Regulations (Title 19 of the CCR), and Title 22 of the CCR. Restrictions on haul routes can be incorporated into the construction specifications according to local permitting requirements.

Contaminated soils and hazardous building materials and wastes would be disposed of in accordance with federal, state, and local requirements at the following landfills:

- South Yuma County Landfill located at 19536 South Avenue 1E, Yuma, AZ
- Clean Harbors Buttonwillow Landfill located at 2500 West Lokern Road, Buttonwillow, CA
- U.S. Ecology located at Highway 95 South, Beatty, NV (EPA, 2023b)

The Los Angeles County Public Health Department manages enforcement and permitting for facilities that receive and dispose of solid waste, including hazardous waste. Table 10-4 provides a representative list of the hazardous waste disposal landfills and potential haul routes.

Table 10-4. Hazardous Waste Disposal Landfills and Potential Haul Routes

Landfill Site Name	Hazardous Waste Accepted	General Potential Haul Route
South Yuma County Landfill 19536 South Avenue 1E Yuma, AZ	Contaminated soil, PCBs, asbestos	I-405 South to SR-91 East to I-15 South to I-8 East to Yuma Arizona
Clean Harbors Buttonwillow 2500 West Lokern Road Buttonwillow, CA	Acutely hazardous materials[a], contaminated soil, PCBs, asbestos, RCRA waste with heavy metals	I-405 North to I-5 North to SR-58 West to Lokern Road
U.S. Ecology Highway 95 South Beatty, NV	Contaminated soil, PCBs, asbestos	I-405 South to I-10 East to I-15 North to US-95 North to Beatty, Nevada

Source: HTA, 2024

[b]Acutely hazardous materials are defined as waste containing such dangerous chemicals that it could pose a threat to human health and the environment even when properly managed.

PCB = polychlorinated biphenyl
RCRA = Resource Conservation and Recovery Act

Adherence to federal and state regulations stipulated by PM HAZ-2 reduces the risk of exposure to hazardous materials used during construction. Each of these regulations is specifically designed to protect the public health through improved procedures for handling hazardous materials, better technology in the equipment used to transport these materials, and a faster, more coordinated response to emergencies. With compliance with existing regulations, impacts related to the creation of significant hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials during construction of Alternative 6 would be less than significant.

10.3.1.3 Maintenance and Storage Facilities Impacts

The types and amounts of hazardous materials would vary according to the nature of the activity. Construction of the MSF would require the use of typical construction equipment (e.g., gasoline- or diesel-powered machinery) and vehicles containing fuel, oil, and grease, as well as the use and transport of these materials. Limited quantities of certain hazardous materials such as paints, solvents, and glues would be used during construction.

Maintenance of trains, vehicles, and equipment would occur at an MSF. Multiple buildings would be constructed, including a multi-level MOW building, track storage area, wash bays, ancillary storage buildings, and a TPSS structure. Operation of the MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, common household-type cleaning materials, and pesticides/herbicides. Cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions. The types and amounts of hazardous materials used at the MSF would not pose any greater risk than the existing uses at other similar development elsewhere in the vicinity of the MSF. Operation of the MSF would not require the use, handling, or storage of quantities of hazardous materials in excess of regulatory thresholds.[40] If the

[40]The thresholds are 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance, per Chapter 6.95 California Health and Safety Code.

quantity of hazardous materials used, handled, or stored on-site would exceed the regulatory thresholds, there is an established comprehensive regulatory framework independent of the CEQA process that would be followed, including preparation and submittal of a Hazardous Materials Business Plan (HMBP), as mandated by PM HAZ-1.

As previously discussed, adherence to federal and state regulations stipulated by PM HAZ-2 reduces the risk of exposure to hazardous materials used during construction and operation. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a more coordinated quicker response to emergencies. With compliance with existing regulations, impacts related to the creation of significant hazards to the public or the environment through the routine transport, use, storage and disposal of hazardous materials during construction of the MSF would be less than significant.

10.3.2 Impact HAZ-2: 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?

10.3.2.1 Operational Impacts

As discussed in Section 10.3.1, operation of stations, the guideway, and an MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal and state regulatory requirements as mandated by PM HAZ-1, which are intended to prevent or manage hazards. If a spill does occur, it would be remediated accordingly.

As mandated by PM HAZ-3, tunnels and stations for the Project would be designed to provide a redundant protection system against gas intrusion hazard, such as those described in the City of Los Angeles Municipal Code, Chapter IX, Building Regulations, Article 1, Division 71, Methane Seepage Regulations. In compliance with these regulations, specific requirements would be determined according to the actual methane gas and/or hydrogen sulfide levels and pressures detected on a site, and the identified specific requirements will be incorporated into the design and construction. Therefore, the risk posed by hazardous subsurface gas such as methane gas and/or hydrogen sulfide to the operations of Alternative 6 would be minimized.

With adherence to PM HAZ-1 and PM HAZ-3, operational impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials under Alternative 6 would be less than significant.

10.3.2.2 Construction Impacts

Construction activities for the proposed Project, such as grading and excavation, could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. Exposure to unanticipated hazardous substances could occur from previously unidentified soil contamination caused by the contaminants originating at nearby listed sites (e.g., roadways and industrial uses). Or from construction-related soil contamination caused by spillage and/or mixing of construction trash and debris into the soil. EDR searched various regulatory databases identified several sites in the surrounding area as being contaminated or having the potential to become contaminated

from the release of hazardous substances. A summary of these sites identified by EDR are presented in Table 10-3 and detailed in Attachment 1C. Exposure to hazardous materials during construction activities could occur as a result of any of the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

If any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons. The risks are particularly heightened during tunneling activities, which would involve deeper excavation and may encounter legacy contamination or naturally occurring hazardous materials that are less likely to be present near the surface.

If tunneling is advanced through contaminated soil or groundwater, the excavated soil/slurry mix could be considered hazardous, depending on the levels of contamination encountered. Parcels within 0.25 mile of Alternative 6 have confirmed releases of hazardous materials, including petroleum hydrocarbons, VOCs, and metals. In addition, other potentially affected parcels within 0.25 mile of Alternative 6 may have subsurface contamination from undocumented releases associated with current and/or historical use of the property(ies) (e.g., gas stations, dry cleaners, or industrial properties) (ICF, 2023; Metro, 2024x). During construction, there is the potential to encounter, dewater, and dispose of contaminated groundwater if the following activities occur: ground-disturbance, shallow excavation, tunnel boring, excavation for the underground guideway, or relocation of utilities. During construction activities involving ground-disturbing activities, there is potential to encounter contaminated groundwater. This risk is heightened when performing shallow excavations, utilities relocation, or construction that requires dewatering. If contaminated groundwater is encountered, it would be managed and disposed of in compliance with local, state, and federal regulations. This could include treating the contaminated groundwater on-site or offsite or transporting it to a wastewater treatment facility capable of handling hazardous materials.

The Area 4 Pollock OU could potentially extend near the northern portions of Alternative 6 north of Saticoy Street (ICF, 2022b). A historical manufacturing work in the Valley groundwater basin, dating back to World War II, contaminated the groundwater in the region with volatile organic compounds (VOCs), including trichloroethylene (TCE) and tetrachloroethylene (PCE). Use of contaminated groundwater poses the greatest risk at this site. The Valley Area 4 groundwater contamination is being addressed through the coordination of federal, state and municipal agencies including EPA, DTS, SRWQCB, and Los Angeles Regional Water Quality Control Board (LARWQCB). EPA conducted rounds of indoor sampling in the Atwater Village area (outside of the RSA) and determined that the VOCs migrating from the groundwater did not impact the area. Based on these results, it can be inferred that VOCs would not affect proposed stations under Alternative 6.

The tunnel alignment for Alternative 6 would traverse the methane and methane buffer zones in the southern portion of the alignment. As shown on Figure 10-8, the Santa Monica Boulevard Station and the Wilshire/Metro D Line Station would be within the methane hazard zone. In addition, the methane zones map shows a small methane and methane buffer zone located near the northern portion of the Alternative 6 alignment. The methane and methane buffer zones are located near the location of an

abandoned oil exploration well (Leadwell Well No. 1) on Van Nuys Boulevard between Valerio Street and Wyandotte Street (Metro, 2024a). As described in Section 10.2.7, methane gas and hydrogen sulfide are highly flammable and can pose challenges during construction, particularly when tunneling activities disturb formations where methane gas and/or hydrogen sulfide may accumulate. The use of a TBM in such areas increase the potential for encountering pockets of methane gas and/or hydrogen sulfide, which could lead to fire or explosion hazards if proper precautions are not taken. Pursuant to Section 91.7104.1 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619) and as outlined in PM HAZ-3, all construction activities within the methane hazard zones would implement the City's methane mitigation measures. These measures include subsurface testing of geological formations, compliance with Methane Mitigation Standards established by the Superintendent of Building, and installation of methane gas and/or hydrogen sulfide mitigation systems for all underground structures, such as stations and tunnels. During tunneling, monitoring for methane gas and/or hydrogen sulfide concentrations, maintaining ventilation systems to minimize accumulation of gas.

Several high-pressure pipelines containing crude oil traverse the RSA (refer to Figure 10-9). A review of the PHMSA Pipeline Map Viewer (PHMSA, 2023) indicated there have been no recorded pipeline releases within the RSA. However, Project-related excavation and earthmoving activities could encounter buried pipelines resulting in accidental rupture or leaks, which could cause a human health and environmental hazard. For security reasons, the PHMSA Pipeline Map Viewer (PHMSA, 2023) cannot be used for field verification of exact high-pressure pipeline locations, and the potential presence of other pipelines is unknown. In addition, it is possible buried underground utility lines may be within the RSA (such as stormwater, sewer, electrical, or communication cables).

Construction would require demolition of existing structures. Demolition of structures could potentially expose construction workers and the public to hazardous conditions through the disturbance or improper handling, transporting, and/or disposal of hazardous building materials such as ACM, lead-based paint (LBP), or PCBs. Both the federal OSHA and Cal/OSHA regulate worker exposure during construction activities that disturb LBP. Any ACMs, if present, would need appropriate abatement of the identified asbestos prior to demolition, pursuant to SCAQMD Rule 1403 and PM HAZ-4.

Additional effects from construction activities, such as excavation, tunneling, demolition, and grading, could include potential exposure of construction workers and/or the public to chemical compounds present in soils or soil gases. These activities may also result in the localized spread of contamination if disturbed soils or materials are improperly handled, leading to the migration of contaminants to previously uncontaminated areas. In addition, airborne chemical compounds released from construction or demolition areas, such as dust containing hazardous substances, could pose inhalation risks to workers, nearby residents, and the environment. Transportation of contaminated slurry or soils off-site for disposal could also result in accidental releases, such as spills or leaks, if proper containment measures are not implemented. Therefore, construction impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be potentially significant.

Alternative 6 would be required to implement MM HAZ-1 through MM HAZ-5, which would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling, transporting, and disposing of hazardous materials. Implementation of MM HAZ-1 through MM HAZ-5 and would minimize the risk of exposing construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as ACM, LBP, or PCBs) during demolition activities.

Regulations stipulated by PM HAZ-3 would ensure that the City's methane mitigation measures to reduce the potential exposure of construction workers and the public to methane gas and/or hydrogen sulfide would be implemented. Alternative 6 would be required to implement MM HAZ-1 through MM HAZ-5, which would require investigations into potential contamination sources prior to, and during construction activities. Therefore, implementation of MM HAZ-1 through MM HAZ-5, and adherence to PM HAZ-2 and applicable local, state, and federal regulations would reduce impacts related to the upset and accidental release of hazardous materials to a less than significant level.

10.3.2.3 Maintenance and Storage Facilities

Operation of stations, guideway, and MSF would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials. None of these substances would be acutely hazardous. No activities are proposed that would result in the use or discharge of unregulated hazardous materials. Storage and disposal of hazardous materials and waste would be conducted in accordance with all federal and state regulatory requirements as mandated by PM HAZ-1, that are intended to prevent or manage hazards, and if a spill does occur, it would be remediated accordingly.

Construction activities for the proposed Project, such as grading and excavation, could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil. Exposure to unanticipated hazardous substances could occur from previously unidentified soil contamination caused by the contaminants originating at nearby listed sites (e.g., roadways and industrial uses). Or from construction-related soil contamination caused by spillage and/or mixing of construction trash and debris into the soil. Exposure to hazardous materials during construction activities could occur as a result of any of the following:

- Direct dermal contact with hazardous materials
- Incidental ingestion of hazardous materials (usually due to improper hygiene, when workers fail to wash their hands before eating, drinking, or smoking)
- Inhalation of airborne dust released from dried hazardous materials

If any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons.

Construction would require demolition of existing structures. Demolition of structures could potentially expose construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as ACM, LBP, or PCBs. Both the federal OSHA and Cal/OSHA regulate worker exposure during construction activities that disturb LBP. Any ACMs, if present, would need appropriate abatement of identified asbestos prior to demolition, pursuant to SCAQMD Rule 1403 and PM HAZ-4.

Additional effects could include the potential exposure of construction workers and/or the public to chemical compounds in soils, and soil gases; potential localized spread of contamination; potential exposure of workers, the public, and the environment to airborne chemical compounds migrating from the construction or demolition areas; and potential accidents during transportation of contaminated slurry or soils. Therefore, construction impacts related to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be potentially significant.

The proposed Project would be required to implement MM HAZ-1 through MM HAZ-4, which would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling hazardous materials and would minimize potential exposure to construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials. Therefore, implementation of MM HAZ-1 through MM HAZ-4, and adherence to applicable local, state, and federal regulations would reduce impacts related to the upset and accidental release of hazardous materials to a less than significant level.

10.3.3 Impact HAZ-3: 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?

10.3.3.1 Operational Impacts

As discussed in Section 10.3.1, operation of the underground stations and guideway would involve the use of small amounts of hazardous substances such as oil, grease, solvents, paints, and common cleaning materials within 0.25 mile of schools (refer to Section 10.2.9). None of these substances would be acutely hazardous.

As mandated by PM HAZ-1, cleaning and maintenance products are required to be labeled with appropriate cautions and instructions for handling, storage, and disposal, and do not represent a significant threat to human health and the environment. Staff would be required to use, store, and dispose of these materials properly in accordance with label directions. Therefore, impacts associated with handling hazardous materials within 0.25 mile of an existing school under Alternative 6 would be less than significant.

10.3.3.2 Construction Impacts

Construction of Alternative 6 would involve handling of hazardous materials and use of diesel-powered equipment within 0.25 mile of schools (refer to Section 10.2.9). Such activities, if not appropriately managed, could result in hazardous emissions that would potentially affect nearby schools.

As described throughout Section 3, there is an established, comprehensive federal, state, regional, and local framework independent of the CEQA process that is intended to reduce the risks associated with the handling of hazardous materials, including transport, use, storage, and disposal. The use and disposal of hazardous materials is heavily regulated at both the federal and state level; these regulations are declared and enforced by agencies such as the EPA, the SWRCB and DTSC, Cal/OSHA, and the SCAQMD. By implementing the SWPPP and associated BMPs, as mandated by the SWRCB Construction General Permit and described in PM HAZ-2, construction-related hazardous substances, such as oil and greases, would be managed through appropriate material handling and BMP. In addition, transportation of hazardous materials would comply with state regulations governing hazardous materials transport included in the California Vehicle Code (Title 13 of the CCR), the State Fire Marshal Regulations (Title 19 of the CCR), and Title 22 of the CCR. Cooperation with the corridor cities would occur throughout the construction process. Restrictions on haul routes would be incorporated into the construction specifications according to local permitting requirements, as set forth in PM HAZ-2.

Adherence to federal and state regulations reduces the risk of exposure to hazardous materials used during construction. Each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the

equipment used to transport these materials, and a faster, more coordinated response to emergencies. By adhering to existing regulations, construction of Alternative 6 would have less than significant impacts associated with the transportation, use, storage, and handling of hazardous materials within 0.25 mile of an existing school.

10.3.3.3 Maintenance and Storage Facilities

The MSF is not located within 0.25 mile of a school. Therefore, the MSF would have no impact related to emissions of hazardous materials within 0.25 mile of a school.

10.3.4 Impact HAZ-4: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

10.3.4.1 Operational Impacts

The hazardous site conditions for Alternative 6 related to Government Code Section 65962.5, commonly known as the Cortese list, are associated with contaminated soils and groundwater (refer to Section 10.3.4.2). There are 69 Cortese-listed hazardous materials sites within 0.5 mile of Alternative 6. Sixty-seven of those sites have been listed as Closed. Sites listed as "Closed" signify that they have been remediated to the satisfaction of the agency with oversight. Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the project site. During operations, no ground-disturbing activities would occur at the Cortese-listed hazardous materials sites such that hazardous releases of contaminated soils could create a significant hazard to the public or the environment.

Two LUST sites have an open status and located within 100 feet of Alternative 6. Miller Infinity Site is located at 5455 Van Nuys Boulevard (Site 25 on Figure 10-6) and Winall Station #17 is located at 4441 Van Nuys Boulevard (Site 35 on Figure 10-6). PM HAZ-1, PM HAZ-2, PM HAZ-4 and PM HAZ-5 would be implemented. Implementation of PM HAZ-1, PM HAZ-2, PM HAZ-4 and PM HAZ-5 would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling and minimizing risk from hazardous materials. With implementation of PM HAZ-1, PM HAZ-2, PM HAZ-4 and PM HAZ-5 and adherence of existing regulations, operation of the Alternative 6 would not create or result in a significant hazard to people or the environment and Alternative 6 would have a less than significant impact.

10.3.4.2 Construction Impacts

There are 69 Cortese-listed hazardous materials sites within 0.5 mile of Alternative 6 (refer to Table B-5 and Figure 10-6 and Figure 10-7). Confirmed releases of hazardous materials include petroleum hydrocarbons, VOC, and metals to soil. Sixty-six of those sites have been listed as Closed. Sites listed as "Closed" signify that they have been remediated to the satisfaction of the agency with oversight. Sixty-seven of those sites have been listed as Closed. Sites listed as "Closed" signify that they have been remediated to the satisfaction of the agency with oversight. Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the project site. Table B-5 provides the business addresses and proximity of the parcels to Alternative 6 and describes the status of each parcel.

The following two open sites are within 100 feet of Alternative 6:

- Miller Infinity Site located at 5455 Van Nuys Boulevard (Site 25 on Figure 10-6). The site (GeoTracker T0603702402) is listed as a gasoline-impacted soil and groundwater site with an Open-Remediation

status under the LUST database. The site is the location of a former commercial petroleum fueling facility. An unauthorized release was reported in April 1989 following the removal of eight gasoline USTs. Remediation has been ongoing. According to the information reviewed, the petroleum release is limited to the soil and shallow groundwater. The Regional Water Quality Control Board (RWQCB) approved a revised Remedial Action Plan on December 23, 2021. The plan involves "over-purging" to remove remaining free product in selected monitoring wells. Depth to water ranges from 59 to 62 feet below ground surface. Groundwater flow is toward the northeast. Several monitoring wells appear to be in or adjacent to the Alternative 6 footprint. As of August 2022, the site does not qualify for closure under the Low-Threat Underground Storage Tank Case Closure Policy.

- Winall Station #17 located at 4441 Van Nuys Boulevard (Site 35 on Figure 10-6). The site (GeoTracker T0603702422) is listed as gasoline-impacted soil, soil vapor, and groundwater contamination with a Remediation Plan status. The site first reported the release in April 1990. Soil and groundwater remediation and monitoring have been ongoing since April 1990. Groundwater impacts are both on and off site. According to a Los Angeles RWQCB April 2022 letter, off-site groundwater impacts extend to the north and northeast, in the direction of groundwater flow. However, off-site impacts to the north have not been adequately delineated. Depth to groundwater has varied between 11 and 21 feet below ground surface. Four monitoring wells appear to be located in or adjacent to the Alternative 6 footprint. A Remedial Action Plan was submitted on August 27, 2021. Remedial activities will be conducted on soil vapor and groundwater.

As discussed in Section 10.3.2, construction that disturbs existing soil that has been contaminated from hazardous materials release sites or other sources could pose a health risk to construction workers, the public, and/or the environment if not characterized, handled, and disposed of properly. This potential health risk would be a significant impact.

MM HAZ-1 through MM HAZ-4 would be implemented. Implementation of MM HAZ-1 through MM HAZ-4 would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling and minimizing risk from hazardous materials. With implementation of MM HAZ-1 through MM HAZ-4 and adherence of existing regulations, construction of the Alternative 6 would not create or result in a significant hazard to people or the environment and Alternative 6 would have a less than significant impact.

10.3.4.3 Maintenance and Storage Facilities

The hazardous site conditions for the MSF related to Government Code Section 65962.5, commonly known as the Cortese list, are associated with contaminated soils, and these sites are listed as "Closed," which signifies that they have been remediated to the satisfaction of the agency with oversight (refer to Section 10.3.4.2). Based on the regulatory status of case closed, these sites are not anticipated to have a negative environmental impact on the project site. With adherence to existing regulations, MSF would not create or result in a significant hazard to people or the environment, and the MSF would result in a less than significant impact.

10.3.5 Impact HAZ-5: 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?

10.3.5.1 Operational Impacts

Alternative 6 is 2.3 mile from the Van Nuys Airport and 1.3 miles from the Santa Monica Municipal Airport. The *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport implements relevant policies and guidelines for land-use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA, airport safety zones, and noise impact zones. These plans also address airport land-use compatibility concerns regarding exposure to aircraft noise, land use safety with respect both to people and property on the ground and the occupants of the aircraft, protection of airport airspace, and general concerns related to aircraft overflights. According to the *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport, Alternative 6 is located outside the AIA for both airports (Figure 10-10) Alternative 6 is not located within the safety zone or the noise impact zone for the airports. (DCP, 2006; LA County Planning, 1991; ALUC, 2003a, 2003b, 2023).

Alternative 6 would not interfere with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval. The Alternative 6 is not within the AIA, Safety Zones, and Noise Impact Zones. Adherence to existing local, state, and federal regulations would ensure that during operation of the Alternative 6, impacts associated with potential aviation hazards would be less than significant.

10.3.5.2 Construction Impacts

Alternative 6 is 2.3 mile from the Van Nuys Airport and 1.3 miles from the Santa Monica Municipal Airport. The *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport implements relevant policies and guidelines for land-use compatibility and specific findings of compatibility or incompatibility of land uses within the AIA, airport safety zones, and noise impact zones. These plans also address airport land-use compatibility concerns regarding exposure to aircraft noise, land use safety with respect both to people and property on the ground and the occupants of the aircraft, protection of airport airspace, and general concerns related to aircraft overflights. According to the *Van Nuys Airport Plan* for the Van Nuys Airport and the Los Angeles County ALUP for the Santa Monica Municipal Airport, Alternative 6 is located outside the AIA for both airports (Figure 10-10).

Alternative 6 is not located within the safety zone or the noise impact zone for the airports. (DCP, 2006; LA County Planning, 1991; ALUC, 2003a, 2003b, 2023).

Alternative 6 would not interfere with CFR Title 14 Part 77.13 which requires that any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval. The Alternative 6 is not within the AIA, Safety Zones, and Noise Impact Zones. Adherence to existing local, state, and federal regulations would ensure that during construction of the Alternative 6, impacts associated with potential aviation hazards would be less than significant.

10.3.5.3 Maintenance and Storage Facilities

The MSF is approximately 2.6 miles from the Van Nuys Airport. The MSF is not located within the AIA, Safety Zones, and Noise Impact Zones. With adherence to existing federal, state and local regulations, the MSF would not result in a safety hazard or excessive noise related airports during operation and the impact would be less than significant.

10.4 Project Measures and Mitigation Measures

10.4.1 Operational Impacts

10.4.1.1 Project Measures

The following PMs are design features, BMPs, or other measures required by law and/or permit approvals. These measures are components of the Project and are applicable to Alternative 6.

PM HAZ-1: *Operational (post Project) BMPs shall be implemented by the Project and include but not be limited to:*

- *Cleaning and maintenance products shall be required to be labeled with appropriate cautions and instructions for handling, storage, and disposal. Staff shall be trained and required to use, store, and dispose of these materials properly in accordance with label directions.*
- *If the quantity of hazardous materials used, handled, or stored on-site at the maintenance and storage facility exceeds the regulatory thresholds of 55 gallons for a hazardous liquid; 500 pounds of a hazardous solid; 200 cubic feet for any compressed gas; or threshold planning quantities of an extremely hazardous substance per Chapter 6.95 of the California Health and Safety Code, the Project shall prepare a Hazardous Materials Business Plan in accordance with all related requirements of the California Health and Safety Code (Chapter 6.95, Articles 1 and 2). The plan shall be reviewed and recertified every year and amended as required by the California Health and Safety Code (Chapter 6.95, Articles 1 and 2).*
- *Storage and disposal of hazardous materials and waste shall be conducted in accordance with all applicable federal and state regulatory requirements, such as the Resource Conservation and Recovery Act; the Comprehensive Environmental Response, Compensation, and Liability Act; the Hazardous Materials Release Response Plans and Inventory Law; and the Hazardous Waste Control Act, and if a spill does occur, it shall be remediated in accordance with all applicable federal and state regulatory requirements and in coordination with the Department of Toxic Substances Control and/or Los Angeles Regional Water Quality Control Board.*
- *Compliance with applicable Los Angeles County and City of Los Angeles requirements pertaining to emergency vehicle access as well as the California Building Code and California Fire Code standards shall ensure that sufficient ingress and egress routes are maintained and provided to the new stations.*

10.4.1.2 Mitigation Measures

No mitigation measures are required.

10.4.2 Construction Impacts

10.4.2.1 Project Measures

The following PMs are design features, BMPs, or other measures required by law and/or permit approvals. These measures are components of the Project and are applicable to Alternative 6.

PM HAZ-2: *Construction BMPs shall include but not be limited to:*

- *The Project shall be required to obtain permits before construction begins and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases in accordance with the U.S. Environmental Protection Agency, State Water Resources Control Board, Department of Toxic Substances Control, California Division of Occupational Safety and Health, and the South Coast Air Quality Management District.*
- *The Project shall develop a Stormwater Pollution Prevention Plan in accordance with the State Water Resources Control Board's Construction Clean Water Act Section 402 General Permit conditions, and subject to regular inspections by applicable jurisdiction(s) to ensure compliance. The Stormwater Pollution Prevention Plan shall include specifications for, but not be limited to, the following:*
  - *Maintain proper working conditions for vehicles and equipment to minimize potential fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials.*
  - *Conduct servicing, refueling, and staging of construction equipment only at designated areas where a spill would not flow to drainages. Conduct equipment washing, if needed, only in designated locations where water would not flow into drainage channels.*
  - *Implement drainage best management practices to protect water quality (such as oil/water separators, catch basin inserts, storm drain inserts, media filtration, and catch basin screens).*
  - *Report hazardous spills to the designated Certified Unified Program Agency (i.e., Los Angeles County Fire Department Health Hazardous Materials Division or Santa Fe Springs Department of Fire and Rescue) and implement clean up immediately and proper disposal of contaminated soil at a licensed facility.*
  - *Establish properly designed, centralized storage areas to keep hazardous materials fully contained.*
  - *Keep spill cleanup materials (e.g., rags, absorbent materials, and secondary containment) properly stored and maintained at the work site when handling materials.*
  - *Implement monitoring program by the construction site supervisor that includes both dry and wet weather inspections.*
- *Transportation of hazardous materials by the Project shall comply with state regulations governing hazardous materials transport included in the California Vehicle Code (Title 13 of the California Code of Regulations), the State Fire Marshal Regulations (Title 19 of the California Code of Regulations), and Title 22 of the California Code of Regulations. These regulations include the following:*
  - *Require all motor carrier transporters of hazardous materials to have a Hazardous Materials Transportation license issued by the California Highway Patrol.*

  - *Require the transport of hazardous materials via routes with the least overall travel time.*
  - *Prohibit the transport of hazardous materials through residential neighborhoods.*
  - *Require transporters to take immediate action to protect human health and the environment in the event of spill, release, or mishap.*
  - *Incorporate restrictions on haul routes into the construction specifications according to local permitting requirements.*
- *Contaminated soils and hazardous building materials and wastes shall be disposed of in accordance with federal, state, and local requirements at landfills serving Los Angeles County. The removal and disposal of hazardous building materials shall be the responsibility of a California Division of Occupational Safety and Health-certified contractor in accordance with South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities).*
- *Traffic control during construction shall follow local jurisdiction guidelines. For specialized construction tasks, it may be necessary to work during nighttime hours to minimize traffic disruptions.*

PM HAZ-3: *Construction best management practices for activities within methane hazard zones, including tunneling operations and underground station construction shall include, but not be limited to, the following:*

- *Pursuant to Section 91.7104.1 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619), site testing of subsurface geological formations shall be conducted by a Project-approved testing agency under the supervision of a licensed architect or registered engineer or geologist. Testing shall address, but necessarily be limited to, methane concentrations and surface conditions along tunneling routes and at underground stations locations. The licensed architect or registered engineer or geologist shall indicate the testing instruments used and testing procedure followed. The testing procedure shall meet the Methane Mitigation Standards established by the Superintendent of Building.*
- *All paving work, building construction, tunneling and underground station construction within the methane zone or methane buffer zone as defined by Los Angeles Department of Building and Safety shall be required to comply with Methane Mitigation Standards established by the Superintendent of Building as well as the requirements outlined in Sections 91.7103 and 91.7104 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619).*
- *All building and underground structures, including tunneling and stations, located in the Methane Zone shall provide a methane mitigation system as required by Los Angeles Municipal Code Table 71 in Section 91.7104.2 of the City of Los Angeles Methane Code (Ordinance Nos. 175790 and 180619) based on the appropriate Site Design Level. The Superintendent of Building may approve an*

equivalent methane mitigation system designed by an architect, engineer, or geologist.

PM HAZ-4: *Construction best management practices for demolition of existing structures shall include, but shall not be limited to, the following:*

- *Both the federal Occupational Safety and Health Administration and California Division of Occupational Safety and Health regulate worker exposure during construction activities that disturb lead-based paint. Any asbestos-containing materials, if present, shall require appropriate abatement of identified asbestos prior to demolition pursuant to South Coast Air Quality Management District Rule 1403.*
- *Polychlorinated biphenyls (PCB)-containing fluorescent light fixtures and electrical transformers that are not labeled "No PCBs" shall be assumed to contain polychlorinated biphenyls and shall be removed prior to demolition activities and shall be disposed of by a licensed and certified polychlorinated biphenyls removal contractor, in accordance with local, state, and federal regulations. The removal and disposal of the electrical transformers shall be the responsibility of the utility owner in accordance with all standards and practices.*

PM HAZ-5: *Construction best management practices for the areas with known or previously undiscovered hazardous materials shall include, but not be limited to, the following:*

- *The Project shall hire a qualified professional to sample soil suspected of contamination (obvious signs of contamination include indicators such as odors, stains, or other suspect materials) for the purpose of classifying material and determining disposal requirements before construction begins. If excavated soil is suspected or known to be contaminated, the Project shall:*
  - *Segregate and stockpile the excavated material in a way that shall facilitate measurement of the stockpile volume.*
  - *Spray the stockpile with water or a South Coast Air Quality Management District-approved vapor suppressant and cover the stockpile with a heavy-duty plastic (i.e., Visqueen) to prevent soil volatilization in the atmosphere or exposure to nearby workers per South Coast Air Quality Management District Rule 1166.*
- *Existing groundwater monitoring wells shall remain under ongoing groundwater investigations associated with off-site sources.*

10.4.2.2 Mitigation Measures

MM HAZ-1: ***Phase II Environmental Site Assessment.*** *Prior to the issuance of a grading permit and before any substantial ground disturbance occurs on or near the properties with documented releases, the Project shall hire a qualified environmental professional to conduct a Phase II Environmental Site Assessment (ESA) to determine the potential presence of petroleum hydrocarbons, metals, and volatile organic compounds in soil and/or groundwater.*

- *If the Phase I ESA identifies any recognized environmental conditions or other indicators of potential contamination, a Phase II ESA shall be conducted. The Phase II Environmental Site Assessment shall include sufficient soil and groundwater sampling and laboratory analysis to identify the types of chemicals and their respective concentrations. The Phase II Environmental Site Assessment shall compare soil and groundwater sampling results against applicable environmental screening levels developed by the Los Angeles Regional Water Quality Control Board and/or Department of Toxic Substances Control. If the Phase II Environmental Site Assessment identifies contaminant concentrations above the screening levels, a site-specific Soil and Groundwater Management Plan shall be prepared and implemented as described in MM HAZ-2. The Project shall consult with the Department of Toxic Substances Control, California Environmental Protection Agency, and/or other appropriate regulatory agencies to ensure sufficient minimization of risk to human health and the environment is completed.*

MM HAZ-2: ***Soil and Groundwater Management Plan.*** *Prior to the issuance of a grading permit, a site-specific Soil and Groundwater Management Plan shall be prepared by a qualified professional environmental contractor to address handling and disposal of contaminated soil and groundwater prior to demolition, excavation, and construction activities.*

- *The Project shall implement the Soil and Groundwater Management Plan during construction activities. The Soil and Groundwater Management Plan shall specify all necessary procedures to ensure the safe handling and disposing of excavated soil, groundwater, and/or dewatering effluent in a manner that is protective of human health and in accordance with federal and state hazardous waste disposal laws, and with state and local stormwater and sanitary sewer requirements. At a minimum, the plan shall include the following:*
  - *Identification and delineation of contaminated areas and procedures for limiting access to such areas to properly trained personnel.*
  - *Step-by-step procedures for handling, excavating, characterizing, and managing excavated soils and dewatering effluent, including procedures for containing, handling, and disposing of hazardous waste; procedures for containing, handling, and disposing of groundwater generated from construction dewatering; the method used to analyze excavated materials and groundwater for hazardous materials likely to be encountered at specific locations; appropriate treatment and/or disposal methods. Removal of soil and materials shall be performed by a licensed engineering contractor with a Class A license and hazardous-substance removal certification.*
  - *Requirements to water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, and staging.*
  - *Requirements to cover or maintain at least 2 feet of free board space on haul trucks transporting soil or other loose material on the site. Any haul*

trucks that would be traveling along freeways or major roadways should be covered.

- *Requirements to use wet power vacuum street sweepers to remove any visible track out mud or dirt onto adjacent public roads at least once a day. Use of dry powered sweeping is prohibited.*
- *Procedures for handling volatile organic compound-contaminated soil, including, but not limited to, segregating volatile organic compound-contaminated stockpiles from non-volatile organic compound-contaminated stockpiles, spraying volatile organic compound-contaminated soil stockpiles with water and/or approved vapor suppressant and covering them with plastic sheeting for all periods of inactivity lasting more than 1 hour, conducting a daily visual inspection of all covered volatile organic compound-contaminated soil stockpiles to ensure the integrity of the plastic covered surfaces, and removing contaminated soil from an excavation or grading site within 30 days from the time of excavation to a licensed facility.*
- *Procedures for notification and reporting, including notifying and reporting to internal management and to local agencies.*
- *Minimum requirements for site-specific Health and Safety Plans to protect the general public and workers in the construction area. Prior to the issuance of grading permits, the Soil and Groundwater Management Plan and the results of environmental sampling shall be provided to contractors who shall be responsible for developing their own construction worker Health and Safety Plan and training requirements, per MM HAZ-4.*
- *The Project shall hire a qualified environmental professional to sample groundwater suspected of contamination. If any suspected groundwater contamination is encountered during construction, the contractor shall stop work in the vicinity, cordon off the area, and contact who shall immediately who shall immediately notify the Regional Water Quality Control Board. In coordination with the Regional Water Quality Control Board, an investigation and remediation plan shall be developed by a qualified environmental professional in order to protect public health and the environment. Any hazardous or toxic materials shall be disposed of according to local, state, and federal regulations.*
- *Trucking operations shall comply with Caltrans and any other applicable regulations, and all trucks shall be licensed and permitted to carry the appropriate waste classification. The tracking of dirt by trucks leaving the project site shall be minimized by cleaning the wheels upon exit and cleaning the loading zone and exit area as needed.*

MM HAZ-3: ***Contractor Specifications.*** *The Project shall include in its contractor specifications the following requirement relating to hazardous materials:*

- *During all ground-disturbing activities, the contractor(s) shall inspect the exposed soil and groundwater for obvious signs of contamination, such as odors, stains, or other suspect materials. Qualified personnel shall monitor for volatile organic*

compounds and other subsurface gases for concentrations exceeding South Coast Air Quality Management District levels with a Photoionization Detector. Should signs of unanticipated contamination be encountered, work shall be suspended, and the Los Angeles County Department of Public Health shall be notified, and the area secured. Contaminated soil and/or groundwater shall be segregated and characterized, and a site-specific Soil and Groundwater Management Plan, as described under MM HAZ-2, shall be prepared and implemented.

MM HAZ-4: ***Worker Health and Safety Plan.*** *The contractor shall prepare site-specific Worker Health and Safety Plan to protect the general public and workers in the construction area. The Health and Safety Plan shall be prepared in accordance with California and federal Occupational Safety and Health Administration regulations. Copies of the Health and Safety Plan shall be made available to construction workers for review during their orientation and/or regular health and safety meetings. The Health and Safety Plan shall identify chemicals of concern, potential hazards, worker training requirements, personal protective equipment and devices, decontamination procedures, the need for personal or area monitoring, and emergency response procedures. The Health and Safety Plan shall be amended, as necessary, if new information becomes available that could affect implementation of the plan.*

MM HAZ-5: ***Hazardous Building Survey and Abatement.*** *Prior to demolition activities of any structures, the Project shall retain a California Division of Occupational Safety and Health-certified contractor to determine the presence or absence of building materials or equipment that contains hazardous materials, including asbestos, lead-based paint, and polychlorinated biphenyls-containing equipment. If such substances are found to be present, the contractor shall prepare and submit a workplan to the relevant oversight agency to demonstrate how these hazardous materials would be properly removed and disposed of in accordance with federal and state law, including South Coast Air Quality Management District Rule 1403 (Asbestos Emissions from Renovation/Demolition Activities). The removal and disposal of hazardous building materials shall be the responsibility of a California Division of Occupational Safety and Health-certified contractor. Following completion of removal activities, the Project shall submit documentation to the relevant oversight agency verifying that all hazardous materials were properly removed and disposed of.*

10.4.3 Impacts After Mitigation

Implementation of MM HAZ-1 through MM HAZ-5 would ensure that workers have a clear understanding of hazardous materials that may occur in the construction area as well as procedures and plans for safely handling hazardous materials, and would minimize potential exposure of construction workers and the public to hazardous conditions through the disturbance or improper handling and/or disposal of hazardous building materials such as ACM, LBP, or PCBs during demolition activities; thus, impacts would be reduced to less than significant.

11 PREPARERS OF THE TECHNICAL REPORT

Name	Title	Experience (Years)
Jenifer King	Senior Environmental Scientist	29
Jennifer J. Lee	Transportation Project Manager	18
Rachel Seiberg	Transportation Planner	3.5
Jason Leung	Transportation Planner	2

12 REFERENCES

AirNav. 2023a. KVNY - Van Nuys Airport. airnav.com/airport/KVNY. Accessed May 24, 2023.

AirNav. 2023b. KSMO - Santa Monica Municipal Airport. airnav.com/airport/KSMO. Accessed May 24, 2023.

California Department of Toxic Substances Control (DTSC). 2004. *Draft Lead Report*. Hazardous Waste Management Program, Regulatory and Program Development Division. August.

California Department of Toxic Substances Control (DTSC). 2016. *Community Update: Statewide Agreement for Caltrans for Reuse of Aerially Deposited Lead-Contaminated Soils. DTSC Fact Sheet*. March. dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/f0004055-caltrans-fs-a11y.pdf.

California Department of Toxic Substances Control (DTSC). 2023. EnviroStor. envirostor.dtsc.ca.gov/public/. Accessed June 14, 2023.

California Department of Toxic Substances Control (DTSC). 2024. Treated Wood Waste (TWW). dtsc.ca.gov/toxics-in-products/treated-wood-waste/. Accessed September 10, 2024.

California Department of Transportation (Caltrans). 2019. *Construction Manual*, "Chapter 7 – Environmental Stewardship." February.

City of Los Angeles Department of City Planning (DCP). 2006. *Van Nuys Airport Plan*. January. lawa.org/-/media/lawa-web/environment/files/vny-master-plan-with-alt-j-map.ashx?la=en&hash=41590866D44F82586C6C714BFAACF191. Accessed May 24, 2023.

City of Los Angeles Department of City Planning (DCP). 2021. Los Angeles Safety Element of the General Plan. planning.lacity.gov/odocument/bf51ae04-1c7b-4931-9a29-d46209998b89/Safety_Element.pdf.

Diaz Yourman & Associates. 2022. *Phase I Initial Site Assessment*. Prepared for the Los Angeles County Metropolitan Transportation Authority. April 29.

EDR. 2021. *EDR DataMap Well Search Report.* November 9.

Geo Forward. 2021. Los Angeles Methane Zones Map. geoforward.com/los-angeles-methane-zones/. Accessed May 27, 2021.

ICF. 2022a. *Sepulveda Environmental Data Resources (EDR) Alternative 1-3*. Prepared for the Los Angeles County Metropolitan Transportation Authority (Metro). December 23.

ICF. 2022b. *Sepulveda Environmental Data Resources (EDR) 4-5*. Prepared for the Los Angeles County Metropolitan Transportation Authority (Metro).

ICF. 2023. *Sepulveda Environmental Data Resources (EDR) Alternative 6*. Prepared for the Los Angeles County Metropolitan Transportation Authority (Metro).

Los Angeles County Airport Land Use Commission (ALUC). 2003a. *Van Nuys Airport Influence Area.* May 13. case.planning.lacounty.gov/assets/upl/project/aluc_airport-van-nuys.pdf.

Los Angeles County Airport Land Use Commission (ALUC). 2003b. *Santa Monica Municipal Airport Influence Area*. May 13. case.planning.lacounty.gov/assets/upl/project/aluc_airport-santa-monica.pdf.

Los Angeles County Airport Land Use Commission (ALUC). 2023. A-NET Interactive geographical information system (GIS) Map. lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=acf2e87194a54af9b266bf07547f240a. Accessed May 24, 2023.

Los Angeles County Chief Executive Office. 2023. Los Angeles County Operational Area Emergency Response Plan. ceo.lacounty.gov/wp-content/uploads/2023/11/County-of-Los-Angeles-OAEOP-2023-Final-for-Website.pdf.

Los Angeles County Department of Regional Planning (LA County Planning). 1991. Los Angeles County Airport Land Use Plan. Amended October 2004. planning.lacounty.gov/wp-content/uploads/2022/10/Los-Angeles-County-Airport-Land-Use-Plan.pdf.

Los Angeles County Metropolitan Transportation Authority (Metro). 2008. *Measure R Expenditure Plan*. July. metro.net/about/measure-r/, dropbox.com/scl/fi/jzu11yppo8q1eeh16nzcl/2009-MeasureR-expenditure-plan.pdf. Amended July 2021.

Los Angeles County Metropolitan Transportation Authority (Metro). 2016. *Measure M Los Angeles County Traffic Improvement Plan. Attachment A, Measure M Expenditure Plan.* libraryarchives.metro.net/dpgtl/MeasureM/201609-proposed-ordinance-16-01-county-traffic%20improvement-plan.pdf.

Los Angeles County Metropolitan Transportation Authority (Metro). 2019. *Sepulveda Transit Corridor Project Final Feasibility Report.* November. libraryarchives.metro.net/dpgtl/pre-eir-eis-reports-and-studies/sepulveda-transit-corridor/2019-sepulveda-transit-corridor-final-feasibility-report.pdf.

Los Angeles County Metropolitan Transportation Authority (Metro). 2021. *Sepulveda Transit Corridor Project Notice of Preparation.* November 30, 2021. ceqanet.opr.ca.gov/2021110432. Accessed October 2024.

Los Angeles County Metropolitan Transportation Authority (Metro). 2023a. *Sepulveda Transit Corridor Phase 1 Environmental Site Assessment (ESA) Impact Report*. March 17.

Los Angeles County Metropolitan Transportation Authority (Metro). 2023b. *Sepulveda Transit Corridor Draft Geotechnical Design Memorandum*. April 20.

Los Angeles County Metropolitan Transportation Authority (Metro). 2024a. *Sepulveda Transit Corridor Alternative 2 Update*. July 3. boardarchives.metro.net/BoardBox/2024/240703_Sepulveda_Transit_Corridor_Alternative_2_Update.pdf.

Los Angeles County Metropolitan Transportation Authority (Metro). 2024b. *Sepulveda Transit Corridor Project Draft Hazardous Materials Data Review Report*.

Los Angeles County Metropolitan Transportation Authority (Metro). 2024c. *Sepulveda Transit Corridor Project Preliminary Geotechnical Design and Data Report*.

Los Angeles County Metropolitan Transportation Authority (Metro). 2024d. Public Transportation Agency Safety. transit.dot.gov/sites/fta.dot.gov/files/2024-02/LA-Metro-Public-Transportation-Agency-Safety-Plan_1.pdf.

Los Angeles County Metropolitan Transportation Authority (Metro). 2025. *Sepulveda Transit Corridor Project Land Use and Development Technical Report*.

Southern California Association of Governments (SCAG). 2020a. *Connect SoCal, 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).* September 3. scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf.

Southern California Association of Governments (SCAG). 2020b. *Connect SoCal, 2020-2045 RTP/SCS Final Connect SoCal Project List Technical Report.* scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_project-list_0.pdf.

Southern California Association of Governments (SCAG). 2021a. *Final 2021 Federal Transportation Improvement Program Technical Appendix*. Volume II of III. March. scag.ca.gov/sites/main/files/file-attachments/f2021-ftip-technical-appendix.pdf.

Southern California Association of Governments (SCAG). 2021b. *Final 2021 Federal Transportation Improvement Program. Consistency Amendment #21-05*. scag.ca.gov/sites/main/files/file-attachments/21-05-la-finalcomparison.pdf.

State Water Resources Control Board (SWRCB). 2023. GeoTracker. geotracker.waterboards.ca.gov/. Accessed June 14, 2023.

U.S. Environmental Protection Agency (EPA). 2023a. *San Fernando Valley (Area 4) Los Angeles, CA Cleanup Activities.* cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.cleanup&id=090225. Accessed May 24, 2023.

U.S. Environmental Protection Agency (EPA). 2023b. *U.S. Ecology Nevada Inc.* epa.gov/pcbs/us-ecology-nevada-inc#about. Accessed June 7, 2023.

U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA). 2023. National Pipeline Mapping System (NPMS) Public Viewer. pvnpms.phmsa.dot.gov/PublicViewer/. Accessed June 14, 2023.

Attachment 1. Sepulveda Environmental Data Resources Memoranda

Environmental Data Resources for Alternatives 1 and 3, Alternatives 4-5 and Alternative 6 submitted under separate cover.

Attachment 2. Hazardous Material Sites within 0.5 Mile of Alternatives

Table B-1. Alternative 1: Hazardous Material Sites within 0.5 Mile

Site Number	Business Name and Address	Site Status
1	American Oil Company 13740 Saticoy Street Van Nuys	Active Corrective Action (EnviroStor CAD981427669): The permittee was a hazardous-waste transporter and collected used oil, used anti-freeze and oil-contaminated solid waste from off-site generators (gas stations, oil changers auto repair shops, etc.) and consolidated these wastes before shipping them to hazardous-waste treatment or disposal facility. The facility consisted of a loading/unloading area, one used-oil storage area to store used oil and used ant freeze separately in two tanker trailers, and one solid-waste storage area to sto solid waste contaminated with oil. The maximum capacity of the loading/unloading area was 3,000 gallons. The maximum capacity of the used-o storage area was 9,500 gallons in one tanker trailer, and the maximum capacity the solid waste storage area was 4.32 cubic yards in one dump trailer. On June 1 2019, the Department of Toxic Substances Control denied the American Oil Company a permit renewal application, which caused the facility to commence closure. The Department of Toxic Substances Control directed the permittee to close the facility, however the Department of Toxic Substances Control is requiring that the closure plan be revised to meet current closure requirements The permittee has revised the closure plan in response to the Department of Toxic Substances Control Notices of Deficiency.
2	General Motors Corporation 8000 Van Nuys Boulevard Panorama City	Closed leaking underground storage tank (LUST) case (GeoTracker T060370241 The site was the subject of a closed LUST case for a release of aviation fluid that affected the soil; the case was closed by the City of Los Angeles in 1988.
3	Salvation Army Thrift Store 6059 N Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603715897): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the Regional Water Quality Control Board (RWQCB) in 2012.
4	LA City Dept of Water and Power 14401 Saticoy Street Van Nuys	Closed LUST case (GeoTracker T060702430): The site was the subject of a closed LUST case for a release of kerosene that affected the soil and groundwater; the case was closed by RWQCB in 1996.
5	Borg-Warner Fluid Controls 7500 Tyrone Avenue Van Nuys	Closed LUST case (GeoTracker T0603702431): The site was the subject of a close LUST case for a release of solvents that affected the soil; the case was closed by RWQCB in 1985.

Site Number	Business Name and Address	Site Status
6	Valley Car Wash/Valley Lube A 7530 N Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T1000002731): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 2014.
7	Crown Chrome Plating, Inc. 14660 Armin Street Van Nuys	Cleanup Program Site (GeoTracker SL06037513881): The site was the subject of closed Cleanup Program Site for a release of lead that affected the soil; the case was closed by RWQCB in 2003.
8	Superior Ind International 14721 Keswick Street Van Nuys	Tiered Permit (EnviroStor 71003532): Permit for storage and use of hazardous chemicals.
9	Cecil Brown Building 14818 Raymer Street Van Nuys	Closed LUST case (GeoTracker T060370245): The site was the subject of a closed LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 1996.
10	Industrial Electronics Engineers 7765-7775 Kester Avenue Van Nuys	Cleanup Program Site (GeoTracker T10000012533): The site was the subject of a closed Cleanup Program Site for a release of nitrate pollutants in the area; the case was closed by the County of Los Angeles in 2019.
11	Eberhard Roofing 15220 Raymer Street Van Nuys	Closed LUST case (GeoTracker T0603707623): The site was the subject of a close LUST case for a release of methyl tertiary butyl ether, tert butyl alcohol, and oth fuel oxygenates in the area; the case was closed by the City of Los Angeles in 2008.
12	J Glover MFG Inc. 15226 W Stagg Street Van Nuys	Closed LUST case (GeoTracker T0603738449): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by the City of Los Angeles in 2013.
13	API Alarm Systems 7750 Burnet Avenue Van Nuys	Closed LUST case (GeoTracker T0603702434): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1996.
14	Viking Electronics Inc. 15521 Lanark Street Van Nuys	Tiered Permit (EnviroStor 71002367): Permit for storage and use of hazardous materials.
15	Shell 8100 Haskell Avenue Van Nuys	Closed LUST case (GeoTracker T0603702443): The site was the subject of a close LUST case for a release of aviation fluid that affected the soil; the case was close by RWQCB in 1987.

Site Number	Business Name and Address	Site Status
16	ITT – Gilfillan 7821 Orion Avenue Van Nuys	Cleanup Program Site (GeoTracker SLT43610608): The site was the subject of a closed Cleanup Program Site for a release of nitrate pollutants in the area; the case was closed by RWQCB in 1997.
17	Exelis, Inc. 7821 Orion Avenue Van Nuys	Hazardous Waste Facility (EnviroStor CAD990665556): The Department of Toxic Substances Control has not provided facility information for this site.
18	Easton Sports 7800 Haskell Avenue Van Nuys	Cleanup Program Site (GeoTracker SLT43610608): The site was the subject of a closed Cleanup Program Site for a release of trichloroethane, trichloroethylene, tetrachloroethylene, methyl ethyl ketone, and acids in addition to cutting and hydraulic oils in soil, sediments, and soil vapor; the case was closed by RWQCB i 2009.
19	Easton Sports, Inc. 7800 Haskell Avenue Van Nuys	Closed LUST case (EnviroStor 71002292): Permit for storage and use of hazardou materials.
20	Easton Aluminum, Inc. 7800 Haskell Avenue Van Nuys	Closed LUST case (GeoTracker T0603702442): The site was the subject of a close LUST Cleanup Program Site for a release of aviation fluid in the aquifer used for the drinking water supply; the case was closed by RWQCB in 1996.
21	Syncom Engineering, Inc. 15749 Stagg Street Van Nuys	Tiered Permit (EnviroStor 71002350): Permit for storage and use of hazardous materials.
22	G & L Plating Co. 7752 Densmore Avenue Van Nuys	Tiered Permit (EnviroStor 71003044): Permit for storage and use of hazardous materials.
23	UNOCAL #5233 15651 Sherman Way Van Nuys	Closed LUST case (GeoTracker T0603702452): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 1997.
24	U.S. Postal Service VN VMF 15701 Sherman Way Van Nuys	Closed LUST case (GeoTracker T0603702441): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1996.
25	AL SAL #21 15650 Sherman Way Van Nuys	Closed LUST case (GeoTracker T0603797881): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 2013.

Site Number	Business Name and Address	Site Status
26	CHEVRON 15709 Vanowen Street Van Nuys	Closed LUST case (GeoTracker T0603702456): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.
27	ARCO #5201 15711 Victory Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702449): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.
28	CHEVRON Terminal #61001504 15359 Oxnard Street Van Nuys	Cleanup Program Site (GeoTracker SL374492462): The site was the subject of a closed Cleanup Program Site for a release of diesel and gasoline that affected th aquifer used for the drinking water supply, contaminated surface and structure, indoor air, other groundwater (uses other than drinking water), soil, and soil vapor; the case was closed by RWQCB in 2015.
29	CHEVRON Van Nuys Terminal 15359 Oxnard Street Van Nuys	Cleanup Program Site (GeoTracker T0603702462): The site was the subject of a closed Cleanup Program Site for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2015.
30	Orchard Supply Hardware 5960 N Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603797352): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by the City of Los Angeles in 1990.
31	CHEVRON #9-2766 5600 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702409): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 2009.
32	SHELL Service Station #0204 5556 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603792956): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2016.
33	Sherman Oaks Centrium 5170 Sepulveda Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702425): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.
34	Los Angeles Fire Department – Fire Station 88 5101 N Sepulveda Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603721060): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by the City of Los Angeles in 2007.

Site Number	Business Name and Address	Site Status
35	Encino – Spectrum/Former Texaco 15503 Ventura Boulevard Encino	Closed LUST case (GeoTracker T0603702490): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1996.
36	TOSCO – 76 Station #3645 15410 Ventura Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702417): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2010.
37	Sherman Oaks Car Wash 15150 Ventra Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603791324): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2011.
38	Mobile #11-FXV (former) 4528 Sepulveda Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702424): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2013.
39	Metropolitan Water District of So. Cal 1731 Sepulveda Boulevard N Los Angeles	Closed LUST case (GeoTracker T0603738936): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by RWQCB in 2007.
40	CHEVRON #306602/Former UNOCAL #4823 651 Sepulveda Boulevard N Brentwood	Closed LUST case (GeoTracker T0603701121): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2007.
41	GTE 598 Sepulveda Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701113): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1995.
42	University of California, Los Angeles (UCLA) 405 Hilgard Avenue Los Angeles	Tiered Permit (EnviroStor 71002377): Permit for storage and use of hazardous materials, including but not limited to gasoline and chemicals associated with fleet maintenance.
43	UCLA Fleet Service Garage 741 Circle Drive S Westwood	Closed LUST case (GeoTracker T0603700680): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1997.
44	UCLA Fleet Maintenance 405 Hilgard Avenue Westwood	Closed LUST case (GeoTracker T0603700684): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.

Site Number	Business Name and Address	Site Status
45	UCLA Medical Center 10833 Le Conte Avenue Westwood	Closed LUST case (GeoTracker T0603700687): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by th City of Los Angeles in 2009.
46	SHELL #204-4530-4007 900 Gayley Avenue Los Angeles	Closed LUST case (GeoTracker T0603700678): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2012.
47	Chevron #9-3100 10984 Le Conte Avenue Westwood	Closed LUST case (GeoTracker T0603700681): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2014.
48	Center West 10877 Wilshire Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700685): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1998.
49	76 Station No. 1065 1157 W Gayley Avenue Los Angeles	Closed LUST case (GeoTracker T0603700679): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2008.
50	Murdock Plaza 10900 Wilshire Boulevard Westwood	Closed LUST case (GeoTracker T0603700683): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by th City of Los Angeles in 1995.
51	Wilshire Westwood Estates 10936 Wilshire Boulevard Los Angeles	Certified State Response Site (EnviroStor 19150002): The area involved was a construction site for a 23-story office building. During the foundation excavation a strong gasoline odor emanated from the borings. The source of the gasoline w probably from a LUST because the area served as a gasoline service station. Afte investigations, some of the soils were found to be contaminated with benzene, toluene, and xylene. To test the soil, 33 borings were drilled, and samples were taken at every 10-foot interval. In addition, all soils were regularly tested for hydrocarbons with a portable organic vapor analyzer. The site was certified in 1986 and a post-cleanup confirmation was received by RWQCB on July 22, 1986
52	Hertz – West LA 10951 Wilshire Boulevard Brentwood	Closed LUST case (GeoTracker T0603701122): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1989.

Site Number	Business Name and Address	Site Status
53	VA Medical Center, 3 USTS AT T-65 11301 Wilshire Boulevard Los Angeles	Closed LUST case (GeoTracker T0603755510): The site was the subject of a close LUST case for a release of diesel, gasoline, and lead that affected the aquifer use for the drinking water supply; the case was closed by RWQCB in 2004.
54	VA Medical Center, UST T-304 11301 Wilshire Boulevard Los Angeles	Closed LUST case (GeoTracker T0603755510): The site was the subject of a close LUST case for a release of diesel and lead that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2004.
55	VA Medical Center, USTS T-258 11301 Wilshire Boulevard Los Angeles	Closed LUST case (GeoTracker T0603765812): The site was the subject of a close LUST case for a release of diesel and gasoline that affected the soil; the case wa closed by RWQCB in 2004.
56	SCI Mortuary (former) 1510 Sepulveda Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700694): The site was the subject of a close LUST case for a release of aviation fluid that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1995.
57	Bren Investment 11100 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700690): The site was the subject of a close LUST case for a release of aviation fluid that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1995.
58	EXXON #7-3816 11261 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700701): The site was the subject of a close LUST case for a release of aviation fluid that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1995.
59	TEXACO #611061485 11256 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T10000005405): The site was the subject of a closed LUST case for an unspecified contaminant/area of concern; the case was closed by the City of Los Angeles in 1992.
60	TOSCO – 76 Station #5146 11305 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T10603700702): The site was the subject of a closed LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2006.

Site Number	Business Name and Address	Site Status
61	T&T Service 1736 Sawtelle Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700697): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2005.
62	Bathroom Jewelry 1888 S Sepulveda Boulevard Los Angeles	Tiered Permit (EnviroStor 71002570): Permit for storage and use of hazardous chemicals.
63	City of LA – WLA Maintenance Yard 11168 W Missouri Avenue Los Angeles	Closed LUST case (GeoTracker T0603719238): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by State Water Resources Control Board in 2015.
64	Bel Air Maintenance Yard 11165 Missouri Avenue Los Angeles	Closed LUST case (GeoTracker T0603700710): The site was the subject of a close LUST case for a release of kerosene that affected the soil; the case was closed b RWQCB in 1996.
65	Southland Location #18821 11075 Olympic Boulevard W Los Angeles	Closed LUST case (GeoTracker T0603700664): The site was the subject of a close LUST case for a release of gasoline that affected aquifer used for the drinking water supply; the case was closed by RWQCB in 1997.
66	EXXON #7-8432 11350 Olympic Boulevard W Rancho Park	Closed LUST case (GeoTracker T0603701165): The site was the subject of a close LUST case for a release of gasoline that affected aquifer used for the drinking water supply; the case was closed by RWQCB in 1993.
67	Home Junction Property 11200 Pico Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701169): The site was the subject of a close LUST case for a release of gasoline that affected aquifer used for the drinking water supply; the case was closed by RWQCB in 1996.

Source: GeoTracker, 2023; EnviroStor, 2023

Table B-2. Alternative 3: Hazardous Material Sites within 0.5 Mile

Site Number	Business Name and Address	Site Status
1	American Oil Company 13740 Saticoy Street Van Nuys	Active Corrective Action (EnviroStor CAD981427669): The Permittee was a hazardous-waste transporter and collected used oil, used anti-freeze, and oil-contaminated solid waste from off-site generators (gas stations, oil changers auto repair shops, etc.) and consolidated these wastes before shipping them to hazardous-waste treatment or disposal facility. The Facility consisted of a loading/unloading area, one used-oil storage area to store used oil and used ant freeze separately in two tanker trailers, and one solid-waste storage area to sto solid waste contaminated with oil. The maximum capacity of the loading/unloading area was 3,000 gallons. The maximum capacity of the used-o storage area was 9,500 gallons in one tanker trailer, and the maximum capacity the solid waste storage area was 4.32 cubic yards in one dump trailer. On June 1 2019, the Department of Toxic Substances Control denied the American Oil Company a permit renewal application, which caused the facility to commence closure. The Department of Toxic Substances Control directed the permittee to close the facility; however, the Department of Toxic Substances Control is requiring that the closure plan be revised to meet current closure requirements The permittee has revised the closure plan in response to the Department of Toxic Substances Control Notices of Deficiency.
2	General Motors Corporation 8000 Van Nuys Boulevard Panorama City	Closed leaking underground storage tank (LUST) case (GeoTracker T0603702415 The site was the subject of a closed LUST case for a release of aviation fluid that affected the soil; the case was closed by the City of Los Angeles in 1988.
3	Salvation Army Thrift Store 6059 N Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603715897): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the Regional Water Quality Control Board (RWQCB) in 2012.
4	LA City Dept of Water and Power 14401 Saticoy Street Van Nuys	Closed LUST case (GeoTracker T060702430): The site was the subject of a closed LUST case for a release of kerosene that affected the soil and groundwater; the case was closed by RWQCB in 1996.
5	Borg-Warner Fluid Controls 7500 Tyrone Avenue Van Nuys	Closed LUST case (GeoTracker T0603702431): The site was the subject of a close LUST case for a release of solvents that affected the soil; the case was closed by RWQCB in 1985.

Site Number	Business Name and Address	Site Status
6	Valley Car Wash/Valley Lube A 7530 N Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T1000002731): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 2014.
7	Crown Chrome Plating, Inc. 14660 Armin Street Van Nuys	Cleanup Program Site (GeoTracker SL06037513881): The site was the subject of closed Cleanup Program Site for a release of lead that affected the soil; the case was closed by RWQCB in 2003.
8	Superior Ind International 14721 Keswick Street Van Nuys	Tiered Permit (EnviroStor 71003532): Permit for storage and use of hazardous chemicals.
9	Cecil Brown Building 14818 Raymer Street Van Nuys	Closed LUST case (GeoTracker T060370245): The site was the subject of a closed LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 1996.
10	Industrial Electronics Engineers 7765-7775 Kester Avenue Van Nuys	Cleanup Program Site (GeoTracker T10000012533): The site was the subject of a closed Cleanup Program Site for a release of nitrate pollutants in the area; the case was closed by the County of Los Angeles in 2019.
11	Eberhard Roofing 15220 Raymer Street Van Nuys	Closed LUST case (GeoTracker T0603707623): The site was the subject of a close LUST case for a release of methyl tertiary butyl ether, tert butyl alcohol, and oth fuel oxygenates in the area; the case was closed by the City of Los Angeles in 2008.
12	J Glover MFG Inc. 15226 W Stagg Street Van Nuys	Closed LUST case (GeoTracker T0603738449): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by the City of Los Angeles in 2013.
13	API Alarm Systems 7750 Burnet Avenue Van Nuys	Closed LUST case (GeoTracker T0603702434): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1996.
14	Viking Electronics Inc. 15521 Lanark Street Van Nuys	Tiered Permit (EnviroStor 71002367): Permit for storage and use of hazardous materials.
15	Shell 8100 Haskell Avenue Van Nuys	Closed LUST case (GeoTracker T0603702443): The site was the subject of a close LUST case for a release of aviation fluid that affected the soil; the case was close by RWQCB in 1987.

Site Number	Business Name and Address	Site Status
16	ITT – Gilfillan 7821 Orion Avenue Van Nuys	Cleanup Program Site (GeoTracker SLT43610608): The site was the subject of a closed Cleanup Program Site for a release of nitrate pollutants in the area; the case was closed by RWQCB in 1997.
17	Exelis, Inc. 7821 Orion Avenue Van Nuys	Hazardous Waste Facility (EnviroStor CAD990665556): The Department of Toxic Substances Control has not provided facility information for this site.
18	Easton Sports 7800 Haskell Avenue Van Nuys	Cleanup Program Site (GeoTracker SLT43610608): The site was the subject of a closed Cleanup Program Site for a release of trichloroethane, trichloroethylene, tetrachloroethylene, methyl ethyl ketone, and acids in addition to cutting and hydraulic oils in soil, sediments, and soil vapor; the case was closed by RWQCB i 2009.
19	Easton Sports, Inc. 7800 Haskell Avenue Van Nuys	Closed LUST case (EnviroStor 71002292): Permit for storage and use of hazardou materials.
20	Easton Aluminum, Inc. 7800 Haskell Avenue Van Nuys	Closed LUST case (GeoTracker T0603702442): The site was the subject of a close LUST Cleanup Program Site for a release of aviation fluid in the aquifer used for the drinking water supply; the case was closed by RWQCB in 1996.
21	Syncom Engineering, Inc. 15749 Stagg Street Van Nuys	Tiered Permit (EnviroStor 71002350): Permit for storage and use of hazardous materials.
22	G & L Plating Co. 7752 Densmore Avenue Van Nuys	Tiered Permit (EnviroStor 71003044): Permit for storage and use of hazardous materials.
23	UNOCAL #5233 15651 Sherman Way Van Nuys	Closed LUST case (GeoTracker T0603702452): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 1997.
24	U.S. Postal Service VN VMF 15701 Sherman Way Van Nuys	Closed LUST case (GeoTracker T0603702441): The site was the subject of a close LUST case for a release of gasoline that affected aquifer used for the drinking water supply; the case was closed by RWQCB in 1996.
25	AL SAL #21 15650 Sherman Way Van Nuys	Closed LUST case (GeoTracker T0603797881): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 2013.

Site Number	Business Name and Address	Site Status
26	CHEVRON 15709 Vanowen Street Van Nuys	Closed LUST case (GeoTracker T0603702456): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.
27	ARCO #5201 15711 Victory Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702449): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.
28	CHEVRON Terminal #61001504 15359 Oxnard Street Van Nuys	Cleanup Program Site (GeoTracker SL374492462): The site was the subject of a closed Cleanup Program Site for a release of diesel and gasoline that affected aquifer used for the drinking water supply, contaminated surface and structure, indoor air, other groundwater (uses other than drinking water), soil, and soil vapor; the case was closed by RWQCB in 2015.
29	CHEVRON Van Nuys Terminal 15359 Oxnard Street Van Nuys	Cleanup Program Site (GeoTracker T0603702462): The site was the subject of a closed Cleanup Program Site for a release of gasoline that affected aquifer used for the drinking water supply; the case was closed by RWQCB in 2015.
30	Orchard Supply Hardware 5960 N Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603797352): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by the City of Los Angeles in 1990.
31	CHEVRON #9-2766 5600 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702409): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 2009.
32	SHELL Service Station #0204 5556 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603792956): The site was the subject of a close LUST case for a release of gasoline that affected aquifer used for the drinking water supply; the case was closed by RWQCB in 2016.
33	Sherman Oaks Centrium 5170 Sepulveda Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702425): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.
34	Los Angeles Fire Department – Fire Station 88 5101 N Sepulveda Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603721060): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by the City of Los Angeles in 2007.

Site Number	Business Name and Address	Site Status
35	Encino – Spectrum/Former Texaco 15503 Ventura Boulevard Encino	Closed LUST case (GeoTracker T0603702490): The site was the subject of a close LUST case for a release of gasoline that affected aquifer used for the drinking water supply; the case was closed by RWQCB in 1996.
36	TOSCO – 76 Station #3645 15410 Ventura Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702417): The site was the subject of a close LUST case for a release of gasoline that affected aquifer used for the drinking water supply; the case was closed by RWQCB in 2010.
37	Sherman Oaks Car Wash 15150 Ventra Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603791324): The site was the subject of a close LUST case for a release of gasoline that affected aquifer used for the drinking water supply; the case was closed by RWQCB in 2011.
38	Mobile #11-FXV (former) 4528 Sepulveda Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702424): The site was the subject of a close LUST case for a release of gasoline that affected aquifer used for the drinking water supply; the case was closed by RWQCB in 2013.
39	Metropolitan Water District of So. Cal 1731 Sepulveda Boulevard, N Los Angeles	Closed LUST case (GeoTracker T0603738936): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by RWQCB in 2007.
40	University of California, Los Angeles (UCLA) 405 Hilgard Avenue Los Angeles	Tiered Permit (EnviroStor 71002377): Permit for storage and use of hazardous materials, including but not limited to gasoline and chemicals associated with fleet maintenance.
41	UCLA Fleet Service Garage 741 Circle Drive S Westwood	Closed LUST case (GeoTracker T0603700680): The site was the subject of a close LUST case for a release of gasoline that affected aquifer used for the drinking water supply; the case was closed by RWQCB in 1997.
42	UCLA Fleet Maintenance 405 Hilgard Avenue Westwood	Closed LUST case (GeoTracker T0603700684): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.
43	UCLA Medical Center 10833 Le Conte Avenue Westwood	Closed LUST case (GeoTracker T0603700687): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by th City of Los Angeles in 2009.
44	SHELL #204-4530-4007 900 Gayley Avenue Los Angeles	Closed LUST case (GeoTracker T0603700678): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2012.

Site Number	Business Name and Address	Site Status
45	Chevron #9-3100 10984 Le Conte Avenue Westwood	Closed LUST case (GeoTracker T0603700681): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2014.
46	76 Station No. 1065 1157 W Gayley Avenue Los Angeles	Closed LUST case (GeoTracker T0603700679): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2008.
47	Murdock Plaza 10900 Wilshire Boulevard Westwood	Closed LUST case (GeoTracker T0603700683): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by th City of Los Angeles in 1995.
48	Wilshire Westwood Estates 10936 Wilshire Boulevard Los Angeles	Certified State Response Site (EnviroStor 19150002): The area involved was a construction site for a 23-story office building. During the foundation excavation a strong gasoline odor emanated from the borings. The source of the gasoline was probably from a LUST because the area served as a gasoline service station. After investigations, some of the soils were found to be contaminated with benzene, toluene, and xylene. To test the soil, 33 borings were drilled, and samples were taken at every 10-foot interval. In addition, all soils were regularly tested for hydrocarbons with a portable organic vapor analyzer. The site was certified in 1986 and a post-cleanup confirmation was received by RWQCB on Ju 22, 1986.
49	Hertz – West LA 10951 Wilshire Boulevard Brentwood	Closed LUST case (GeoTracker T0603701122): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1989.
50	VA Medical Center, 3 USTS AT T-65 11301 Wilshire Boulevard Los Angeles	Closed LUST case (GeoTracker T0603755510): The site was the subject of a close LUST case for a release of diesel, gasoline, and lead that affected the aquifer use for the drinking water supply; the case was closed by RWQCB in 2004.
51	VA Medical Center, UST T-304 11301 Wilshire Boulevard Los Angeles	Closed LUST case (GeoTracker T0603755510): The site was the subject of a close LUST case for a release of diesel, and lead that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2004.

Site Number	Business Name and Address	Site Status
52	VA Medical Center, USTS T-258 11301 Wilshire Boulevard Los Angeles	Closed LUST case (GeoTracker T0603765812): The site was the subject of a close LUST case for a release of diesel and gasoline that affected the soil; the case wa closed by RWQCB in 2004.
53	SCI Mortuary (former) 1510 Sepulveda Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700694): The site was the subject of a close LUST case for a release of aviation fluid that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1995.
54	Bren Investment 11100 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700690): The site was the subject of a close LUST case for a release of aviation fluid that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1995.
55	EXXON #7-3816 11261 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700701): The site was the subject of a close LUST case for a release of aviation fluid that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1995.
56	TEXACO #611061485 11256 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T10000005405): The site was the subject of a closed LUST case for an unspecified contaminant/area of concern; the case was closed by the City of Los Angeles in 1992.
57	TOSCO – 76 Station #5146 11305 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T10603700702): The site was the subject of a closed LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2006.
58	T&T Service 1736 Sawtelle Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700697): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2005.
59	Bathroom Jewelry 1888 S Sepulveda Boulevard Los Angeles	Tiered Permit (EnviroStor 71002570): Permit for storage and use of hazardous chemicals.
60	City of LA – WLA Maintenance Yard 11168 W Missouri Avenue Los Angeles	Closed LUST case (GeoTracker T0603719238): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by State Water Resources Control Board in 2015.
61	Bel Air Maintenance Yard 11165 Missouri Avenue Los Angeles	Closed LUST case (GeoTracker T0603700710): The site was the subject of a close LUST case for a release of kerosene that affected the soil; the case was closed b RWQCB in 1996.

Site Number	Business Name and Address	Site Status
62	Southland Location #18821 11075 Olympic Boulevard W Los Angeles	Closed LUST case (GeoTracker T0603700664): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1997.
63	EXXON #7-8432 11350 Olympic Boulevard W Rancho Park	Closed LUST case (GeoTracker T0603701165): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1993.
64	Home Junction Property 11200 Pico Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701169): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1996.

Source: GeoTracker, 2023; EnviroStor, 2023

Table B-3. Alternative 4: Hazardous Material Sites within 0.5 Mile

Site Number	Business Name and Address	Site Status
1	General Motors Corporation 8000 Van Nuys Boulevard Panorama City	Closed leaking underground storage tank (LUST) case (GeoTracker T0603702415 The site was the subject of a closed LUST case for a release of aviation fluid that affected the soil; the case was closed by the City of Los Angeles in 1988.
2	Salvation Army Thrift Store 6059 N Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603715897): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the Regional Water Quality Control Board (RWQCB) in 2012.
3	LA City Dept of Water and Power 14401 Saticoy Street Van Nuys	Closed LUST case (GeoTracker T060702430): The site was the subject of a closed LUST case for a release of kerosene that affected the soil and groundwater; the case was closed by RWQCB in 1996.
4	Borg-Warner Fluid Controls 7500 Tyrone Avenue Van Nuys	Closed LUST case (GeoTracker T0603702431): The site was the subject of a close LUST case for a release of solvents that affected the soil; the case was closed by RWQCB in 1985.
5	Crown Chrome Plating, Inc. 14660 Armin Street Van Nuys	Cleanup Program Site (GeoTracker SL06037513881): The site was the subject of closed Cleanup Program Site for a release of lead that affected the soil; the case was closed by RWQCB in 2003.
6	Superior Ind International 14721 Keswick Street Van Nuys.	Tiered Permit (EnviroStor 71003532): Permit for storage and use of hazardous chemicals.
7	Cecil Brown Building 14818 Raymer Street Van Nuys	Closed LUST case (GeoTracker T060370245): The site was the subject of a closed LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 1996.
8	Industrial Electronics Engineers 7765-7775 Kester Avenue Van Nuys	Cleanup Program Site (GeoTracker T10000012533): The site was the subject of a closed Cleanup Program Site for a release of nitrate pollutants in the area; the case was closed by the County of Los Angeles in 2019.
9	Eberhard Roofing 15220 Raymer Street Van Nuys	Closed LUST case (GeoTracker T0603707623): The site was the subject of a close LUST case for a release of methyl tertiary butyl ether, tert butyl alcohol, and oth fuel oxygenates in the area; the case was closed by the City of Los Angeles in 2008.

Site Number	Business Name and Address	Site Status
10	J Glover MFG Inc. 15226 W Stagg Street Van Nuys	Closed LUST case (GeoTracker T0603738449): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by the City of Los Angeles in 2013.
11	API Alarm Systems 7750 Burnet Avenue Van Nuys	Closed LUST case (GeoTracker T0603702434): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1996.
12	Photo Fabricators, Inc. 7648 Burnet Avenue Los Angeles	Tiered Permit (EnviroStor 71003117): Permit for storage and use of hazardous chemicals.
13	Gibralter Transmissions 7650 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702433): The site was the subject of a close LUST case for a release of waste, motor, hydraulic, and lubricating oils that affected the soil; the case was closed by RWQCB in 1986.
14	ARCO #1035 7557 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702439): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1998.
15	MOBIL #11-FCG 15303 Sherman Way Van Nuys	Closed LUST case (GeoTracker T0603702451): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 2011.
16	76 Products Station #1650 7161 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702437): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by RWQCB in 2016.
17	Shell Service Station (former) 7162 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603715832): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2009.
18	ARCO Facility No. 1035 7557 Sepulveda Boulevard Van Nuys	Cleanup Program Site (GeoTracker T0603777142): The site was the subject of a closed LUST case for a release of gasoline that affected area not specified; the case was closed by the City of Los Angeles in 2012.
19	Chevron #9-0316T (former) 6810 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702436): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected other groundwater (uses other than drinking water); the case was close by the City of Los Angeles in 1996.

Site Number	Business Name and Address	Site Status
20	DOD – Sepulveda ANG IRP SITE #1 15900 Victory Boulevard Van Nuys	Cleanup Program Site (GeoTracker SLT43188186): The site was the subject of a closed LUST case for a release of non-specified material that affected a non-specified area; the case was closed by RWQCB in 2001.
21	UNOCAL #2489 15300 Victory Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702446): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water; the case was closed by RWQCB in 1997.
22	MOBILE #18-FGC 6360 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702470): The site was the subject of a close LUST case for a release of aviation fluid that affected other groundwater (uses other than drinking water); the case was closed by RWQCB in 2012.
23	CHEVRON Terminal #61001504 15359 Oxnard Street Van Nuys	Cleanup Program Site (GeoTracker SL374492462): The site was the subject of a closed Cleanup Program Site for a release of diesel and gasoline that affected th aquifer used for the drinking water supply, contaminated surface and structure, indoor air, other groundwater (uses other than drinking water), soil, and soil vapor; the case was closed by RWQCB in 2015.
24	CHEVRON Van Nuys Terminal 15359 Oxnard Street Van Nuys	Cleanup Program Site (GeoTracker T0603702462): The site was the subject of a closed Cleanup Program Site for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2015.
25	Van Nuys Maintenance Yard 15145 Oxnard Street Van Nuys	Cleanup Program Site (GeoTracker T0603702460): The site was the subject of a closed LUST case for a release of diesel that affected the soil; the case was close by the City of Los Angeles in 1997.
26	Orchard Supply Hardware 5960 N Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603797352): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by the City of Los Angeles in 1990.
27	CHEVRON #9-2766 5600 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702409): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 2009.

Site Number	Business Name and Address	Site Status
28	SHELL Service Station #0204 5556 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603792956): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2016.
29	Sherman Oaks Centrium 5170 Sepulveda Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702425): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.
30	Los Angeles Fire Department – Fire Station 88 5101 N Sepulveda Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603721060): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by the City of Los Angeles in 2007.
31	TOSCO – 76 Station #3645 15410 Ventura Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702417): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2010.
32	Sherman Oaks Car Wash 15150 Ventra Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603791324): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2011.
33	Mobile #11-FXV (former) 4528 Sepulveda Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702424): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2013.
34	Mobile #17-273 2337 Roscomare Road Los Angeles	Closed LUST case (GeoTracker T0603701236): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 1988.
35	Pacific Holding Co. 10644 Bellagio Road Bel Air	Closed LUST case (GeoTracker T0603701237): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by RWQCB in 1997.
36	University of California, Los Angeles (UCLA) 405 Hilgard Avenue Los Angeles	Tiered Permit (EnviroStor 71002377): Permit for storage and use of hazardous materials, including but not limited to gasoline and chemicals associated with fleet maintenance.
37	UCLA Fleet Service Garage 741 Circle Drive S Westwood	Closed LUST case (GeoTracker T0603700680): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1997.

Site Number	Business Name and Address	Site Status
38	UCLA Fleet Maintenance 405 Hilgard Avenue Westwood	Closed LUST case (GeoTracker T0603700684): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.
39	UCLA Medical Center 10833 Le Conte Avenue Westwood	Closed LUST case (GeoTracker T0603700687): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by th City of Los Angeles in 2009.
40	SHELL #204-4530-4007 900 Gayley Avenue Los Angeles	Closed LUST case (GeoTracker T0603700678): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2012.
41	Chevron #9-3100 10984 Le Conte Avenue Westwood	Closed LUST case (GeoTracker T0603700681): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2014.
42	Center West 10877 Wilshire Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700685): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1998.
43	TOSCO - 76 Station No. 1065 1157 W Gayley Avenue Los Angeles	Closed LUST case (GeoTracker T0603700679): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2008.
44	Murdock Plaza 10900 Wilshire Boulevard Westwood	Closed LUST case (GeoTracker T0603700683): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by th City of Los Angeles in 1995.
45	Wilshire Westwood Estates 10936 Wilshire Boulevard Los Angeles	Certified State Response Site (EnviroStor 19150002): The area involved was a construction site for a 23-story office building. During the foundation excavation a strong gasoline odor emanated from the borings. The source of the gasoline w probably from a LUST because the area served as a gasoline service station. Afte investigations, some of the soils were found to be contaminated with benzene, toluene, and xylene. To test the soil, 33 borings were drilled and samples were taken at every 10-foot interval. In addition, all soils were regularly tested for hydrocarbons with a portable organic vapor analyzer. The site was certified in 1986 and a post-cleanup confirmation was received by RWQCB on July 22, 1986
46	Hertz – West LA 10951 Wilshire Boulevard Brentwood	Closed LUST case (GeoTracker T0603701122): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1989.

Site Number	Business Name and Address	Site Status
47	SCI Mortuary (former) 1510 Sepulveda Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700694): The site was the subject of a close LUST case for a release of aviation fluid that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1995.
48	World Oil Station #60 10991 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700705): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 2005.
49	Bren Investment 11100 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700690): The site was the subject of a close LUST case for a release of aviation fluid that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1995.
50	Kinder-Morgan Section 23 Pipelines 9600 Alameda Street Los Angeles	Closed LUST case (GeoTracker SL204DP2396): The site was the subject of a close LUST case for a release of petroleum, fuels, oils, and volatile organic compounds that affected a non-specified area; the case was closed by RWQCB in 2002.
51	Bathroom Jewelry 1888 S Sepulveda Boulevard Los Angeles	Tiered Permit (EnviroStor 71002570): Permit for storage and use of hazardous chemicals.
52	City of LA – WLA Maintenance Yard 11168 W Missouri Avenue Los Angeles	Closed LUST case (GeoTracker T0603719238): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by State Water Resources Control Board in 2015.
53	Bel Air Maintenance Yard 11165 Missouri Avenue Los Angeles	Closed LUST case (GeoTracker T0603700710): The site was the subject of a close LUST case for a release of kerosene that affected the soil; the case was closed b RWQCB in 1996.
54	Southland Location #18821 11075 Olympic Boulevard W Los Angeles	Closed LUST case (GeoTracker T0603700664): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1997.
55	Home Junction Property 11200 Pico Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701169): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1996.
56	Westdale Maintenance Facility 2723 Sepulveda Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701173): The site was the subject of a close LUST case for a release of aviation fluid that affected the soil; the case was close by the City of Los Angeles in 1997.

Site Number	Business Name and Address	Site Status
57	Caltrans Westdale Maintenance 2723 Sepulveda Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701174): The site was the subject of a close LUST case for a release of solvents that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2004.
58	Torrance Valley Pipeline 2800 S Sepulveda Boulevard Los Angeles	Open Cleanup Program Site (GeoTracker T10000021011): On April 23, 2023, it was reported that oil was seeping up through the roadway surface in the vicinity of Sepulveda Boulevard and Interstate 10 (I-10). Liquids were removed and remedial soil excavation was conducted around the area of a crude-oil release from an underground pipeline near the area of Sepulveda Boulevard and I-10. S was removed from three affected areas: 1) excavation in Sepulveda Boulevard along the pipeline, 2) soil area east of the pipeline excavation between Sepulved Boulevard and the sidewalk, and 3) soil area beneath the I-10 overpass, along th footing of the overpass. Soil samples were collected on April 28, 2023, and additional remedial action occurred on May 4, 2023. From the descriptions and observations of the release event by on-scene personnel, observations made during soil sampling activities, remedial excavations conducted, primarily fine-grained clayey soil, and soil sample analytical results, it appears the subsurface and surface affected area from the crude oil release was limited in extent, adequately assessed, and remediated to the extent practicable. Residual impacts, as indicated in the soil sample results, are below environmental screening levels.
59	Torrance Valley Pipeline 2800 S Sepulveda Boulevard Los Angeles	Open Cleanup Program Site (GeoTracker T10000021001): Assessment & Interim Remedial Action. Refer to details provided for Site 58.
60	TEXACO USA (former) 11205 National Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701206): The site was the subject of a close LUST case for a release of solvents or non-petroleum hydrocarbon that affected the soil; the case was closed by RWQCB in 1998.
61	76 Products Station #4357 11280 National Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701205): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.
62	76 Products Station #4357 11280 National Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701204): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.

Source: GeoTracker, 2023; EnviroStor ,2023

Table B 4. Alternative 5: Hazardous Material Sites within 0.5 Mile

Site Number	Business Name and Address	Site Status
1	American Oil Company 13736 Saticoy Street Van Nuys	Undergoing Closure (EnviroStor CAD981427669): The permittee was a hazardous-waste transporter and collected used oil, used anti-freeze and oil-contaminated solid waste from off-site generators (gas stations, oil changers auto repair shops, etc.) and consolidated these wastes before shipping them to hazardous-waste treatment or disposal facility. The facility consisted of a loading/unloading area, one used-oil storage area to store used oil and used ant freeze separately in two tanker trailers, and one solid-waste storage area to sto solid waste contaminated with oil. On June 14, 2019, the Department of Toxic Substances Control denied the American Oil Company a permit renewal application, which caused the facility t commence closure. The Department of Toxic Substances Control directed the permittee to close the facility; however, the Department of Toxic Substances Control is requiring that the closure plan be revised to meet current closure requirements. The permittee has revised the closure plan in response to the Department of Toxic Substances Control Notices of Deficiency.
2	General Motors Corporation 8000 Van Nuys Boulevard Panorama City	Closed leaking underground storage tank (LUST) case (GeoTracker T0603702415 The site was the subject of a closed LUST case for a release of aviation fluid that affected the soil; the case was closed by the City of Los Angeles in 1988.
3	Salvation Army Thrift Store 6059 N Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603715897): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the Regional Water Quality Control Board (RWQCB) in 2012.
4	LA City Dept of Water and Power 14401 Saticoy Street Van Nuys	Closed LUST case (GeoTracker T060702430): The site was the subject of a closed LUST case for a release of kerosene that affected the soil and groundwater; the case was closed by RWQCB in 1996.
5	Borg-Warner Fluid Controls 7500 Tyrone Avenue Van Nuys	Closed LUST case (GeoTracker T0603702431): The site was the subject of a close LUST case for a release of solvents that affected the soil; the case was closed by RWQCB in 1985.

Site Number	Business Name and Address	Site Status
6	Crown Chrome Plating, Inc. 14660 Armin Street Van Nuys	Cleanup Program Site (GeoTracker SL06037513881): The site was the subject of closed Cleanup Program Site for a release of lead that affected the soil; the case was closed by RWQCB in 2003.
7	Superior Ind International 14721 Keswick Street Van Nuys	Tiered Permit (EnviroStor 71003532): Permit for storage and use of hazardous chemicals.
8	Cecil Brown Building 14818 Raymer Street Van Nuys	Closed LUST case (GeoTracker T060370245): The site was the subject of a closed LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 1996.
9	Industrial Electronics Engineers 7765-7775 Kester Avenue Van Nuys	Cleanup Program Site (GeoTracker T10000012533): The site was the subject of a closed Cleanup Program Site for a release of nitrate pollutants in the area; the case was closed by the County of Los Angeles in 2019.
10	Eberhard Roofing 15220 Raymer Street Van Nuys	Closed LUST case (GeoTracker T0603707623): The site was the subject of a close LUST case for a release of methyl tertiary butyl ether, tert butyl alcohol, and oth fuel oxygenates in the area; the case was closed by the City of Los Angeles in 2008.
11	J Glover MFG Inc. 15226 W Stagg Street Van Nuys	Closed LUST case (GeoTracker T0603738449): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by the City of Los Angeles in 2013.
12	API Alarm Systems 7750 Burnet Avenue Van Nuys	Closed LUST case (GeoTracker T0603702434): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1996.
13	Photo Fabricators, Inc. 7648 Burnet Avenue Los Angeles	Tiered Permit (EnviroStor 71003117): Permit for storage and use of hazardous chemicals.
14	Gibralter Transmissions 7650 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702433): The site was the subject of a close LUST case for a release of waste, motor, hydraulic, and lubricating oils that affected the soil; the case was closed by RWQCB in 1986.
15	ARCO #1035 7557 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702439): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1998.

Site Number	Business Name and Address	Site Status
16	MOBIL #11-FCG 15303 Sherman Way Van Nuys	Closed LUST case (GeoTracker T0603702451): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 2011.
17	76 Products Station #1650 7161 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702437): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by RWQCB in 2016.
18	Shell Service Station (former) 7162 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603715832): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2009.
19	ARCO Facility No. 1035 7557 Sepulveda Boulevard Van Nuys	Cleanup Program Site (GeoTracker T0603777142): The site was the subject of a closed LUST case for a release of gasoline that affected area not specified; the case was closed by the City of Los Angeles in 2012.
20	Chevron #9-0316T (former) 6810 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702436): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected other groundwater (uses other than drinking water); the case was close by the City of Los Angeles in 1996.
21	Department of Defense– Sepulveda ANG IRP Site #1 15900 Victory Boulevard Van Nuys	Cleanup Program Site (GeoTracker SLT43188186): The site was the subject of a closed LUST case for a release of non-specified material that affected a non-specified area; the case was closed by RWQCB in 2001.
22	UNOCAL #2489 15300 Victory Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702446): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water; the case was closed by RWQCB in 1997.
23	MOBILE #18-FGC 6360 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702470): The site was the subject of a close LUST case for a release of aviation fluid that affected other groundwater (uses other than drinking water); the case was closed by RWQCB in 2012.
24	CHEVRON Terminal #61001504 15359 Oxnard Street Van Nuys	Cleanup Program Site (GeoTracker SL374492462): The site was the subject of a closed Cleanup Program Site for a release of diesel and gasoline that affected th aquifer used for the drinking water supply, contaminated surface and structure, indoor air, other groundwater (uses other than drinking water), soil, and soil vapor; the case was closed by RWQCB in 2015.

Site Number	Business Name and Address	Site Status
25	CHEVRON Van Nuys Terminal 15359 Oxnard Street Van Nuys	Cleanup Program Site (GeoTracker T0603702462): The site was the subject of a closed Cleanup Program Site for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2015.
26	Van Nuys Maintenance Yard 15145 Oxnard Street Van Nuys	Cleanup Program Site (GeoTracker T0603702460): The site was the subject of a closed LUST case for a release of diesel that affected the soil; the case was close by the City of Los Angeles in 1997.
27	Orchard Supply Hardware 5960 N Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603797352): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by the City of Los Angeles in 1990.
28	CHEVRON #9-2766 5600 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702409): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 2009.
29	SHELL Service Station #0204 5556 Sepulveda Boulevard Van Nuys	Closed LUST case (GeoTracker T0603792956): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2016.
30	Sherman Oaks Centrium 5170 Sepulveda Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702425): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.
31	Los Angeles Fire Department – Fire Station 88 5101 N Sepulveda Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603721060): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by the City of Los Angeles in 2007.
32	TOSCO – 76 Station #3645 15410 Ventura Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702417): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2010.
33	Sherman Oaks Car Wash 15150 Ventra Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603791324): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2011.

Site Number	Business Name and Address	Site Status
34	Mobile #11-FXV (former) 4528 Sepulveda Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702424): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2013.
35	Mobile #17-273 2337 Roscomare Road Los Angeles	Closed LUST case (GeoTracker T0603701236): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 1988.
36	Pacific Holding Co. 10644 Bellagio Road Bel Air	Closed LUST case (GeoTracker T0603701237): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by RWQCB in 1997.
37	UCLA 405 Hilgard Avenue Los Angeles	Tiered Permit (EnviroStor 71002377): Permit for storage and use of hazardous chemicals, including but not limited to gasoline and chemicals associated with fleet maintenance.
38	UCLA Fleet Service Garage 741 Circle Drive S Westwood	Closed LUST case (GeoTracker T0603700680): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1997.
39	UCLA Fleet Maintenance 405 Hilgard Avenue Westwood	Closed LUST case (GeoTracker T0603700684): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.
40	UCLA Medical Center 10833 Le Conte Avenue Westwood	Closed LUST case (GeoTracker T0603700687): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by th City of Los Angeles in 2009.
41	SHELL #204-4530-4007 900 Gayley Avenue Los Angeles	Closed LUST case (GeoTracker T0603700678): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2012.
42	Chevron #9-3100 10984 Le Conte Avenue Westwood	Closed LUST case (GeoTracker T0603700681): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2014.
43	Center West 10877 Wilshire Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700685): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1998.

Site Number	Business Name and Address	Site Status
44	TOSCO - 76 Station No. 1065 1157 W Gayley Avenue Los Angeles	Closed LUST case (GeoTracker T0603700679): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2008.
45	Murdock Plaza 10900 Wilshire Boulevard Westwood	Closed LUST case (GeoTracker T0603700683): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by th City of Los Angeles in 1995.
46	Wilshire Westwood Estates 10936 Wilshire Boulevard Los Angeles	Certified State Response Site (EnviroStor 19150002): The area involved was a construction site for a 23-story office building. During the foundation excavation a strong gasoline odor emanated from the borings. The source of the gasoline w probably from an LUST, since the area served as a gasoline service station. After investigations, some of the soils were found to be contaminated with benzene, toluene and xylene. To test the soil, 33 borings were drilled and samples were taken at every 10-foot interval. In addition, all soils were regularly tested for hydrocarbons with a portable organic vapor analyzer. The site was certified in 1986 and a post-cleanup confirmation was received by RWQCB on July 22, 1986
47	Hertz – West LA 10951 Wilshire Boulevard Brentwood	Closed LUST case (GeoTracker T0603701122): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1989.
48	SCI Mortuary (former) 1510 Sepulveda Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700694): The site was the subject of a close LUST case for a release of aviation fluid that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1995.
49	World Oil Station #60 10991 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700705): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 2005.
50	Bren Investment 11100 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700690): The site was the subject of a close LUST case for a release of aviation fluid that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1995.
51	Kinder-Morgan Section 23 Pipelines 9600 Alameda Street Los Angeles	Closed LUST case (GeoTracker SL204DP2396): The site was the subject of a close LUST case for a release of petroleum, fuels, oils, and volatile organic compounds that affected non specified area; the case was closed by RWQCB in 2002.
52	Bathroom Jewelry 1888 S Sepulveda Boulevard Los Angeles	Tiered Permit (EnviroStor 71002570): Permit for storage and use of hazardous chemicals.

Site Number	Business Name and Address	Site Status
53	City of LA – WLA Maintenance Yard 11168 W Missouri Avenue Los Angeles	Closed LUST case (GeoTracker T0603719238): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by State Water Resources Control Board in 2015.
54	Bel Air Maintenance Yard 11165 Missouri Avenue Los Angeles	Closed LUST case (GeoTracker T0603700710): The site was the subject of a close LUST case for a release of kerosene that affected the soil; the case was closed b RWQCB in 1996.
55	Southland Location #18821 11075 Olympic Boulevard W Los Angeles	Closed LUST case (GeoTracker T0603700664): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1997.
56	Home Junction Property 11200 Pico Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701169): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 1996.
57	Westdale Maintenance Facility 2723 Sepulveda Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701173): The site was the subject of a close LUST case for a release of aviation fluid that affected the soil; the case was close by the City of Los Angeles in 1997.
58	Caltrans Westdale Maintenance 2723 Sepulveda Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701174): The site was the subject of a close LUST case for a release of solvents that affected the aquifer used for the drinkin water supply; the case was closed by RWQCB in 2004.

Site Number	Business Name and Address	Site Status
59	Torrance Valley Pipeline 2800 S Sepulveda Boulevard Los Angeles	Open Cleanup Program Site (GeoTracker T10000021011): On April 23, 2023, it was reported that oil was seeping up through the roadway surface in the vicinity of Sepulveda Boulevard and Interstate 10 (I-10). Liquids were removed and remedial soil excavation was conducted around the area of a crude oil release from an underground pipeline near the area of Sepulveda Boulevard and I-10. S was removed from three affected areas: 1) excavation in Sepulveda Boulevard along the pipeline, 2) soil area east of the pipeline excavation between Sepulved Boulevard and the sidewalk, and 3) soil area beneath the I-10 overpass along th footing of the overpass. Soil samples were collected on April 28, 2023, and additional remedial action occurred on May 4, 2023. From the descriptions and observations of the release event by on-scene personnel, observations made during soil sampling activities, remedial excavations conducted, primarily fine-grained clayey soil, and soil sample analytical results, it appears the subsurface and surface affected area from the crude oil release was limited in extent, adequately assessed, and remediated to the extent practicable. Residual impacts as indicated in the soil sample results a below ESLs.
60	Torrance Valley Pipeline 2800 S Sepulveda Boulevard Los Angeles	Open Cleanup Program Site (GeoTracker T10000021001): Assessment & Interim Remedial Action. Refer to details provided for Site 58.
61	TEXACO USA (former) 11205 National Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701206): The site was the subject of a close LUST case for a release of solvents or non-petroleum hydrocarbon that affected the soil; the case was closed by RWQCB in 1998.
62	76 Products Station #4357 11280 National Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701205): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.
63	76 Products Station #4357 11280 National Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701204): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.

Source: GeoTracker, 2023; EnviroStor, 2023

Table B-5. Alternative 6: Hazardous Material Sites within 0.5 Mile

Site Number	Business Name and Address	Site Status
1	American Oil Company 13740 Saticoy Street Van Nuys	Active Corrective Action (EnviroStor CAD981427669): The permittee was a hazardous-waste transporter and collected used oil, used anti-freeze and oil-contaminated solid waste from off-site generators (gas stations, oil changers, auto repair shops, etc.) and consolidated these wastes before shipping them to a hazardous-waste treatment or disposal facility. The facility consisted of a loading/unloading area, one used-oil storage area to store used oil and used anti freeze separately in two tanker trailers, and one solid-waste storage area to stor solid-waste contaminated with oil. The maximum capacity of the loading/unloading area was 3,000 gallons. The maximum capacity of the used-oi storage area was 9,500 gallons in one tanker trailer, and the maximum capacity of the solid-waste storage area was 4.32 cubic yards in one dump trailer. On June 14, 2019, the Department of Toxic Substances Control denied the American Oil Company a permit renewal application, which caused the facility to commence closure. The Department of Toxic Substances Control directed the permittee to close the facility; however, the Department of Toxic Substances Control is requiring that the closure plan be revised to meet current closure requirements. The permittee has revised the closure plan in response to the Department of Toxic Substances Control Notices of Deficiency.
2	General Motors Corporation 8000 Van Nuys Boulevard Panorama City	Closed Leaking Underground Storage Tank (LUST) case (GeoTracker T0603702415): The site was the subject of a closed LUST case for a release of aviation fluid that affected the soil; the case was closed by the City of Los Angele in 1988.
3	Salvation Army Thrift Store 6059 N Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603715897): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the Regional Water Quality Control Board (RWQCB) in 2012.
4	LA City Dept of Water and Power 14401 Saticoy Street Van Nuys	Closed LUST case (GeoTracker T060702430): The site was the subject of a closed LUST case for a release of kerosene that affected the soil and groundwater; the case was closed by RWQCB in 1996.
5	Borg-Warner Fluid Controls 7500 Tyrone Avenue Van Nuys	Closed LUST case (GeoTracker T0603702431): The site was the subject of a close LUST case for a release of solvents that affected the soil; the case was closed by RWQCB in 1985.

Site Number	Business Name and Address	Site Status
6	Valley Car Wash/Valley Lube A 7530 N Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T1000002731): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 2014.
7	Mobile 7204 Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T1000005354): The site was the subject of a close LUST case for a release of an unspecified discharge from a corrosive tank that affected the soil; the case was closed by the City of Los Angeles in 1992.
8	Southern CA RTD Div 8 14557 Sherman Way Van Nuys	Closed LUST case (GeoTracker T0603702432): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 1996.
9	Exxon #7-3396 7155 Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702438): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 1997.
10	AAMCO Transmissions 7012 Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702429): The site was the subject of a close LUST case for a release of waste oil and hydraulic fluid that affected the soil; the case was closed by the City of Los Angeles in 1996.
11	County of Los Angeles Transportation Van Nuys	Closed Cleanup Program Site (GeoTracker SLT43115113): The site was the subjec of a closed cleanup program site for an unspecified release; the case was closed by RWQCB in 1965.
12	Unocal #2326 14401 Victory Boulevard Van Nuys	Closed LUST case (GeoTracker T10000005431): The site was the subject of a closed LUST case for unspecified release; the case was closed by the City of Los Angeles in 1997.
13	9/1 Valley Police Headquarters 6240 Sylmar Avenue Van Nuys	Closed LUST case (GeoTracker T0603702410): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 1999.
14	Asia Auto Repair 14550 Sylvan Street Van Nuys	Closed LUST case (GeoTracker T0603702410): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 2018.
15	ARCO Gas 6171 Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603707552): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 2018.

Site Number	Business Name and Address	Site Status
6	Bob Faeber Volkswagen 6115 Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702405): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 2003.
17	Van Nuys Plating 6109 Vesper Avenue Van Nuys	Closed LUST case (GeoTracker T0603702461): The site was the subject of a close LUST case for a release of aviation fluid that affected the soil; the case was close by the City of Los Angeles in 1987.
18	Valley Motor Center 6001 Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702403): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1987.
19	LA City Dept of Water and Power 14453 Oxnard Street Van Nuys	Corrective Action (EnviroStor 60002146): The warehouse previously accepted polychlorinated biphenyls (PCBs) from the Los Angeles Department of Water and Power. When electrical equipment was taken out of service, drained, and found to contain PCBs, the equipment was shipped to the warehouse for storage. The facility also accepted PCBs solid debris and light ballasts. The Department of Toxi Substances Control determined that no further action was required in 2001 after reviewing and approving the *Resource Conservation and Recovery Act (RFI) Facility Investigation Report*. The RFI was part of Corrective Action activities conducted by the Department of Water and Power under the Department of Toxic Substances Control oversight to determine if releases of hazardous waste posing a risk to public health or the environment had occurred.
20	Hollywood Community Hospital 14433 Emelia Avenue Van Nuys	Closed LUST case (GeoTracker T0603792946): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by the City of Los Angeles in 2000.
21	Mobile #18-FE1 5560 Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603777926): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2017.
22	Arco #5062 5555 Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702465): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1996.
23	Dunn-Edwards Paints 5529 Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702404): The site was the subject of a close LUST case for a release of aviation fluid that affected the soil; the case was close by RWQCB in 1998.

Site Number	Business Name and Address	Site Status
24	Foreman Honda 5511 Van Nuys Boulevard Van Nuys	Closed Cleanup Program site (GeoTracker SLT43379377): The site was the subjec of a closed Cleanup Program case for an unspecified release; the case was closed by RWQCB in 1997.
25	Miller Infinity Site 5455 Van Nuys Boulevard Van Nuys	Open LUST Cleanup Site (GeoTracker T0603702402): The site is listed as a gasoline-impacted soil and groundwater site with an Open-Remediation status under the LUST database. The site is the location of a former commercial petroleum fueling facility. An unauthorized release was reported in April 1989 following the removal of eight gasoline underground storage tanks (UST). Remediation has been ongoing. According to the information reviewed, the petroleum release is limited to the soil and shallow groundwater. RWQCB approved a revised *Remedial Action Plan* on December 23, 2021. The plan involves "over-purging" to remove remaining free product in selected monitorin wells. Depth to water ranges from 59 to 62 feet below ground surface. Groundwater flow is toward the northeast. Several monitoring wells appear to b in or adjacent to Alternative 6. As of August 2022, the site does not qualify for closure under the Low-Threat Underground Storage Tank Case Closure Policy.
26	Rob's Car Wash 5300 N Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603743004): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by the City of Los Angeles in 2013.
27	Shell 5161 Van Nuys Boulevard Sherman Oaks	Closed LUST case (GeoTracker T060372418): The site was the subject of a closed LUST case for a release of waste, motor, hydraulic, and lubricating oils that affected the soil; the case was closed by RWQCB in 1987.
28	Shell Station 5161 Van Nuys Boulevard Los Angeles	Closed LUST case (GeoTracker T0603792510): The site was the subject of a close LUST case for a release of methyl tertiary butyl ether, tert butyl alcohol, and other fuel oxygenates that affected groundwater (other than drinking water); th case was closed by RWQCB in 1987.
29	Chevron #9-6745 5160 Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603702427): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinkin water; the case was closed by RWQCB in 1997.

Site Number	Business Name and Address	Site Status
30	Sherman Oaks Community Hospital 4929 Van Nuys Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702423): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by RWQCB in 1996.
31	Unocal #6183 (former) 4822 Van Nuys Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702428): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1990.
32	76 Station #6183 4822 Van Nuys Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603745045): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2014.
33	Mobile #11-LLD 4715 Van Nuys Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702420): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1996.
34	EXXON Mobile Station #18-LLD (former) 4715 Van Nuys Boulevard Van Nuys	Closed LUST case (GeoTracker T0603744313): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2014.
35	Winall Station #17 4441 Van Nuys Boulevard Sherman Oaks	Open LUST Cleanup Site (GeoTracker T0603702422): gasoline-impacted soil, soil vapor and groundwater site with a *Remediation Plan* status under the LUST database. The site first reported the release in April 1990. Soil and groundwater remediation and monitoring have been ongoing since then. Groundwater impacts are both on- and off-site. According to a Los Angeles RWQCB April 2022 letter, off-site groundwater impacts extend to the north and northeast in the direction of groundwater flow. However, off-site impacts to the north have not been adequately delineated. Depth to groundwater has varied between 11 and 21 feet below ground surface. Four monitoring wells appear to be located in or adjacent to Alternative 6. A *Remedial Action Plan* was submitted on August 27, 2021. Remedial activities will be conducted on soil vapor and groundwater.
36	Casa de Cadillac 14401 Ventura Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702472): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1997.
37	Chevron #9-1333 14505 Ventura Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702421): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1996.

Site Number	Business Name and Address	Site Status
38	ARCO #1361 (former) 14311 Ventura Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702479): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2021.
39	TOSCO – 76 Station #2421 14478 Ventura Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702483): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2013.
40	TEXACO 14344 Ventura Boulevard Sherman Oaks	Closed LUST case (GeoTracker T0603702476): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2023.
41	3M Gas 2181 Beverly Glen Boulevard Rancho Park	Closed LUST case (GeoTracker T0603701164): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1994.
42	Pacific Holdings Co. 10644 Bellagio Road Bel Air	Closed LUST case (GeoTracker T0603701237): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the soil; the case was closed by RWQCB in 1997.
43	UCLA 405 Hilgard Avenue Los Angeles	Tiered Permit (EnviroStor 71002377): Permit for storage and use of hazardous materials, including but not limited to gasoline and chemicals associated with fleet maintenance.
44	UCLA Fleet Service Garage 741 Circle Drive S Westwood	Closed LUST case (GeoTracker T0603700680): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1997.
45	UCLA Fleet Maintenance 405 Hilgard Avenue Westwood	Closed LUST case (GeoTracker T0603700684): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1997.
46	UCLA Medical Center 10833 Le Conte Avenue Westwood	Closed LUST case (GeoTracker T0603700687): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by the City of Los Angeles in 2009.
47	SHELL #204-4530-4007 900 Gayley Avenue Los Angeles	Closed LUST case (GeoTracker T0603700678): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2012.

Site Number	Business Name and Address	Site Status
48	Chevron #9-3100 10984 Le Conte Avenue Westwood	Closed LUST case (GeoTracker T0603700681): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2014.
49	Center West 10877 Wilshire Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700685): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1998.
50	76 Station No. 1065 1157 W Gayley Avenue Los Angeles	Closed LUST case (GeoTracker T0603700679): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2008.
51	Murdock Plaza 10900 Wilshire Boulevard Westwood	Closed LUST case (GeoTracker T0603700683): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by the City of Los Angeles in 1995.
52	Wilshire Westwood Estates 10936 Wilshire Boulevard Los Angeles	Certified State Response Site (EnviroStor 19150002): The area involved was a construction site for a 23-story office building. During the foundation excavation a strong gasoline odor emanated from the borings. The source of the gasoline was probably from a LUST because the area served as a gasoline service station. After investigations, some of the soils were found to be contaminated with benzene, toluene and xylene. To test the soil, 33 borings were drilled and samples were taken at every 10-foot interval. In addition, all soils were regularly tested for hydrocarbons with a portable organic vapor analyzer. The site was certified in 1986 and a post-cleanup confirmation was received by RWQCB on July 22, 1986.
53	Hertz – West LA 10951 Wilshire Boulevard Brentwood	Closed LUST case (GeoTracker T0603701122): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1989.
54	SCI Mortuary (former) 1510 Sepulveda Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700694): The site was the subject of a close LUST case for a release of aviation fluid that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1995.
55	Bren Investment 11100 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700690): The site was the subject of a close LUST case for a release of aviation fluid that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1995.

Site Number	Business Name and Address	Site Status
56	EXXON #7-3816 11261 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700701): The site was the subject of a close LUST case for a release of aviation fluid that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1995.
57	TEXACO #611061485 11256 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T10000005405): The site was the subject of a closed LUST case for an unspecified contaminant/area of concern; the case was closed by the City of Los Angeles in 1992.
58	TOSCO – 76 Station #5146 11305 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T10603700702): The site was the subject of a closed LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2006.
59	SHELL Service Station 11574 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T0603784772): The site was the subject of a close LUST case for a release of other solvent or non-petroleum hydrocarbon that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2004.
60	T&T Service 1736 Sawtelle Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700697): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2005.
61	West L.A. SHELL 11574 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700699): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1995.
62	The Cleaning Store 11628 Santa Monica Boulevard Los Angeles	Closed Cleanup Program site (GeoTracker SLT43618616): The site was the subjec of a closed Cleanup Program case for an unspecified release; the case was closed by RWQCB in 1998.
63	Blue Wave Car Wash 11602 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T10000013769): The site was the subject of a closed LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 2021.
64	West Los Angeles Police 1663 Butler Avenue Los Angeles	Closed LUST case (GeoTracker T0603700700): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 1995.

Site Number	Business Name and Address	Site Status
65	Barrington Plaza – Vons 11674 W Santa Monica Boulevard Los Angeles	Closed Cleanup Program site (GeoTracker SL0603792739): The site was the subject of a closed Cleanup Program case for an unspecified release; the case wa closed by RWQCB in 2012.
66	1500 Granville Property 11776 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T10000011695): The site was the subject of a closed LUST case for a release of waste, motor, hydraulic, and lubricating oils tha affected the soil; the case was closed by RWQCB in 2019.
67	76 Station #5210 11954 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T0603763357): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2010.
68	GTE Bundy Central Office 1450 Bundy Drive S Los Angeles	Closed LUST case (GeoTracker T0603700700): The site was the subject of a close LUST case for a release of diesel that affected the soil; the case was closed by the City of Los Angeles in 1998.
69	76 Products Station #5210 11954 Santa Monica Boulevard Los Angeles	Closed LUST case (GeoTracker T0603700695): The site was the subject of a close LUST case for a release of gasoline that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 1997.
70	Regency Dry Cleaner 12225 Santa Monica Boulevard Los Angeles	Closed Cleanup Program site (GeoTracker SLT43360358): The site was the subjec of a closed Cleanup Program case for an unspecified release; the case was closed by RWQCB in 1996.
71	Loomis 1929 Pico Boulevard W Los Angeles	Closed LUST case (GeoTracker T10000002999): The site was the subject of a closed LUST case for a release of diesel that affected the aquifer used for the drinking water supply; the case was closed by RWQCB in 2012.

Site Number	Business Name and Address	Site Status
72	2030 S Westgate Avenue Los Angeles	Closed Cleanup Program site (GeoTracker T10000020817): The site consists of two parcels located at 2030 South Westgate Avenue and 2035 Granville Avenue. Historical use at the 2030 South Westgate Avenue property began in approximately 1948 and included light manufacturing, warehouse storage, a metal foundry, a distribution company, and most recently a commercial printing operation. After 2020, the printing operator vacated. The former use of the 2035 Granville Avenue address included manufacturing, which consisted of die casting plating, electronics manufacturing, and welding. The property has been vacant since approximately 2018. Environmental assessment at the site indicated soil impacts by petroleum and total chromium lead at a portion of the site and chlorinated solvent impacts to the subsurface beneath the site. Excavation for the petroleum and total chromium impacted-soil was proposed in the site report's *Removal Action Plan*, dated March 9, 2022, which was approved by Los Angeles County on May 19, 2022. Following the soil vapor extraction documented in the site report's *Remedial Action Plan*, dated March 26, 2021, Lo Angeles County issued an approval letter on August 25, 2021, for the continued operation of the soil vapor extraction system. The case was closed on January 26 2023.
73	ARCO Power Gas Station 11748 Olympic Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701167): The site was the subject of a close LUST case for a release of gasoline that affected the groundwater; the case was closed by RWQCB in 2009.

Site Number	Business Name and Address	Site Status
74	Hudson Element LA 1901, 1925, 1933 S Bundy Drive Los Angeles	Open Cleanup Program site (GeoTracker SL0603705527) and open Site Assessment (RWQCB 0850B): The site was utilized for agricultural activities until 1950 and consists of an approximately 5.66-acre parcel of land with three buildings and paved parking areas. The three buildings are located within a mixe commercial, office, and light industrial land-use area with combined useable space measuring approximately 84,000 square feet. The 1901 South Bundy Drive building, constructed in 1950 with an area of 30,00 square feet, was the first of the three buildings. Packard Bell initially used this building from 1950 until 1970 to manufacture navy testing equipment and electronics, such as radios and televisions. Thereafter, Teledyne Controls occupied the building and used it for warehousing, and as office space, until 1996. The 1925 South Bundy Drive building was constructed in 1953, and measures 20,000 square feet in size. This building was used primarily as office space by Packard Bell and Teledyne Inc. The 1933 South Bundy Drive structure is the largest of the three buildings measuring over 34,000 square feet. Packard Bell utilized this building for electronics manufacturing from 1953 until 1977, after which manufacturing activities ceased. Thereafter, Teledyne used the building as office and warehous space until the early 1990s. AGI Properties purchased the site between 1996 and 1997 and leased the three buildings to Fox Television. Fox Television used the buildings as a television studio, and office space, until 2003. All three buildings are presently vacant.
75	Chevron #9-0944 11951 W Olympic Boulevard Los Angeles	Closed LUST case (GeoTracker T0603701163): The site was the subject of a close LUST case for a release of gasoline that affected groundwater; the case was closed by RWQCB in 1997.
76	Chevron #9-0944 11951 W Olympic Boulevard Los Angeles	Closed LUST case (GeoTracker T0603794744): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 2004.
77	Commercial Development 12312 W Olympic Boulevard Los Angeles	Closed Cleanup Program site (GeoTracker SL204931715): The site was the subjec of a closed Cleanup Program case for an unspecified release; the case was closed by RWQCB in 1998.

Site Number	Business Name and Address	Site Status
78	Shell Service Station 11944 W Olympic Boulevard Los Angeles	Closed LUST case (GeoTracker T0603743918): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by RWQCB in 2007.
79	76 Products Station 12100 W Olympic Boulevard Rancho Park	Closed LUST case (GeoTracker T0603701175): The site was the subject of a close LUST case for a release of gasoline that affected the soil; the case was closed by the City of Los Angeles in 2001.
80	Hudson Element LA 12333 W Olympic Boulevard Los Angeles	Open Cleanup Program site (GeoTracker (SL2046M1652) and open Site Assessment (RWQCB 0850A): The primary structure at the Site was originally constructed and utilized by Packard Bell for the manufacture of radios and televisions. Reportedly Packard Bell maintained boilers, an incinerator, a shaving bin, and stored paint and solvents on the site. By 1970, the property was being operated by Teledyne for the manufacture of electronic devices for aviation purposes. These operations involved circuit board assembly, thermal testing, computer testing, vibration testing, and machining. Solvents, petroleum hydrocarbons, and other hazardous raw and waste products were utilized and/o produced during Teledyne's manufacturing processes. According to a previous environmental assessment report prepared in June 1995, information concernin USTs utilized by Teledyne is available with the County of Los Angeles Fire Department. Reportedly, four USTs were removed from the northeast corner of the Teledyne building in 1990. The USTs reportedly contained diesel fuel, gasoline, and mineral oil. Teledyne vacated the site in September 2007. Several physical structures of note remain at the Site. These structures include: an enclosed former chamber area ir the shipping and receiving area adjacent to the cafeteria; an exterior hazardous chemical storage area; a pump house with an existing internal combustion engin and oil/grease staining; a four-stage clarifier in the facilities area; a detached shed containing possible UST vent pipes, and older single-stage clarifier, remnan hydraulic lift features, a concrete patch area (possibly indicating a former excavation), dark stained areas, and an exterior pipe (which appeared to be a fill port that may have been associated with an UST); and sinks, sumps and piping of unknown use along the northwestern wall of the primary structure. Soil removal activities are dependent on the demolition of the existing structures on the site.

Site Number	Business Name and Address	Site Status
81	Mathew May Property 12312 W Olympic Boulevard Rancho Park	Closed Cleanup Program site (GeoTracker T0603700114): The site was the subjec of a closed Cleanup Program case for a release of gasoline that affected drinking water supply; the case was closed by RWQCB in 1996.

Source: GeoTracker, 2023; EnviroStor, 2023