



January 2022

TC NO. CAL. Development Warehousing and Distribution Facility Project

State Clearinghouse Number: 2021080499



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# Draft Environmental Impact Report

Prepared for the Port of Stockton

January 2022

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SCH Number: 2021080499

# Draft Environmental Impact Report

**Prepared for**

Port of Stockton  
2201 West Washington Street  
Stockton, California 95203

**Prepared by**

Anchor QEA, LLC  
130 Battery Street, Suite 400  
San Francisco, California 94111

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## ABBREVIATIONS

--	not applicable
µg/m <sup>3</sup>	micrograms per cubic meter
2040 General Plan	<i>Envision Stockton 2040 General Plan (City 2018a)</i>
AB	Assembly Bill
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
AST	aboveground storage tank
BAU	business as usual
BMP	best management practice
BNSF	BNSF Railway
BPS	Best Performance Standards
BTU	British thermal unit
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Cal/OSHA	California Division of Occupational Safety and Health
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CAPP	Community Air Protection Program
CCAA	California Clean Air Act
CCR	California Code of Regulations
CCT	Central California Traction Company
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH <sub>4</sub>	methane
City	City of Stockton
CNDDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO <sub>2</sub>	carbon dioxide

CO <sub>2</sub> e	carbon dioxide equivalent
COC	contaminants of concern
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CVFPB	Central Valley Flood Protection Board
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
dB	decibel
dBA	decibel, A-weighted
DDT	total dichlorodiphenyltrichloroethane
DEIR	Draft Environmental Impact Report
Delta	Sacramento-San Joaquin River Delta
DOT	U.S. Department of Transportation
DPM	diesel particulate matter
DPS	distinct population segment
DSP	Development Standards Plan
DTSC	Department of Toxic Substances Control
DWSC	Deep Water Ship Channel
DWT	tons deadweight
EFH	essential fish habitat
EIR	Environmental Impact Report
EO	Executive Order
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FGC	California Fish and Game Code
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FTA	Federal Transit Administration
GHG	greenhouse gases
GWP	global warming potential
HASP	health and safety plan
HCFC	hydrochlorofluorocarbon
HFC	hydrofluorocarbon
HMMP	Hazardous Materials Management Plan

HRA	Health Risk Assessment
HSC	California Health and Safety Code
I-5	Interstate 5
IBC	International Building Code
IS	Initial Study
ITMM	incidental take minimization measure
kWh	kilowatt hour
LCFS	Low Carbon Fuel Standard
L <sub>dn</sub>	day/night average sound level
L <sub>eq</sub>	equivalent continuous noise level
L <sub>max</sub>	maximum sound level
L <sub>min</sub>	minimum sound level
L <sub>n</sub>	percentile-exceeded noise level
LOS	level of service
LUC	Land Use Covenant
MBTA	Migratory Bird Treaty Act
MHHW	mean higher high water
MIP	Monitoring Implementation Plan
MLLW	mean lower low water
MND	Mitigated Negative Declaration
MOTEMS	Marine Oil Terminal Engineering and Maintenance Standards
MS4	Municipal Separate Storm Sewer System
msl	mean sea level
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NAVD88	North American Vertical Datum of 1988
Navy	U.S. Department of the Navy
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO <sub>2</sub>	nitrogen dioxide
NOP	Notice of Preparation
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O	carbon monoxide

O <sub>3</sub>	ozone
OCP	organochlorine pesticide
OHWM	ordinary high water mark
OPR	Governor's Office of Planning and Research
OPR Technical Advisory	<i>Technical Advisory on Evaluating Transportation Impacts in CEQA</i> (OPR 2018)
OSHA	Occupational Safety and Health Administration
PAH	polycyclic aromatic hydrocarbon
PM	particulate matter
PM <sub>10</sub>	particulate matter less than 10 microns in diameter
PM <sub>2.5</sub>	particulate matter less than 2.5 microns in diameter
Port	Port of Stockton
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
proposed project	TC NO. CAL. Development Warehousing and Distribution Facility Project
PTO	Permit to Operate
RAP	Remedial Action Plan
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RDIP	Remedial Design Implementation Plan
REM	Revel Environmental Manufacturing
RI/FFS	Remedial Investigation/Focused Feasibility Study
ROG	reactive organic gases
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCH	State Clearinghouse
SDS	Safety Data Sheet
sf	square foot
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SJCEHD	San Joaquin County Public Health Services, Environmental Health Division
SJCOES	San Joaquin County Office of Emergency Services
SJCOG	San Joaquin Council of Governments

SJMSCP	San Joaquin County Multi-Species Habitat Conservation and Open Space Plan
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMC	City of Stockton Municipal Code
SO <sub>2</sub>	sulfur dioxide
SR	State Route
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TDM	Transportation Demand Management
TIA	Transportation Impact Analysis
TIS	Traffic Impact Study
TMDL	Total Maximum Daily Load
TPA	transit priority area
UP	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USC	United States Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VERA	Voluntary Emission Reduction Agreement
VOC	volatile organic compound
WCDP	West Complex Development Plan
WDR	waste discharge requirement
WMPU	Water Master Plan Update

## Executive Summary

This *Draft Environmental Impact Report* (DEIR) was prepared in compliance with the California Environmental Quality Act (CEQA) to assist the Port of Stockton (Port) in considering the approval of the proposed TC NO. CAL. Development Warehousing and Distribution Facility Project (proposed project) in accordance with 22 California Code of Regulations (CCR) Section 66265 et seq. The proposed project is located on a 102-acre site on the Port's West Complex and involves the development of a new distribution warehouse and remediation of existing impacted soils. Under the proposed project, the Port would issue a lease to TC NO. CAL. Development to construct and operate a new warehouse facility and associated infrastructure over approximately 60 acres of the project site to receive, store, and distribute bulk building products and consumer goods. Construction would also include remediation of contaminated soils from past U.S. Department of the Navy (Navy) activities. Following construction, TC NO. CAL. Development would sublease the warehousing facility to a commercial operator for distribution services.

Remediation is the process of reducing exposure to contaminated soil, sediment, surface water, or groundwater through on-site containment, removal, and/or treatment in order to reduce the impact on people and the environment.

The Port has principal responsibility for making a determination on the proposed project through issuance of the lease and is the lead agency under CEQA (California Public Resources Code [PRC] 21000 et seq.) and the CEQA Guidelines for Implementation (14 CCR 15000 et seq.) for preparation and approval of the DEIR.

The Port aims to accomplish the following as part of this DEIR:

- Describe the proposed project and its regulatory background.
- Identify any significant environmental effects associated with the proposed project.
- Provide a discussion of alternatives and feasible mitigation measures for environmental resources where significant impacts are identified.

As detailed in the Notice of Preparation (NOP)/Initial Study (IS) circulated for public review from August 26, 2021, through September 24, 2021 (Anchor QEA 2021a; Appendix B), the proposed project is not expected to result in environmental impacts in several resource areas, namely agriculture and forestry, land use and planning, mineral resources, population and housing, public services, recreation, and wildfire. Therefore, the DEIR relies on the analyses presented in the NOP/IS and is focused on the following areas that may result in environmental impacts: aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gases (GHG), hazards and hazardous materials, hydrology and water quality, noise, transportation, tribal cultural resources, and utilities.

## Proposed Project

The 102-acre project site is located south of McCloy Avenue on the Port's West Complex in Stockton, California (Figure ES-1). The proposed project includes construction and operation of a distribution warehouse on a portion of the project site and remediation of contaminated soils from past Navy activities throughout the project site. The site is largely vacant except for five warehouses on a 26-acre parcel on the western side of the site.

Under the proposed project, the Port would issue a lease to TC NO. CAL. Development to construct and operate the warehouse. TC NO. CAL. Development would sublease the warehousing facility to a commercial operator. Construction elements include a 655,200-square-foot (sf) warehouse, 293,951-sf outdoor storage area, employee parking, trailer parking, trailer storage, truck docks, rail service and spurs, detention ponds, water tank and pumphouse, guard house, and minor ancillary structures on the existing vacant area. The warehouse would be used for receiving, storing, and distributing bulk building products and consumer goods (warehousing or wholesaling/distribution). Operations are expected to begin following warehouse construction and would involve truck and rail deliveries of commercial products.

As part of the proposed project, remediation would occur in areas throughout the 102-acre project site, which includes the proposed 60-acre site on which the warehouse would be developed, as well as approximately 42 acres to the east and west. The remedial site is referred to as Site 47.

Contaminants detected within various portions of Site 47 include arsenic, polycyclic aromatic hydrocarbons (PAHs), and organochlorine pesticides (OCPs) including DDT. The contaminants in soil and sediment were determined to pose a risk to human health and wildlife and therefore require remediation.

Based on an assessment of human health and ecological risk, the primary drivers of risk at Site 47 are the presence of arsenic in soil and OCPs in sediment.

The Port is addressing hazardous substances at Site 47 as required under a July 30, 2003, consent agreement between the Port, the California Department of Toxic Substances Control (DTSC), and the Central Valley Regional Water Quality Control Board (CVRWQCB). DTSC is the lead regulatory agency, and CVRWQCB is a supporting agency overseeing the Port's remediation within Site 47.

The approximately 102-acre project site comprises four distinct areas proposed for remediation and development:

- A 60-acre area proposed for remediation and TC NO. CAL. Development warehouse development ("Warehouse Development Area")
- A 7-acre area to the west of the Warehouse Development Area that would be remediated and remain undeveloped ("Western Remediation Area")
- A 9-acre area to the east of the Warehouse Development Area that would be remediated and remain undeveloped ("Eastern Remediation Area")
- A 26-acre area to the west of the Western Remediation Area that would be remediated using institutional controls and undergo necessary pavement repairs ("Western Warehouse Area")

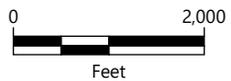
Remediation requires the development and approval of the following Cleanup Decision Documents as follows:

- Remedial Investigation/Focused Feasibility Study (RI/FFS): The purpose of the Site 47 RI/FFS is to assess site conditions and evaluate alternatives to the extent necessary to select a remedy that will be documented in the Remedial Action Plan (RAP). The Site 47 RI/FFS presents the current understanding of potential human health and ecological risks posed by soil and sediment contamination within Site 47 and develops and evaluates remedial alternatives (Geosyntec 2020). It is being developed by the Port and TC NO. CAL. Development, subject to approval by DTSC and CVRWQCB.
- RAP: The RAP, developed by DTSC and CVRWQCB, selects the remedial alternative based on the RI/FFS. The RAP identifies and selects the remedy to address the contaminated soil pursuant to Sections 3006 and 6001 of the Resource Conservation and Recovery Act (RCRA; 42 United States Code 6926 and 6961) and Division 20 of the California Health and Safety Code (HSC; Chapters 6.5 and 6.8). Following a public comment period, DTSC will consider approval of the Draft RAP. The CVRWQCB will also consider approval of the Draft RAP and select the remedy pursuant to the Division 7 of the California Water Code, Division 20 of the HSC (Chapters 6.67, 6.7, and 6.75), and the CCR. The remedy selected as part of the RAP may not conform to the remedy proposed in the RI/FFS or evaluated in the DEIR. Provided the Final EIR adequately addresses the environmental impacts of the remedy selected in the Final RAP, DTSC and CVRWQCB—as CEQA responsible agencies—will consider and rely on the environmental analysis of the selected remedy in the Final EIR to comply with CEQA.
- Remedial Design Implementation Plan (RDIP): The RDIP is developed by the Port and TC NO. CAL. Development to present construction details associated with implementing the selected Site 47 remedy approved under the RAP. The RDIP is subject to DTSC and CVRWQCB approval.

The Port prepared this DEIR using available technical information and comments received as part of scoping. An EIR is an informational disclosure document and not an action document. As required by CEQA, the Port must evaluate the information in this DEIR, including the proposed mitigation measures and potentially feasible alternatives, before deciding whether to approve the proposed project or an alternative. By following prescribed procedures, a public agency may approve a project even if an EIR concludes there are one or more unavoidable significant environmental effects.



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**Figure ES-1**  
**Project Site and Vicinity**

Draft Environmental Impact Report  
 TC NO. CAL. Development Warehousing and Distribution Facility Project

## Project Objectives

Pursuant to the CEQA Guidelines and 14 CCR 15124, a “statement of the objectives sought by the proposed project” must be provided as part of the project description in an EIR. The goals of the proposed project are to construct and operate a distribution warehouse facility to accommodate Port-bound cargo and to remediate Site 47. To accomplish this goal, the following key project objectives must be accomplished:

- Remediate Site 47 per applicable regulations and standards.
- Initiate a lease with the Port consistent with the proposed project.
- Provide modern warehouse space to meet the existing need for an on-demand logistical model as the current growth in logistics has outpaced the availability of modern warehouse space.
- Receive, store, and ship bulk building products and consumer goods in a manner that promotes safe and efficient handling while ensuring environmental protection and controls.
- Increase the availability of building materials and supplies to the local area, region, and state.

## Summary of Project Alternatives

The CEQA Guidelines (14 CCR 15126) require that a DEIR consider a range of reasonable alternatives to the project or to the location of the project that would feasibly attain most of its basic objectives but would avoid or substantially lessen any of the significant effects of the project. The following alternatives are considered in the DEIR:

- Alternative 1: No Project Alternative
- Alternative 2: Reduced Project Alternative
- Alternative 3: Alternative Site Locations

A complete evaluation of these alternatives—including their ability to meet the objectives of the proposed project and their ability to avoid or substantially reduce significant environmental impacts—is provided in Section 6 of the DEIR.

### *Alternative 1: No Project Alternative*

The No Project Alternative, which is required for inclusion in an EIR by CEQA, represents what would reasonably be expected to occur in the foreseeable future if the proposed project were not approved. Under this alternative, no new warehouse building or associated improvements would be constructed, and there would be no change to operations on the site. Additionally, no remediation of Site 47 would occur as part of the distribution facility construction, and a different remedial design that meets cleanup goals would be selected through the RAP approval process.

### *Alternative 2: Reduced Project Alternative*

The Reduced Project Alternative would consist of warehouse building construction and operation at two-thirds the capacity of the proposed project. This alternative includes development of a warehouse building and associated infrastructure (e.g., parking areas) over a 40-acre area at the same location as the proposed project. With the smaller warehouse building, there would be a commensurate reduction in throughput capacity. Because this alternative would still overlap with Site 47, it is anticipated that the extent of remediation associated with this alternative would be the same as that of the proposed project.

### *Alternative 3: Alternative Site Locations*

This alternative considers locating the proposed TC NO. CAL. Development warehouse at another site within the Port. It considers whether an available existing facility could be retrofitted to provide warehousing or whether a separate parcel of land could be developed to meet project objectives. As part of this alternative, no remediation of Site 47 would occur as part of the proposed project. However, if any of the alternative sites also require remediation, the regulatory process governing remediation would need to be completed specific to the selected site.

## **Notice of Preparation/Initial Study**

The Port distributed the NOP/IS (Appendix B) for the proposed project on August 26, 2021, for a 30-day public review period ending on September 24, 2021. Public comments received during the scoping process were considered in this DEIR. The following five comment letters were received during the public comment period for the NOP/IS:

- California Air Resources Board (ARB)
- California Native American Heritage Commission (NAHC)
- CVRWQCB
- San Joaquin Valley Air Pollution Control District (SJVAPCD)
- Adams Broadwell Joseph & Cardozo

## **Availability of the Draft Environmental Impact Report**

The Port is the lead agency for this DEIR. Consistent with CEQA requirements, copies of the DEIR and technical appendices are available for a 45-day public review period beginning January 11, 2022, and ending February 24, 2022.

The DEIR is available on the Port's website at <https://www.portofstockton.com/ceqa-documents/>. It is also posted on the State Clearinghouse (SCH) website at <https://ceqanet.opr.ca.gov/> and can be found by entering the SCH Number 2021080499 in the "search" window.

Hard copies of the DEIR and technical appendices are available upon request by contacting Jason Cashman by email ([ceqa@stocktonport.com](mailto:ceqa@stocktonport.com)) or phone at 209-946-0246.

## **Summary of Impacts and Mitigation**

### *Summary of Project-Level Impacts*

Anticipated environmental effects associated with the proposed project are evaluated in Sections 3 and 4 of the DEIR. Feasible mitigation measures that could minimize significant adverse impacts are also identified in these sections. Table ES-1 presents a summary of the environmental effects of, proposed mitigation measures for, and residual impacts of the proposed project.

The proposed project would result in significant and unavoidable project-level impacts in the following resource areas: air quality, GHG, and transportation. Less-than-significant or no project level impacts would occur in the following resource areas: aesthetics; agriculture and forestry resources; biological resources; cultural resources; energy; geology and soils; hazards and hazardous materials; hydrology and water quality; land use and planning; mineral resources; noise; population and housing; public services; noise; recreation; tribal cultural resources; utilities and service systems; and wildfire. Mitigation measures have been incorporated where available and feasible.

### *Summary of Cumulative Impacts*

For this DEIR, the potential for other regional projects to contribute to cumulative impacts was analyzed using a list of related projects that would be constructed in the cumulative geographic scope (Section 4, Table 27). In consideration of these projects, cumulative impact analyses for each environmental resource area potentially affected by the proposed project are presented in Section 4. Implementation of the proposed project—cumulatively combined with other related past, present, or probable future projects—may result in significant and unavoidable cumulative adverse impacts related to air quality, GHG, and transportation.

**Table ES-1  
Summary of Proposed Project Impacts and Proposed Mitigation Measures**

	<b>Impact Determination</b>	<b>Mitigation Measures</b>	<b>Impact Determination After Mitigation</b>
<b>Aesthetics</b>			
AES-1: Would the project have a substantial adverse effect on a scenic vista?	No Impact	--	No Impact
AES-2: Would the project substantially damage scenic resources?	No Impact	--	No Impact
AES-3: Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings?	No Impact	--	No Impact
AES-4: Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	Less-than-significant Impact	MM-AES-1	Less-than-significant Impact
<b>Air Quality</b>			
AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?	Significant Impact	MM-AQ-1 MM-AQ-2 MM-AQ-3 MM-AQ-4 MM-AQ-5	Less-than-significant Impact
AQ-2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Significant Impact	MM-AQ-1 MM-AQ-2 MM-AQ-3 MM-AQ-4 MM-AQ-5	Less-than-significant Impact
AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?	Less-than-significant Impact	MM-AQ-1 MM-AQ-2 MM-AQ-3 MM-AQ-4 MM-AQ-5	Less-than-significant Impact
AQ-4: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less-than-significant Impact	--	Less-than-significant Impact

	<b>Impact Determination</b>	<b>Mitigation Measures</b>	<b>Impact Determination After Mitigation</b>
<b>Biological Resources</b>			
BIO-1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Significant Impact	MM-BIO-1 MM-BIO-2 MM-BIO-3	Less-than-significant Impact
BIO-2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	No Impact	--	No Impact
BIO-3: Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands) through direct removal, filling, hydrological interruption, or other means?	Significant Impact	MM-BIO-4	Less-than-significant Impact
BIO-4: Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Significant Impact	MM-BIO-1 MM-BIO-3	Less-than-significant Impact
BIO-5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact	--	No Impact
BIO-6: Would the project conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	Significant Impact	MM-BIO-1	Less-than-significant Impact
<b>Cultural Resources</b>			
CHR-1: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	No Impact	--	No Impact
CHR-2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Significant Impact	MM-CHR-1	Less-than-significant Impact
CHR-3: Would the project disturb any human remains, including those interred outside of formal cemeteries?	Significant Impact	MM-CHR-1	Less-than-significant Impact

	<b>Impact Determination</b>	<b>Mitigation Measures</b>	<b>Impact Determination After Mitigation</b>
<b>Energy</b>			
ENE-1: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less-than-significant Impact	--	Less-than-significant Impact
ENE-2: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less-than-significant Impact	MM-GHG-1	Less-than-significant Impact
<b>Geology/Soils</b>			
GEO-1: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> <li>• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?</li> <li>• Strong seismic ground shaking?</li> <li>• Seismic-related ground failure, including liquefaction?</li> <li>• Landslides?</li> </ul>	Less-than-significant Impact	MM-GEO-1 MM-GEO-2	Less-than-significant Impact
GEO-2: Would the project result in substantial soil erosion or the loss of topsoil?	Significant Impact	MM-GEO-3	Less-than-significant Impact
GEO-3: Would the project be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	Less-than-significant Impact	MM-GEO-1 MM-GEO-2	Less-than-significant Impact
GEO-4: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less-than-significant Impact	MM-GEO-1 MM-GEO-2	Less-than-significant Impact
GEO-5: Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	No Impact	--	No Impact
GEO-6: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact	--	No Impact

	<b>Impact Determination</b>	<b>Mitigation Measures</b>	<b>Impact Determination After Mitigation</b>
<b>Greenhouse Gas Emissions</b>			
GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Significant Impact	MM-GHG-1 MM-GHG-2 MM-AQ-1 MM-AQ-3 MM-AQ-4 MM-AQ-5	Significant and Unavoidable Impact
GHG-2: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Significant Impact	MM-GHG-1 MM-GHG-2 MM-GHG-3 MM-AQ-1 MM-AQ-3 MM-BIO-3	Less-than-significant Impact
<b>Hazards and Hazardous Materials</b>			
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?	Significant Impact	MM-HAZ-1 MM-GEO-1	Less-than-significant 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?	Significant Impact	MM-HAZ-1 MM-HAZ-2 MM-GEO-1	Less-than-significant Impact
HAZ-3: Would the project emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	No Impact	--	No Impact
HAZ-4: Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Significant Impact	MM-HAZ-1 MM-HAZ-2 MM-GEO-1	Less-than-significant Impact
HAZ-5: Would the project be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area?	No Impact	--	No Impact
HAZ-6: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less-than-significant Impact	MM-GEO-1	Less-than-significant Impact

	<b>Impact Determination</b>	<b>Mitigation Measures</b>	<b>Impact Determination After Mitigation</b>
HAZ-7: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact	--	No Impact
<b>Hydrology/Water Quality</b>			
HYD-1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Significant Impact	MM-HAZ-1 MM-HAZ-2 MM-GEO-1 MM-GEO-2	Less-than-significant Impact
HYD-2: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Less-than-significant Impact	--	Less-than-significant Impact
HYD-3: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: <ul style="list-style-type: none"> <li>• Result in substantial erosion or siltation on- or off site?</li> <li>• Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off site?</li> <li>• Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</li> <li>• Impede or redirect flood flows?</li> </ul>	Less-than-significant Impact	--	Less-than-significant Impact
HYD-4: Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Less-than-significant Impact	MM-HAZ-1	Less-than-significant Impact
HYD-5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less-than-significant Impact	--	Less-than-significant Impact

	<b>Impact Determination</b>	<b>Mitigation Measures</b>	<b>Impact Determination After Mitigation</b>
<b>Noise</b>			
NV-1: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less-than-significant Impact	--	Less-than-significant Impact
NV-2: Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	Less-than-significant Impact	--	Less-than-significant Impact
NV-3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact	--	No Impact
<b>Transportation</b>			
TRA-1: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Significant Impact	MM-TRA-1 MM-TRA-2	Less-than-significant Impact
TRA-2: Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Significant Impact	MM-TRA-3	Significant and Unavoidable Impact
TRA-3: Would the project substantially increase hazards because of a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Significant Impact	MM-TRA-1	Less-than-significant Impact
TRA-4: Would the project result in inadequate emergency access?	No Impact	--	No Impact
<b>Tribal Cultural Resources</b>			
TCR-1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074?	Significant Impact	MM-CHR-1	Less-than-significant Impact

	<b>Impact Determination</b>	<b>Mitigation Measures</b>	<b>Impact Determination After Mitigation</b>
<b>Utilities</b>			
UTI-1: Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less-than-significant Impact	--	Less-than-significant Impact
UTI-2: Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	No Impact	--	No Impact
UTI-3: Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's project demand in addition to the provider's existing commitments?	Less-than-significant Impact	--	Less-than-significant Impact
UTI-4: Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	No Impact	--	No Impact
UTI-5: Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact	--	No Impact

# 1 Introduction

This *Draft Environmental Impact Report* (DEIR) was prepared by the Port of Stockton (Port) to identify the potential environmental impacts of the proposed TC NO. CAL. Development Warehousing and Distribution Facility Project (proposed project) under the California Environmental Quality Act (CEQA; 13 California Public Resources Code [PRC] 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). The proposed project is located on a 102-acre site at the Port's West Complex (Rough and Ready Island) and involves the development of a new distribution warehouse and remediation of existing contaminated sediment and soils.

Under the proposed project, the Port would issue a lease to TC NO. CAL. Development to construct and operate a new warehouse building and associated infrastructure (collectively, distribution facility) over approximately 60 acres of the project site. TC NO.

Constituents of Concern (COCs) are more generally referred to as contaminants and can include any substance defines as a hazardous substance, hazardous waste, toxic substance, solid waste, or pollutant.

CAL. Development would sublease the distribution facility to a commercial operator to receive, store, and distribute bulk building products and consumer goods. The proposed project would also include remediation of contaminated soils from past U.S. Department of the Navy (Navy) activities associated with the project site, referred to as Site 47. The constituents of concern (COCs) at Site 47 are arsenic, five polycyclic aromatic hydrocarbons (PAHs), and, in limited areas, organochlorine pesticides (OCPs), including DDT. Remediation would occur in areas throughout the 102-acre project site, including the 60 acres on which the distribution facility would be developed as well as approximately 42 acres to the east and west.

## 1.1 California Environmental Quality Act Process

CEQA, enacted by the California legislature in 1970, requires public agency decision-makers to consider the environmental effects of their actions. One of the main objectives of CEQA is to disclose the potential environmental effects of proposed activities to the public and decision-makers. CEQA

All projects undertaken by a public agency are subject to CEQA. CEQA applies to discretionary actions. A discretionary action is one that requires a public agency to exercise judgement or deliberation in determining whether the project will be approved or if a permit will be issued.

requires that the potential environmental effects of a project be evaluated prior to implementation. The primary purposes of this DEIR are to inform the public, decision-makers, and other responsible and interested agencies of the following information:

- Identification and evaluation of potential significant environmental effects of the proposed project
- The manner in which environmental effects can be avoided or significantly reduced

- Any effects that, even with implementation of mitigation measures, would be unavoidable and adverse
- Identification and analysis of alternatives that may avoid or substantially lessen any significant environmental effects of the proposed project

This DEIR meets CEQA content requirements by including a project description; descriptions of the environmental setting, potential environmental impacts, and mitigation measures for any potentially significant impacts; and discussion of the proposed project's consistency with plans and policies.

This DEIR is being circulated to potentially affected agencies and the public for review and comment over a 45-day review period, from January 11, 2022, to February 24, 2022.

## 1.2 Lead, Responsible, and Trustee Agencies

The CEQA Guidelines identify "the lead agency as the public agency which has the principal responsibility for carrying out or approving a project" (14 CCR 15367). The Port is the CEQA lead agency for the proposed project and has the primary responsibility for developing the commercial terms in the TC NO. CAL. Development lease consistent with the proposed project. The Port has directed the preparation of an environmental document that complies with CEQA and will consider the information in this document when determining whether to approve the proposed project. The preparation of DEIRs is guided by Sections 15080 to 15097 of the CEQA Guidelines. Where appropriate and supportive to an understanding of the issues, reference will be made to the statute, the CEQA Guidelines, or appropriate case law.

Projects or actions undertaken by the lead agency (in this case, the Port), may require subsequent oversight, approvals, or permits from other public agencies. Other such agencies are referred to as responsible agencies and trustee agencies. Pursuant to CEQA Guidelines Sections 15381 and 15386, as amended, responsible and trustee agencies are defined as follows:

- A responsible agency is a "public agency which proposes to carry out or approve a project, for which a Lead agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term "Responsible Agency" includes all public agencies other than the Lead Agency which have discretionary approval authority over the project" (CEQA Guidelines Section 15381).
- A trustee agency is "a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California" (CEQA Guidelines Section 15386). Trustee agencies have jurisdiction over natural resources held in trust for the people of California but do not have a legal authority over approving or carrying out a project. CEQA Guidelines Section 15386 identifies the following four agencies as trustee

agencies for projects subject to CEQA, pending the proposed project’s potential to affect a resource under their trust:

- California Department of Fish and Wildlife (CDFW), regarding fish and wildlife, native plants designated as rare or endangered, game refuges, and ecological reserves
- California State Lands Commission, regarding “state owned ‘sovereign’ lands, such as the beds of navigable waters and state school lands”
- California Department of Parks and Recreation, regarding “units of the State Park System”
- University of California, regarding “sites within the Natural Land and Water Reserves System”

Table 1 summarizes the expected relevant regulatory agencies, expected jurisdiction (i.e., trustee or responsible agency), and statutory authority as related to the proposed project. The jurisdiction of these agencies will be confirmed through subsequent coordination.

**Table 1  
Regulatory Agencies and Authority**

Regulatory Agency	Jurisdiction	Statutory Authority/Implementing Regulations
California Department of Fish and Wildlife	Trustee Agency	<ul style="list-style-type: none"> <li>• Reviews and submits recommendations in accordance with CEQA</li> <li>• Reviews and authorizes in-water work and work in riparian areas under the California Fish and Game Code</li> </ul> <p>The proposed project is expected to require a Streambed Alteration Agreement.</p>
Central Valley Regional Water Quality Control Board (CVRWQCB)	Responsible agency	<ul style="list-style-type: none"> <li>• Permitting authority for water quality, including point and non-point source discharges</li> <li>• Reviews projects for authorization under the Porter-Cologne Water Quality Control Act and Clean Water Act Sections 401 and 402 (National Pollutant Discharge Elimination System [NPDES])</li> </ul> <p>The Remedial Action Plan (RAP) for the proposed remediation will require CVRWQCB approval. The proposed project may necessitate waste discharge requirements (if waters on site are considered jurisdiction under the CWA) and is expected to require a NPDES permit to regulate construction-related stormwater at the site.</p>
Department of Toxic Substances Control (DTSC)	Responsible agency	<ul style="list-style-type: none"> <li>• Regulates the management of hazardous waste</li> <li>• Administers the Hazardous Waste Facility Permitting Program (established under Chapter 6.5 of California Health and Safety Code) and Resource Conservation and Recovery Act (RCRA) authorization</li> </ul> <p>The RAP for the proposed remediation will require public review prior to consideration by DTSC for approval.</p>
San Joaquin Valley Air Pollution Control District	Responsible agency	<ul style="list-style-type: none"> <li>• Review authority under the California Clean Air Act</li> <li>• Responsible for implementing federal and state regulations at the local level and permitting stationary sources of air pollution</li> </ul> <p>The proposed project is expected to require an air permit for on-site generators.</p>

<b>Regulatory Agency</b>	<b>Jurisdiction</b>	<b>Statutory Authority/Implementing Regulations</b>
San Joaquin County Department of Environmental Health	Responsible agency	<ul style="list-style-type: none"> <li>Regulates the handling, disposal, generation of, and cleanup from accidental spills of hazardous waste, on-site petroleum storage, and drilling activities in San Joaquin County, which may be applicable to the proposed project</li> </ul>
San Joaquin Council of Governments	Responsible agency	<ul style="list-style-type: none"> <li>Reviews and approves projects obtaining coverage under the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan, which may be applicable to the proposed project</li> </ul>
City of Stockton Building Department	Responsible agency	<ul style="list-style-type: none"> <li>Reviews and approves mechanical, electrical, demolition, and building permits in Stockton, which are expected to be required for the proposed project</li> </ul>
City of Stockton Public Works	Responsible agency	<ul style="list-style-type: none"> <li>Regulates movement of large vehicles through the City on roadways, which will be applicable to the proposed project</li> </ul>
Stockton Fire Department	Responsible agency	<ul style="list-style-type: none"> <li>Reviews and approves fire protection systems, which will be applicable to the proposed project</li> </ul>

### 1.3 Public Participation, Consultation, and Coordination

Public participation is an integral part of the CEQA process. Public participation facilitates two-way communication between the public and the lead agency (the Port) decision-makers, ensuring that public concerns and input are considered in the final decision. The Port’s public participation process ensures that interested persons are informed about discretionary decisions and have the opportunity to provide input. The Port also consults with public agencies in a variety of ways when developing CEQA documents, including direct agency outreach and distribution of documents.

#### 1.3.1 Notice of Preparation

After deciding that an environmental impact report (EIR) is needed, the lead agency (in this case, the Port) is required to prepare and distribute a notice informing interested parties that an EIR will be prepared. CEQA requires that the lead agency prepare a Notice of Preparation (NOP) to inform interested parties of a proposed project and to solicit their participation in the EIR scoping process. The CEQA Guidelines require that an NOP be sent “immediately after deciding that an environmental impact report is required for the project” (CEQA Guidelines Section 15082[a]) and include “sufficient information describing the project and the potential environmental effects to enable the responsible agencies to make a meaningful response” (CEQA Guidelines Section 15082[a][1]). The Port distributed an NOP and accompanying Initial Study (IS) (Anchor QEA 2021a; Appendix B) for the proposed project on August 26, 2021, for a 30-day public review period that ended September 24, 2021. Public comments received during the scoping process (provided as Appendix C) were considered in this DEIR.

### *1.3.2 Public Scoping and Agency Coordination*

As part of CEQA's consultation requirements, the CEQA Guidelines recommend that public scoping be combined to the extent possible with consultation with responsible agencies, as required under 14 CCR 15086. Consultation is conducted with agencies that will be locally involved in the environmental review process, as well as state and federal agencies and tribal governments, as appropriate.

CEQA Guidelines Sections 15086(a)(1–2) require that the lead agency formally consult with responsible and trustee agencies. On August 26, 2021, the Port filed the NOP/IS with the Governor's Office of Planning and Research (OPR) and the San Joaquin County Clerk.

In addition to making the NOP/IS available for a 30-day public comment period, the Port also conducted a public scoping meeting. The virtual meeting was held on September 14, 2021, from 4:00 p.m. to 6:00 p.m. Project-related information, including maps, were provided as part of a presentation during this meeting. To encourage public comments, the Port opened the discussion for oral comments after the presentation.

The Port also sent the NOP/IS directly to responsible and trustee agencies and other interested stakeholders. In total, the following agencies received the NOP/IS prepared for the proposed project:

- Buena Vista Rancheria of Me-Wuk Indians of California
- Bureau of Environmental Justice, California Attorney General's Office
- Burlington Northern Santa Fe (BNSF) Railway
- California Air Resources Board (ARB)
- California Department of Toxic Substances Control (DTSC)
- California State Lands Commission
- CDFW
- California Environmental Protection Agency (CalEPA)
- California Department of Transportation District 10
- California State Department of Justice
- California State Water Resources Control Board
- Central Valley Flood Protection Board
- Central Valley Regional Water Quality Control Board (CVRWQCB)
- City of Stockton (Building Department, Economic Development, and Public Works)
- The Confederated Villages of Lisjan
- Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
- National Marine Fisheries Service
- North Valley Yokuts Tribe
- Reclamation District 403

- San Joaquin Council of Governments (SJCOG)
- San Joaquin County Department of Environmental Health
- San Joaquin Valley Air Pollution Control District (SJVAPCD) Environmental Justice Advisory Group and CEQA Review Divisions
- Stockton Fire Department
- Tule River Indian Tribe
- U.S. Fish and Wildlife Service (USFWS)
- U.S. Army Corps of Engineers (USACE), Sacramento and San Francisco Districts
- U.S. Environmental Protection Agency (USEPA) Region 9
- Wilton Rancheria Tribe

Five comment letters were received during the scoping period:

- ARB
- California Native American Heritage Commission (NAHC)
- CVRWQCB
- SJVAPCD
- Adams Broadwell Joseph & Cardozo

The letters and a summary of the public and agency comments received on the NOP/IS are included as Appendix C. Table 2 presents summaries of the key comments received during the scoping period. All comments were considered during development of the DEIR.

**Table 2  
Summary of Scoping Comments**

Commenter	Key Issues Raised
<b>State, Regional, and Local Agencies</b>	
ARB	<ul style="list-style-type: none"> <li>• Noted that the proposed project could increase air pollution in disadvantaged communities</li> <li>• Recommended that the proposed project consider Senate Bill (SB) 535, SB 1000, and Assembly Bill (AB) 617</li> <li>• DEIR should discuss potential cancer risks</li> </ul>
NAHC	<ul style="list-style-type: none"> <li>• Proposed project should comply with SB 18 and AB 52 requirements for tribal consultation</li> </ul>
CVRWQCB	<ul style="list-style-type: none"> <li>• Noted potential permitting requirements of the proposed project related to water quality</li> </ul>
SJVAPCD	<ul style="list-style-type: none"> <li>• Recommended that the proposed project utilize the cleanest available off-road construction equipment</li> <li>• Recommended incorporation of design elements such as the use of cleaner heavy-duty trucks and vehicles, measures that reduce VMTs, and measures that increase energy efficiency</li> <li>• Recommended using the California Emission Estimator Model for Quantifying Air Emissions</li> <li>• Recommended additional air quality evaluation and discussion in the DEIR</li> <li>• Recommended evaluating truck routing, idling, use of zero and near-zero emissions technologies, locomotive replacements, and vegetative barriers to limit health and environmental impacts</li> </ul>

Commenter	Key Issues Raised
	<ul style="list-style-type: none"> <li>• Recommended that the Port conduct a health risk assessment</li> <li>• Recommended that the DEIR include an Ambient Air Quality Analysis and Voluntary Emission Reduction Agreement if thresholds are met</li> <li>• Recommended that the Port consider on-site solar power and electric vehicle chargers</li> <li>• Recommended that the Port include an odor management plan in the DEIR</li> <li>• Noted other SJVAPCD rules and regulations related to air quality</li> </ul>
<b>Organizations</b>	
Adams Broadwell Joseph & Cardozo	<ul style="list-style-type: none"> <li>• Requested additional information about the applicant and tenant</li> </ul>

### 1.3.3 Regulatory Guidance Related to Public Outreach and Coordination

#### 1.3.3.1 Assembly Bill 52

Assembly Bill (AB) 52 became effective on July 1, 2015. It requires lead agencies to consider the effects of projects on tribal cultural resources and to conduct notification and consultation with federally and non-federally recognized Native American Tribes and NAHC early in the environmental review process.

Six Native American Tribes—the Buena Vista Rancheria of Me-Wuk Indians of California, the Confederated Villages of Lisjan, Muwekma Ohlone Indian Tribe of the San Francisco Bay Area, the Northern Valley Yokuts Tribe, the Tule River Indian Tribe, and the Wilton Rancheria Tribe—have requested consultation on CEQA documentation for projects at the Port. The Port initiated consultation with the Buena Vista Rancheria of Me-Wuk Indians of California, the Confederated Villages of Lisjan, the Northern Valley Yokuts Tribe, and the Tule River Indian Tribe; requested a search of NAHC’s Sacred Lands Information File on March 26, 2021; and initiated consultation with Muwekma Ohlone Indian Tribe of the San Francisco Bay Area and the Wilton Rancheria Tribe on April 26, 2021. The Port received responses from the following three Tribes requesting consultation on the proposed project: the Buena Vista Rancheria of Me-Wuk Indians of California, the Wilton Rancheria Tribe, and the Northern Valley Yokuts Tribe. The Port responded to each Tribe, acknowledging their requests and providing further information on the CEQA timeline. Each Tribe was provided notification of the NOP/IS on August 26, 2021. Consultation is ongoing.

#### 1.3.3.2 Assembly Bill 617

Per AB 617 (C. Garcia, Chapter 136, Statutes of 2017), ARB must develop an air toxic monitoring plan for the state, focusing on community air monitoring at the highest priority locations and considering factors such as the presence of sensitive receptors like schools and hospitals, whether the community is disadvantaged, and whether there is a high degree of exposure to toxic air contaminants (TACs) and criteria air pollutants. In response to AB 617, ARB has established the Community Air Protection

Program (CAPP). The goal of CAPP is to reduce exposure in communities most impacted by air pollution. CAPP works with local air districts to implement monitoring networks and address emission sources.

Three AB 617 communities have been identified in the San Joaquin Valley, including the Southwest Stockton community. The SJVAPCD is working closely with community residents, community businesses, and other key stakeholders, including the Port, to reduce exposure to harmful air pollutants in selected communities. Through the implementation of the AB 617 legislation, SJVAPCD, with input from the community, will be deploying additional community-specific air quality monitoring to better understand the impacts of local sources of pollution and developing community-specific emission reduction programs. The Port is a member of the AB 617 Community Steering Committee and intends to be active in developing strategies to protect public health and the environment.

## **1.4 Incorporation by Reference**

As permitted in Section 15150 of the CEQA Guidelines, CEQA lead agencies may reference all or portions of another document that is a matter of public record or is generally available to the public. Information from documents that have been incorporated by reference are briefly summarized in the appropriate sections of this DEIR, along with a description of how the public may obtain and review these documents.

The documents incorporated by reference in this DEIR are summarized in Sections 1.4.1 through 1.4.3. These documents are available for review at the internet links provided in the following sections or in person from 8:00 a.m. to 5:00 p.m., Monday through Friday, at the Port, which is located at 2201 West Washington Street Stockton, California 95201.

### **1.4.1 City of Stockton 2040 General Plan**

The City of Stockton's (City's) *Envision Stockton 2040 General Plan* (2040 General Plan; State Clearinghouse [SCH] number 2017052062; City 2018a), which is available online at [http://www.stocktongov.com/files/Adopted\\_Plan.pdf](http://www.stocktongov.com/files/Adopted_Plan.pdf), is appropriate to incorporate by reference because the 2040 General Plan establishes land use designations for the project site with which the proposed project is consistent. The 2040 General Plan identifies the project area and most of the areas surrounding the site as "Institutional" (City 2018a). The 2040 General Plan also guides the maintenance, design, and operation of transportation resources in the City, including streets and highway within the project area, and sets regional noise standards based on land use designations.

### *1.4.2 City of Stockton Municipal Code*

The City of Stockton Municipal Code, which is available online at <https://qcode.us/codes/stockton/>, is appropriate to incorporate by reference because the City designates “Landmarks” and “Historic Sites” in the Cultural Resources section of the Municipal Code (SMC 16.7.16.16.220, 2014). Landmarks and Historic Sites include artifacts, natural features, or structures notable for one or more of the following: archaeological interest; architectural artistry, style, or type; association with a historic event or person; association with the heritage of the City, state, or nation; visual characteristics; relationship to another landmark; or integrity as a natural environment. Port resources have been identified as having significant historical or cultural significance. The Municipal Code also provides protection for heritage oaks in its Heritage Tree Permit (SMC 16.5.16.130).

### *1.4.3 City of Stockton Climate Action Plan*

The City’s Climate Action Plan (CAP; SCH Number 2012042065; City 2014), which is available online at [http://www.stocktonca.gov/files/Climate\\_Action\\_Plan\\_August\\_2014.pdf](http://www.stocktonca.gov/files/Climate_Action_Plan_August_2014.pdf), is appropriate to incorporate by reference because the CAP provides goals and associated measures in the sectors of energy use, transportation, land use, water, solid waste, and off-road equipment. Consistent with SJVAPCD, the CAP relied on a goal of 29% reduction in greenhouse gas (GHG) emissions from business as usual (BAU) by 2020. As described in the CAP (City 2014), “the City would revisit this plan in the future to examine whether there exist additional options to further reduce GHG emissions, and whether such options might be feasible in improved economic conditions” beyond 2020. An updated community GHG inventory is planned during fiscal year 2021 to 2022 (City 2021a).

## **1.5 Port Environmental Programs**

In cooperation with numerous agencies, the City, and the surrounding community, the Port has implemented a variety of plans and programs to identify and reduce environmental impacts from Port operations and promote community engagement and education. These programs are being implemented in areas throughout the Port and include measures to reduce emissions, protect habitat, improve water quality, and engage with the community. While not specifically limited to the footprint of the proposed project, all of these efforts ultimately reduce cumulative environmental effects of the proposed project and will continue to do so into the future.

### *1.5.1 Water Quality*

The Port makes considerable efforts to prevent pollutants potentially produced by industrial and maritime activities at the Port from reaching the surrounding waterways. Over the past 5 years, the Port spent more than \$5 million on stormwater programs, including the following:

- The Port labeled 100% of the storm drains on Port property with “No Discharge” to prevent any non-stormwater discharge.

- The Port installed three “Safe Drains” near the Port fueling station (outside the footprint of the proposed project). In the event of a spill, the Safe Drains will close nearby storm drains, thereby preventing a release to the aquatic environment.
- The Port installed and maintains sediment traps in storm drains at key locations that are most susceptible to pollution.
- The Port upgraded the stormwater conveyance system on the East Complex by installing several check-dams. These dams are designed to reduce the velocity of the stormwater runoff, which dissipates some of the water’s energy and allows solid pollutants to drop out of suspension before the water is discharged to a waterway.
- The Port maintains and operates an aeration facility in the Stockton Deep Water Ship Channel (DWSC; located within the San Joaquin River) to help alleviate the problems associated with low dissolved oxygen concentrations.
- The Port maintains and operates a detention pond on the East Complex that collects stormwater and allows for settling and removal of contaminants before the water is released into the San Joaquin River.

### 1.5.2 *Air Quality*

The Port is developing longer-term plans and strategies to better understand and reduce air emissions related to its development and projects. As part of this effort, the Port is conducting a Port-wide criteria pollutant and GHG emissions inventory. The Technical Working Group for the emissions inventory includes Port representatives and technical experts, including stakeholder agency representatives from the USEPA, ARB, and SJVAPCD.

The Port is also working with tenants and the SJVAPCD to repower and retrofit its existing cargo handling equipment with lower emission engines for improved air quality. Projects that have resulted in direct emissions reductions, demonstrating the beginning of the Port’s longer-term emissions plans and strategies, include the following:

- Replacing four older gasoline-powered trucks with new zero-emission electric vehicles for use on docks and implementing more than 30 electrical vehicle charging stations
- Acquiring two zero-emission, multi-use DANNAR mobile power sources fitted with forklift, scissor lift, and dump capabilities
- Working in tandem with the Ports of Long Beach and Oakland, the Port was awarded grant funding as part of ARB’s Zero- and Near-Zero Emission Freight Facilities Program to receive 34 forklifts from XL Lifts, a company specializing in zero- and near-zero-emissions forklifts
- Obtaining a zero-emissions railcar mover in late 2020

### 1.5.3 *Habitat and Species*

The Port has implemented habitat and species programs that use innovative approaches toward invasive species mitigation, while protecting and providing habitat for special status species. For instance, the Port installed barn owl nest boxes throughout the East and West Complexes to provide nesting habitat for barn owls (*T. alba*). The Port currently has 15 barn owl nest boxes, which have housed more than 200 new owls. The nest boxes provide valuable and safe habitat and natural rodent control, and two boxes are outfitted with streaming cameras that allow the public to learn more about Port wildlife. The Port also maintains bat roosting boxes, which provide bat habitat and natural insect control.

Arundo (*A. donax*) is an invasive giant reed that has spread throughout the Sacramento-San Joaquin River Delta (Delta). In the past, arundo was controlled with heavy use of herbicides. However, the Port has begun an eradication program based on the following more environmentally friendly approaches:

1. Cutting and tarping the arundo, based on research conducted at the University of the Pacific
2. Introducing arundo wasps (*Tetramesa romana*) (tiny 1-centimeter-long black insects that are harmless to humans) that feed and reproduce only on arundo and lay eggs in their chutes, which usually leads to the death of the plant

### 1.5.4 *Traffic Management*

The Port is working with the City and San Joaquin County on truck routes to access terminals in the northern section of the East Complex. Currently, a portion of the trucks travel northbound on South Fresno Avenue to access terminals located along West Washington Street. South Fresno Avenue is a designated City-controlled truck route; however, the street runs adjacent to the Boggs Tract residential neighborhood and West Washington Elementary School, which are heavily impacted by surrounding industrial operations and major traffic corridors.

As part of the Port's Outreach Committee (see Section 1.5.5), the Port understands that there is community support for reducing the level of truck traffic on South Fresno Avenue or closing the road to trucks, as well as placing restrictions on truck travel through the Boggs Tract neighborhood. Because South Fresno Avenue is controlled by the City, the Port does not have the authority to change the truck designation. However, the Port is evaluating improvements to several in-Port roads that could be used as alternative truck routes. The Port is also working with the City and County to identify other strategies, such as restricting access to West Washington Street from South Fresno Avenue and building vegetative or other noise barriers along the avenue between the residential neighborhood and the roadway.

### 1.5.5 *Community Outreach and Support*

The Port formed the Port Outreach Committee, which is a stakeholder engagement group comprising representatives from the Port, the Port's community outreach experts, environmental managers from the Port's business partners and tenants, members of the community, environmental justice groups, and local organizations. The committee began meeting in mid-2021. Its purpose is to create a communication channel between the involved stakeholders, thus establishing a strategic network with opportunities for enhanced communication, cooperation, collaboration, and transparency. While a primary focus of the committee is environmental quality at and near the Port, the Port is also providing tours of the property, tenant presentations, and discussing other topics of interest with the involved stakeholders.

## 1.6 **Scope of this Environmental Impact Report**

CEQA Guidelines Section 15120 requires that an EIR include numerous components but allows for documents to be prepared in a wide variety of formats so long as the essential elements of information are included. As detailed in CEQA Guidelines Section 15126.2, "an EIR shall identify and focus on the significant environmental effects of the proposed project on the environment." When assessing the potential environmental effects of a proposed project, "the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced." An IS was prepared and included in the NOP for the proposed project (Appendix B) to determine which environmental effects could potentially result in significant impacts and therefore focus the DEIR on those resource areas. As detailed in the IS, the following resource areas were found to not result in any potential environmental impacts and are not addressed in this DEIR:

- **Agriculture and Forestry Resources:** The City's 2040 General Plan (City 2018a) designates the project site as "Institutional," and the zoning designation of the project area is "Port" (City 2021b). Neither the project site nor the immediate surrounding areas currently support agricultural use or forestry resources. All property surrounding the project site has been developed or planned for industrial or urban land uses. The project area is zoned for non-agricultural uses, which precludes the lease area from qualifying for Williamson Act contracts.
- **Land Use and Planning:** The City's 2040 General Plan (City 2018a) designates the project site as "Institutional," and the zoning designation of the project area is "Port" (City 2021b). There is no housing within or adjacent to the project site. The closest residential neighborhoods are located to the north on the opposite side of the San Joaquin River, approximately 1.6 miles to the east of the project site, and approximately 1.7 miles to the southeast of the project site. Development of the project site for the purpose of constructing and operating a distribution

facility and associated improvements (parking, open storage, rail extensions, drainage improvements) to provide storage and bulk distribution of building products and consumer goods, as well as remediation of contaminated soils at the West Complex, is consistent with its existing zoning and use and would not conflict with any land use or other plans for the project site.

- **Mineral Resources:** The project area is classified as a Mineral Resource Zone-1, meaning “adequate information indicates that no significant mineral deposits are present, or it is judged that little likelihood exists for their presence” (California Department of Conservation 2012). The project site does not contain any known mineral resources, including any rock, sand, or gravel.
- **Population and Housing:** The project site is located on the Port’s West Complex, for which growth was analyzed in the West Complex Development Plan (WCDP) Final EIR (Port 2004). Growth at the Port’s West Complex and as a result of the proposed project is expected to increase direct employment opportunities. However, this increase in employment is not expected to result in a need for additional housing in the area because of the large number of workers that already reside within the area and the relatively high rate of unemployment for the Stockton-Lodi Metropolitan Statistical Area (9% for November 2020; CEDD 2021) compared to the state of California (7.9% for December 2020; CEDD 2021) and the United States (6.7% for November 2020; Port 2004; BLS 2021). No new homes would be constructed as a result of the proposed project, nor are there housing units in the project area. The proposed project would have no effect on the availability of housing for existing residential areas, and the project site’s zoning precludes the potential for future housing developments.
- **Public Services:** The project area is adequately served by the Stockton Fire Department, Stockton Police Department, and Port of Stockton Police Department. The proposed project would not result in increased demand on any existing facilities or services. Accordingly, there would be no impact to fire protection, police, schools, parks, or other public facilities as a result of the proposed project construction and operation.
- **Recreation:** There are limited park resources within the immediate project area. Neither construction nor operation of the proposed distribution facility would increase the use of existing neighborhood and regional parks or other recreational facilities. The proposed project does not include construction or expansion of any recreational facilities and would not result in increased demand or other effects to recreational facilities.
- **Wildfire:** The project area and nearby communities are generally considered to have lower wildfire risk (CAL FIRE 2019). The proposed project and nearby communities are located in a local responsibility area (CAL FIRE 2021). There are regional emergency response plans for the project area. In addition, during facility operation, TC NO. CAL. Development would prepare and keep on site an emergency response plan to be implemented in case of emergencies such as fires.

## 1.7 Environmental Impact Report Organization

The content and format of this DEIR are organized into the following sections to meet the requirements of CEQA and the CEQA Guidelines:

- **Executive Summary.** Summarizes the proposed project and alternatives, potential impacts, and mitigation measures
- **Section 1 – Introduction.** Describes the purpose and use of the DEIR and outlines the organization of the DEIR
- **Section 2 – Project Description.** Describes the proposed project’s background, provides details on the construction and operation of the proposed project, and discloses objectives of the proposed project
- **Section 3 – Environmental Impact Analysis.** Describes the current environmental conditions existing near the project site and discusses the environmental setting, significance criteria, environmental impacts, and mitigation measures for each environmental resource area examined
- **Section 4 – Cumulative Impacts.** Discusses other categories of environmental impacts that must be evaluated in an EIR in addition to those addressed in Section 3
- **Section 5 – Other Required Analysis.** Identifies unavoidable significant impacts, significant irreversible environmental changes, and direct and indirect growth-inducing impacts of the proposed project
- **Section 6 – Alternatives.** Discusses a range of reasonable alternatives to the proposed project that would feasibly attain all or most of the basic objectives and would avoid or substantially lessen any of the potentially significant environmental effects of the proposed project
- **Section 7 – References.** Provides a list of references used to provide information in preparation of the DEIR
- **Appendices.** The following appendices are attached to this DEIR:
  - Appendix A: List of Preparers
  - Appendix B: Notice of Preparation/Initial Study
  - Appendix C: Comments Received on the Notice of Preparation/Initial Study
  - Appendix D: Air Quality and Greenhouse Gas Emissions and Health Risk Assessment
  - Appendix E: Potentially Present Special Status Species Lists
  - Appendix F: Traffic Study

## 2 Project Description

The proposed project includes development of a new distribution facility and remedial activities on a 102-acre site on the Port's West Complex (also known as Rough and Ready Island; Figure 1). Remediation would occur in areas throughout the 102-acre project site, including on the 60-acre portion being developed for the distribution facility, as well as on 42 acres to the east and west (Figure 2).

Under the proposed project, the Port would issue a lease to TC NO. CAL. Development to develop the distribution facility. TC NO. CAL. Development would construct a 655,200-square-foot (sf) warehouse, 293,951-sf outdoor storage area, employee parking, trailer parking, trailer storage, truck docks, rail service and spurs, detention ponds, water tank and pumphouse, guard house, and minor ancillary structures (Figure 3; these improvements would occur in the area referred to as the Warehouse Development Area). TC NO. CAL. Development would sublease the distribution facility to a commercial operator to receiving, storing, and distributing bulk building products and consumer goods (warehousing or wholesaling/distribution). Operations are expected to begin following warehouse construction and would involve truck and rail deliveries of commercial products.

The proposed project would also include remediation of contaminated soils from past Navy activities associated with Site 47. Remediation in areas throughout the project site generally entails on-site movement and consolidation of contaminated soil via grading and installing covers composed of a combination of clean soil, lime stabilizers, and low-permeability surfaces such as asphalt and concrete building foundations. The COCs at Site 47 are arsenic, PAHs, and OCPs, including DDT (Geosyntec 2021a). The Port is addressing contaminated soil as required under a July 30, 2003, consent agreement between the Port, DTSC, and CVRWQCB (DTSC et al. 2003). DTSC is the lead regulatory agency, and CVRWQCB is a supporting agency overseeing the Port's remediation within Site 47. Remediation requires the development and approval of the following Cleanup Decision Documents:

- Remedial Investigation/Focused Feasibility Study (RI/FFS): The purpose of the Site 47 RI/FFS is to assess site conditions and evaluate alternatives to the extent necessary to select a remedy that will be documented in the Remedial Action Plan (RAP). The Site 47 RI/FFS presents the current understanding of potential human health and ecological risks posed by soil and sediment contamination within Site 47 and develops and evaluates remedial alternatives (Geosyntec 2020). It is being developed by the Port and TC NO. CAL. Development, subject to approval by DTSC and CVRWQCB.
- RAP: The RAP, developed by DTSC and CVRWQCB, selects the remedial alternative based on the RI/FFS. The RAP identifies and selects the remedy to address the contaminated soil pursuant to Sections 3006 and 6001 of the Resource Conservation and Recovery Act (RCRA; 42 United States Code [USC] 6926 and 6961) and Division 20 of the California Health and

Safety Code (HSC), Chapters 6.5 and 6.8. Following a public comment period, DTSC will consider approval of the Draft RAP. The CVRWQCB will also consider approval of the RAP and select the remedy pursuant to the Division 7 of the California Water Code, Division 20 of the HSC, (Chapters 6.67, 6.7, and 6.75), and the CCR. The remedy selected as part of the RAP may not conform to the remedy proposed in the RI/FFS or evaluated in the DEIR. Provided the Final EIR adequately addresses the environmental impacts of the remedy selected in the Final RAP, DTSC and CVRWQCB—as CEQA responsible agencies—will consider and rely on the environmental analysis of the selected remedy in the Final EIR to comply with CEQA.

- Remedial Design Implementation Plan (RDIP): The RDIP is developed by the Port and TC NO. CAL. Development to present construction details associated with implementing the selected Site 47 remedy approved under the RAP. The RDIP is subject to DTSC and CVRWQCB approval.

Site 47 is subject to an existing Land Use Covenant (LUC; DTSC et al. 2003). The LUC prohibits several activities, including construction of residences, hospitals, or schools; uses that would disturb monitoring wells; or uses that would restrict investigation activities. Soil disturbance and management activities are also strictly controlled. As part of the RAP that will be developed, the existing LUC would be replaced with a new LUC specific to the RAP. It is assumed that many of the use restrictions in the existing LUC would remain.

This DEIR serves as the CEQA assessment to support implementation of the RAP, and construction cannot begin until the RAP is finalized and the RDIP is approved.

A Land Use Covenant (LUC) is a tool that DTSC uses when exposure to contamination can be controlled through specifically defined restrictions. Usually, DTSC and the property owner(s) enter a LUC that allows ongoing use of the property within certain limits.

Additional details on project phasing, remediation activities, and warehouse construction and operation are provided in Sections 2.1 through 2.7.

## 2.1 Project Background

Rough and Ready Island is bordered to the north, south, and east by the San Joaquin River and to the west and south by the Burns Cutoff (a tributary to the San Joaquin River). Formerly a riverine marshy grassland, Rough and Ready Island was transformed into farmland in the late 1800s. The United States Army began using the island during World War I as a camp to rehabilitate wounded veterans. The island was developed as a supply depot during World War II and commissioned as the United States Naval Supply Annex Stockton in 1945. The area was then redesignated as the Naval Communication Station in 1965 following the establishment of Navy headquarters on the island in 1960. Navy records indicate that Site 47 was used as an unpaved construction yard and equipment storage area beginning in the 1940s. By 1973, Site 47 contained housing units near the eastern boundary, a model

airplane landing strip near the center, and a skeet/trap shooting range in the northeast area (Geosyntec 2021a).

A 1997 *Basewide Environmental Baseline Survey Report* of Rough and Ready Island (PRC Environmental 1997) described the parcels that comprise Site 47 as “Agricultural Area: agricultural field” and highlighted that as of 1996, the Navy was leasing 405 acres of Rough and Ready Island to private agricultural users. Neither a map of the leased area nor historical records of the agricultural use of the parcels were included in that survey. Although no specific agricultural use for Site 47 was identified in Navy historical records, the ecological setting identified from a 1995 site visit was predominantly “agricultural (fallow).” Further the report noted, “Although the agricultural portion of Site 47 is not used for crop production, vegetation in this area consists of a combination of relic agricultural species and various re-established disturbed species” (Geosyntec 2021a).

Between 1995 and 2020, the Navy and the Port conducted several environmental studies at and around Site 47 to assess the concentrations and distribution of metals, PAHs) semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, total petroleum hydrocarbons (TPH), and volatile organic compounds (VOCs) in soil, sediment, and groundwater. These studies are described in the 2009 *Site 47 Remedial Investigation* (ERS 2009) and in the *Site 47 Soil Sampling Report* submitted in 2015 (ERS 2015). These site investigations found contamination within various portions of Site 47, specifically arsenic, PAHs, and OCPs, including DDT. The contaminants in soil and sediment were determined to pose a risk to human health and wildlife and therefore would require remediation. The Navy transferred ownership of Rough and Ready Island to the Port through a series of agreements in 2000, 2002, 2003, and 2011. The Port received Site 47 in 2003 and took responsibility for conducting remediation in accordance with the 2003 Consent Agreement. The remedial boundary is based on the estimated extent of arsenic in soil and OCPs in sediment that pose a potential risk to human health or wildlife.

Following the Navy transfer of interest and use to the Port, the Port developed the WCDP to support the development of Rough and Ready Island. As part of long-term planning for the West Complex, the Port identified and considered the types of development and operations that could occur based on existing infrastructure, approved land uses, and future regional consumer demand. Approved in 2004, the WCDP identifies commercial and industrial parks and other diversified land uses and infrastructure to support Port activities for the undeveloped portion of Rough and Ready Island, with marine terminals on the waterfront area. As of 2020, approximately 75 facilities or businesses operate in the West Complex, which is characterized by the presence of large warehouse buildings, maritime terminals, railroad facilities, large storage buildings, and stockpiles of various commodities. Consistent with the WCDP, all facilities or businesses are Port-dependent bulk, commercial, industrial, or warehousing operations.

A portion of the bulk products that would be received at the new TC NO. CAL. Development distribution center are currently handled at an existing facility (Best Logistics) on the Port's East Complex. Due to increased demand in the local and regional markets, the amount of bulk product is expected to increase and exceed the capacity of the Best Logistics facility. Accordingly, TC NO. CAL. Development is proposing to construct and operate a new distribution facility to handle the expected volumes. The proposed distribution facility would be located in an area identified for warehousing in the Port's WCDP with sufficient land area for warehouse and other infrastructure development, connections to regional railways, and easy access to regional trucking routes. Best Logistics is expected to continue to operate and support distribution of other goods through its facility.

## 2.2 Project Need and Objectives

Pursuant to the CEQA Guidelines and 14 CCR 15124, a "statement of the objectives sought by the proposed project" must be provided as part of the project description in an EIR. The proposed project's goal is to construct and operate a distribution facility to accommodate Port-bound cargo and to remediate Site 47 as identified in the 2003 Consent Agreement. To accomplish these goals, the following key project objectives must be accomplished:

- Remediate Site 47 per applicable regulations and standards.
- Initiate a lease with the Port consistent with the proposed project.
- Provide modern warehouse space to meet the existing need for an on-demand logistical model as the current growth in logistics has outpaced the availability of modern warehouse space.
- Receive, store, and ship bulk building products and consumer goods in a manner that promotes safe and efficient handling while ensuring environmental protection and controls.
- Increase the availability of building materials and supplies to the local area, region, and state.

## 2.3 Environmental Setting

### 2.3.1 California Environmental Quality Act Baseline

CEQA Guidelines Section 15125 requires that an EIR include a description of the physical environmental conditions in the vicinity of the proposed project. Further, CEQA Guidelines Section 15125(a) states that "this environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant [...]. The purpose of this requirement is to give the public and decision-makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts." Per CEQA Guidelines Section 15125, the following paragraph describes current conditions at the project site.

The 102-acre project site is surfaced in weeds, remnant barren concrete, asphalt, compacted dirt, ornamental grass lawn, and mature native and non-native ornamental trees. Structures on the project site include three stormwater drainage ditches, abandoned structures, rail spurs, and degraded basketball and tennis courts. Soils in certain areas of the project site contain arsenic, PAHs, and OCPs, including DDT. There are five existing warehouses that are currently used for storage and logistics services on the Western Warehouse Area. Other than the five warehouses and associated activities at those warehouses, no other industrial, commercial, or other uses occur under existing conditions at the project site.

### *2.3.2 Regional Setting*

The project site is located within the City's urban core, which is characterized as a mix of heavy industrial uses with limited landscape features, older residential neighborhoods, neighborhood commercial shopping centers, and a variety of other commercial and industrial parcels. The Port is located south of the San Joaquin River and is an industrial port served by rail, trucks, and vessels. It supports a mix of liquid and dry bulk storage and shipment, as well as warehousing. Several communities are in close proximity to the Port, including the Southwest Stockton community, which ARB selected in 2019 for community-specific air monitoring and the development of an air emissions reduction plan pursuant to AB 617.

As previously described, the project site is located on Rough and Ready Island, also known as the Port's West Complex, which is bordered to the north, south, and east by the San Joaquin River and to the west and south by the Burns Cutoff. The West Complex is characterized by the presence of large warehouse buildings, maritime terminals, railroad facilities, large storage buildings, and stockpiles of various commodities. There are no residential communities on Rough and Ready Island; the closest residential receptors are located north of the island across the San Joaquin River.

The City's 2040 General Plan (City 2018a) designates the project site as "Institutional," and the zoning district of the project site and surrounding parcels is "Port" (City 2021b). Port areas are designated for the operation of Port facilities, including wharves, dockage, warehousing, and related facilities, and the Port zoning district principally permits warehouse uses. While the City does not have discretionary authority to approve, disapprove, or conditionally approve land uses at the Port, the City's General Plan does cover the Port, and the City issues building permits and is responsible for other infrastructure planning such as roadway intersections on City streets within and adjacent to the Port.

The project site is also part of the area covered by the WCDP, which identified the following types of Port-related land uses for development on Rough and Ready Island: rail to dock; break-bulk; petroleum plant; commercial industrial park; automobile facility and wharf upgrade; container shipping facility; expanded break-bulk, roll-on/roll-off, and project cargo; container expansion and

intermodal transfer; water-related future expansion area; diversified land use; and a future Immigration and Naturalization Service facility (this property has subsequently been transferred to the Port). As part of long-term planning for the West Complex, the Port identified and considered the types of development and operations that could occur based on existing infrastructure, approved land uses, and future regional consumer demand. The WCDP assumed that commercial and industrial parks and other diversified land uses and infrastructure that support Port activities would be located on the undeveloped portion of Rough and Ready Island, while marine terminals would be developed on the remaining 500-acre area. (Port 2004)

### 2.3.3 Project Setting

The approximately 102-acre project site contains a former model airplane landing strip and skeet/trap shooting range, abandoned buildings and sports courts, stormwater drainage ditches, paved areas, paved and dirt roads, and a section of railroad tracks. Most of the project site is unpaved. There are four distinct areas proposed for remediation and/or development (Figure 2):

- A 60-acre area proposed for remediation and TC NO. CAL. Development warehouse development (“Warehouse Development Area”)
- A 7-acre area to the west of the Warehouse Development Area that would be remediated and remain undeveloped (“Western Remediation Area”)
- A 9-acre area to the east of the Warehouse Development Area that would be remediated and remain undeveloped (“Eastern Remediation Area”)
- A 26-acre area to the west of the Western Remediation Area that would be remediated using institutional controls (ICs) and undergo necessary pavement repairs (“Western Warehouse Area”)

In addition to the four areas listed previously, the Port of Stockton Expressway is also subject to remediation under the 2003 Consent Agreement. The remedial activities include maintaining the roadway, which serves as the cover.

#### 2.3.3.1 Warehouse Development Area

The 60-acre Warehouse Development Area is bordered to the north by McCloy Avenue and Port railways; to the west by the Port of Stockton Expressway; to the south by the Ferguson Building warehouse parking lot at 530 Port of Stockton Expressway, stormwater drainage ditches, and undeveloped Port land; and to the east by the DR commercial facility and abandoned structures. As noted, soils with elevated COCs are present in the Warehouse Development Area due to historical activities prior to the Port’s ownership of the Site 47 parcel.

Ruderal vegetation are the plant species that colonize disturbed lands and are commonly fast-growing weeds.

The Warehouse Development Area is surfaced in ruderal vegetation and non-native grasses; trees, including Italian stone pine (*Pinus pinea*), white mulberry (*Morus alba*), northern hackberry (*Celtis occidentalis*), and California palm (*Washingtonia filifera*); and a small area of remnant asphalt or concrete paving. A narrow access road bisects the project site from north to south. Three stormwater drainage ditches are located within this portion of the project site (identified in Figure 2) and are described as follows:

- **Drainage Ditch 1 (“central ditch”):** An open, channelized, earthen stormwater drainage ditch bisects the center of the project site from east to west (WRA 2021). This approximately 0.80-acre and 2,139-foot-long ditch has been present on the project site since 1954, as indicated by a line on a topographic map (NETR 2021). Water flows from east to west in this central semi-permanently inundated ditch, with sections of the ditch drying during the most arid time of the year. Plant species found within the ditch include hardstem bulrush, alkali bulrush, and cattail.
- **Drainage Ditch 2:** A second open, channelized, earthen stormwater drainage ditch is located on the western edge of the Warehouse Development Area and connects to Drainage Ditch 1. This approximately 0.17-acre and 529-foot-long drainage ditch is a linear feature confined to a distinct channel with an ordinary high water mark (OHWM), which flows for a portion of the year and generally dries out in sections during the most arid time of the year. It has also been present since 1954, as indicated by a line on a topographic map (NETR 2021). Water within this western ditch flows from north to south. At the southern end of this western ditch is a large culvert and concrete catch basin where water flows into the project site from the Port’s larger storm drain system. Dominant plant species within the ditch are hardstem bulrush, alkali bulrush, cattail, and other hydrophytic and ruderal species.
- **Drainage Ditch 3:** A third approximately 0.61-acre and 1,732-foot-long drainage ditch also extends east to west on the southern edge of the project site immediately north of the existing Ferguson Building warehouse at 530 Port of Stockton Expressway. This southern ditch was excavated in 2006 to route water around the Ferguson Building warehouse (WRA 2021), and it connects to the western ditch with no obstructions or culverts. This semi-permanently inundated ditch is a linear feature confined to a distinct channel with an OHWM and contains water for a portion of the year, generally drying out in sections during the most arid time of the year. The ditch is almost entirely vegetated, with only a few sections of unvegetated channel. Unvegetated portions are presumed to be caused by long-term inundation. Water within the southern ditch flows from east to west. Hardstem bulrush, common reed (*Phragmites australis*), arroyo willow (*Salix lasiolepis*), alkali bulrush, cattail, and other hydrophytic and ruderal species are the dominant plant species within this southern ditch.

These ditches are part of the Port’s West Complex drainage system, which conveys stormwater and surfacing groundwater to a single pump-controlled discharge point on the west side of the

West Complex. Stormwater that reaches this discharge point is held in a stormwater retention basin on the western end of the West Complex. During years when the retention basin reaches a high level, stormwater is pumped to the San Joaquin River.

#### **2.3.3.2 Western Remediation Area**

The Western Remediation Area is an irregularly shaped, approximately 7-acre area west of and across from the Port of Stockton Expressway and the Warehouse Development Area. The Western Remediation Area is surfaced in ruderal vegetation with small areas of remnant barren concrete, asphalt, or compacted dirt. A rail spur extends northeast to southwest across the area's northern portion. Ten London planetrees (*Platanus × acerifolia*) are located along the west side of the Port of Stockton Expressway. The Western Remediation Area is bordered by Daggett Road, Port of Stockton Expressway, and McCloy Avenue.

#### **2.3.3.3 Eastern Remediation Area**

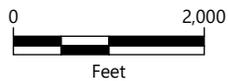
The Eastern Remediation Area is a rectangular 9-acre area immediately east of and adjacent to the Warehouse Development Area. The Eastern Remediation Area has three derelict abandoned structures and degraded tennis and basketball courts associated with the West Complex's former Navy use. This area also includes asphalt or concrete surfacing, ruderal vegetation, ornamental grass lawn, and mature native and non-native ornamental trees. It is bordered to the east by North Hooper Street, to the north by McCloy Avenue, and to the south by a narrow strip of vegetation and an asphalt-paved parking area.

#### **2.3.3.4 Western Warehouse Area**

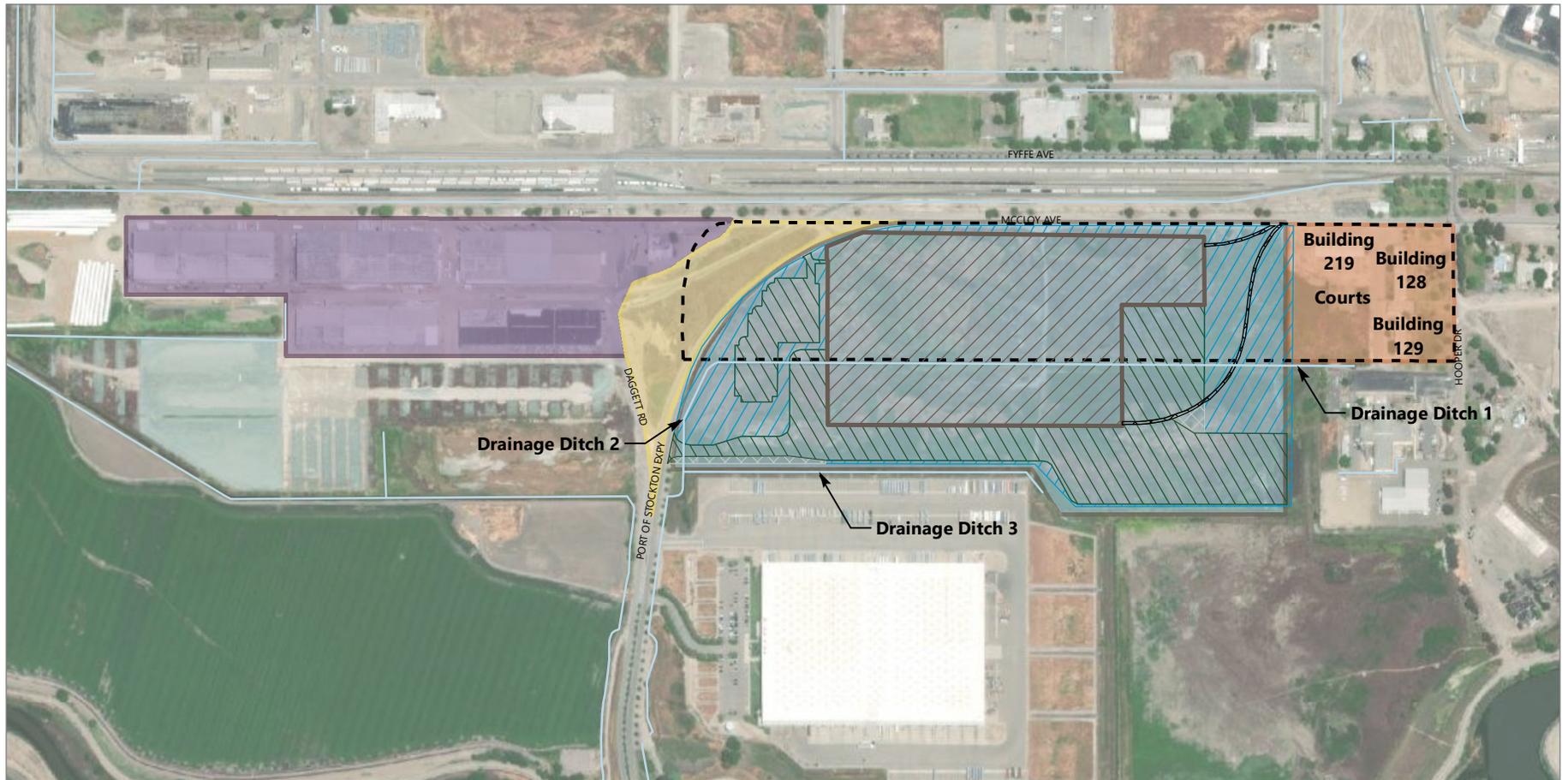
The Western Warehouse Area is an approximately 26-acre area west of the Port of Stockton Expressway and the Western Remediation Area. The Western Warehouse Area is composed of five existing warehouses that are currently used for storage and logistics services. The Western Warehouse Area is surfaced with asphalt or concrete with one mature ornamental tree located near the western portion of the area. The Western Warehouse Area is bordered to the east by Port of Stockton Expressway, to the south by Gillis Avenue, to the north by McCloy Avenue, and to the west by Humphreys Street and a strip of compacted dirt and ornamental grass lawn.



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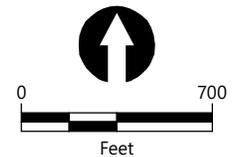


**Figure 1**  
**Vicinity Map**



**LEGEND:**

- |                                    |  |
|------------------------------------|--|
| Stormwater Ditch                   | Western Warehouse Area                                 |
| Site 47 Consent Agreement Boundary | Warehouse and outdoor storage areas                    |
| Warehouse Development Area         | Stormwater detention ponds and limited landscape areas |
| Eastern Remediation Area           | Parking and driveway areas                             |
| Western Remediation Area           | New railroad spurs                                     |
| Western Warehouse Area             | Exterior concrete areas and sidewalks                  |

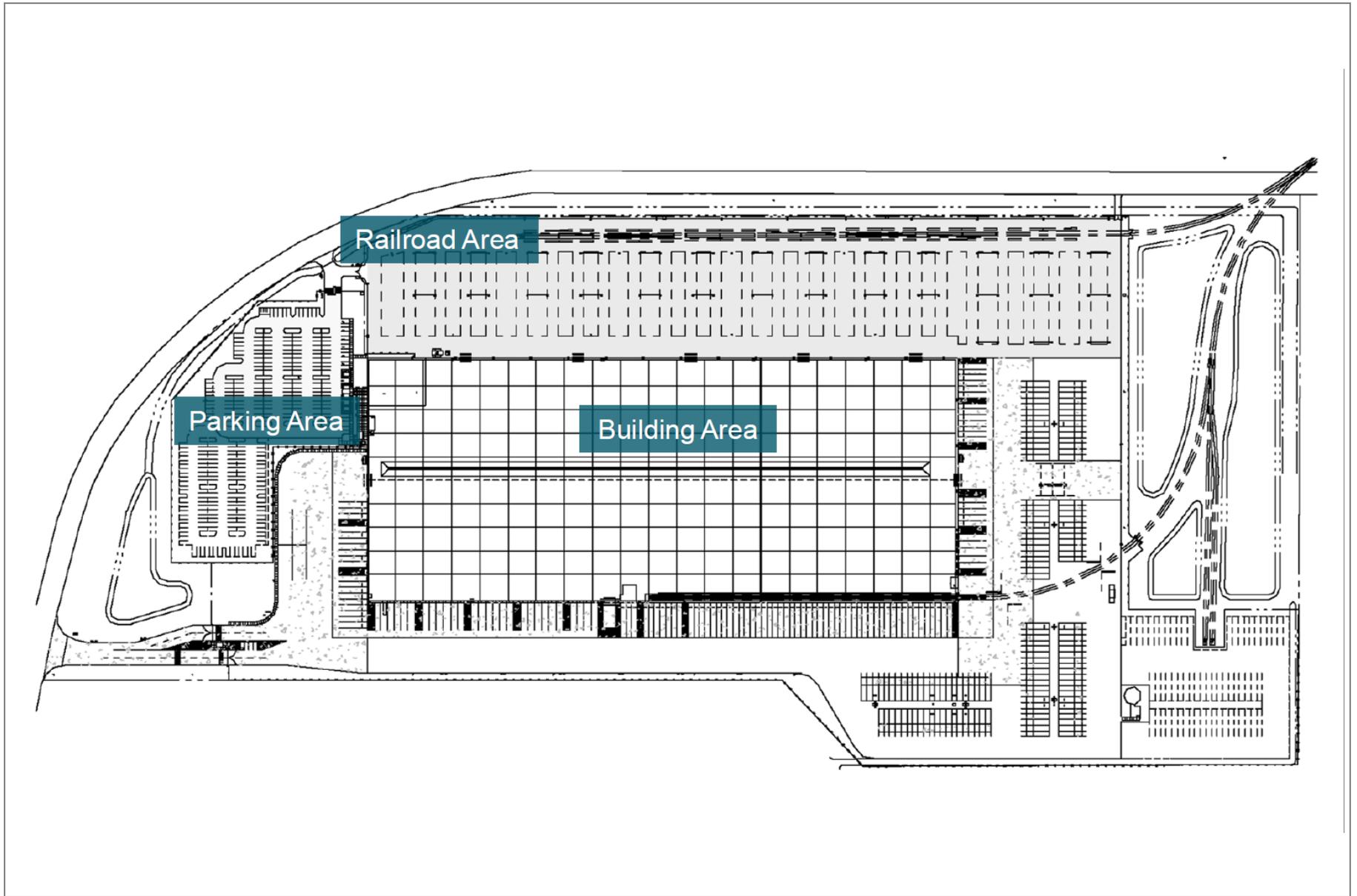


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**Figure 2**  
**Development and Remediation Areas**

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 TC NO. CAL. Development Warehousing and Distribution Facility Project



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**Figure 3**  
**Overall Warehousing and Distribution Facility Site Plan**

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TC NO. CAL. Development Warehousing and Distribution Facility Project

## 2.4 Remedial Activities Considered

To address the risk from soil and sediment contaminants, a focused set of alternative remedial activities was developed and evaluated using criteria established in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). NCP criteria are used to screen remedial technologies and evaluate remedial activities. The remedial activities considered are as follows:

- **Alternative Remedial Activity 1: No Action**
  - Under this scenario, Site 47 would remain in its current condition, and no containment or removal would be implemented. No new ICs would be implemented, but the existing LUC would remain in effect.
- **Alternative Remedial Activity 2: Existing Durable Cover, Fence, and ICs**
  - Under this scenario, a fence and signage would be installed surrounding Site 47. Future land use and activities would be restricted by ICs, and existing covers would be retained near the eastern boundary of Site 47 and within the paved warehouse area west of Site 47.
- **Alternative Remedial Activity 3: Excavation with On-Site Consolidation, Durable Cover, and ICs**
  - Under this scenario, a soil cover would be installed over the majority of Site 47, and the existing covers (i.e., building foundations and paved areas) would be repaired, as needed, to serve as a physical barrier. Future land use and activities would be restricted by ICs.
- **Alternative Remedial Activity 4: Excavation (to 2 Feet) with Off-Site Disposal (Backfilled with Clean Fill) and ICs**
  - Under this scenario, soil over the majority of Site 47 would be excavated to a depth of 2 feet and disposed of at a permitted off-site landfill following the appropriate waste characterization. The excavation would be backfilled with clean borrow fill that meets the preliminary remediation goals and graded to match the surrounding topography. The existing and new cover would be inspected and maintained regularly, and ICs would be implemented.
- **Alternative Remedial Activity 5: Expanded Excavation with On-Site Consolidation, Expanded Durable Cover, and ICs**
  - This scenario involves installation of a durable cover that is integrated with and supports the proposed project. The durable cover includes a combination of asphalt-concrete pavement, building foundations, concrete slabs-on-grade, and a 2-foot soil cover. Areas within the remedial boundary but outside the project site would be addressed through a combination of soil covers and repairing existing covers (i.e., building foundations and paved areas), as needed, to serve as a physical barrier. Unpaved areas with elevated arsenic concentrations in soil (e.g., between Port of Stockton Expressway, Daggett Road, and McCloy Avenue) would be covered with 2 feet of clean soil. Existing covers in other areas (i.e., building foundations and paved areas) would be repaired, as needed, to serve as a

physical barrier. The covered areas would be inspected and maintained regularly, and ICs would also be implemented to protect human health by restricting land uses and activities that are incompatible with the selected remedy through a new LUC developed as part of the RAP.

Alternatives 3 and 5 are both viable and provide comparable performance relative to the NCP evaluation criteria. The Port determined that Alternative Remedial Activity 5 is the recommended remedy because it exceeds NCP requirements and will support the proposed project, providing economic benefit to the region. Therefore, this DEIR analyzes remedial activities consistent with those included in Alternative Remedial Activity 5 as part of the proposed project. If an alternative remedial activity is ultimately selected as part of the RAP, additional CEQA analysis may be necessary.

## 2.5 Proposed Project Construction and Remedial Activities

Remediation and construction are anticipated to occur between 2022 and 2024. The proposed project construction would occur in three phases that would generally occur sequentially, as follows:

- **Phase 1: Site Preparation and Remediation in Warehouse Development Area.** Anticipated to occur in 2022 (expected 8-month duration)
- **Phase 2: Construction of Warehouse and Improvements in Warehouse Development Area.** Anticipated to occur between 2022 and 2024 (expected 20-month duration with 1 month of potential overlap with Phase 1)
- **Phase 3: Remediation of Western and Eastern Remediation Areas and Western Warehouse Area.** Anticipated to occur in 2024 (expected 2-month duration)

No removal of facilities and no major construction is planned at the Western Warehouse Area. Activities within the Western Warehouse Area would be permanently managed by the Port using ICs and the new LUC developed as part of the RAP. However, some areas of existing damaged pavement would be fixed.

### 2.5.1 *Phase 1: Site Preparation and Remediation in Warehouse Development Area*

Site preparation and remediation of the Warehouse Development Area would largely occur first, prior to construction of the warehouse and associated improvements under Phase 2. Site preparation activities include clearing and grubbing of vegetation, implementing best management plans (BMPs) consistent with the SWPPP, and removing existing utilities. Following site preparation, approximately 57,000 cubic yards of contaminated soil would be excavated throughout the Warehouse Development Area. Building support columns will then be installed within the area of the proposed building, outdoor storage area, and rail spurs.

Drainage Ditch 1 would be filled in with clean material sourced on site during the grading process. Drainage Ditch 2 would be modified to accommodate the distribution facility and related infrastructure, and a new drainage channel would be constructed along the northern boundary of Site 47 (south of McCloy Avenue) and integrated into the Port's drainage system. In the eastern and western area of the project site, grading activities would also move contaminated soil away from existing paved areas and building foundations to facilitate placement of a 2-foot clean soil cover in unpaved areas next to these features.

All excavated contaminated soil would be consolidated on site, then placed in the footprint of the new warehouse and outdoor storage area. Prior to placement, the top and lateral extent of the contaminated soil and bottom of the cap would be surveyed, and a demarcation layer would be installed above the contaminated soil. Following placement, contaminated soil would be covered with approximately 168,000 loose cubic yards of clean soil sourced from adjacent sites within the Port. The clean fill would be compacted, treated with lime and cement, overlain by an aggregate base, and covered with a concrete slab, which would serve as the foundation for the warehouse.

Other areas within the Warehouse Development Area but outside the foundation footprint would be covered with a combination of clean soil and hardscape surfaces, including concrete sidewalks and asphalt-concrete pavement. The new covers would be tied into the existing pavement and structures where necessary. The final surface of the covers would be designed to slope at a slight grade to promote surface water drainage. The durable covers would prevent future site users and wildlife from contacting the underlying contaminated soil.

### *2.5.2 Phase 2: Construction of Warehouse and Improvements in Warehouse Development Area*

The proposed warehouse and associated improvements would be constructed immediately following Phase 1 remediation and site preparation, with the potential for 1 month of construction overlap between these phases. As described in Table 3, proposed improvements during this phase include construction of a 655,200-sf, 36-foot clear height, concrete tilt-wall build-to-suit warehouse structure; 293,951-sf outdoor storage area (exterior slab-on-grade); 418 car and trailer parking spaces; trailer storage; truck docks; rail service via two rail spurs extended onto the project site and a railcar storage track; water tank and pumphouse; guard house; and minor ancillary structures. The warehouse and structures would meet all requirements of the 2019 California Green Building Standards Code. Rail service would be extended into the Warehouse Development Area via the existing Port rail network, entering the site from the northeast corner through a new gated crossing off McCloy Avenue. TC NO. CAL. Development would also plant at least 30 trees, including Patmore ash (*Fraxinus p. 'Patmore'*), Chinese pistache (*Pistachia chinensis*), coast redwood (*Sequoia sempervirens*), and multi-trunk chaste tree (*Vitex agnus-castus*), on the project Warehouse

Development Area. Utility extensions would be required for gas, electricity, water, wastewater, and telecommunications.

### ***2.5.3 Phase 3: Remediation of Western and Eastern Remediation Areas and Western Warehouse Area***

Remediation of the Western and Eastern Remediation Areas shown in Figure 2 would occur following completion of Phase 2 warehouse and improvements construction. The Phase 3 remediation construction sequence would be similar to Phase 1 remediation and is anticipated to include site preparation activities, including surveying the top and lateral extent of the contaminated soil and bottom of the cap, clearing and grubbing vegetation, removing the former tennis courts in the Eastern Remediation Area, and preparing the site to receive fill by compacting the subgrade and grading away from existing paved areas. It would also include installing a demarcation layer above the contaminated soils, importing borrow fill material from adjacent sites in the West Complex for the soil cover and fill areas, placing clean soil above the demarcation layer to achieve the bottom of cap elevation, and compacting and grading soil cover and fill material.

Some existing infrastructure within the Western and Eastern Remediation Areas, including intact paved surfaces and building foundations, would be integrated into the remediation design. In limited areas of the Eastern Remediation Area, low-permeability asphalt would be installed between the intact paved surfaces and building foundations to form a continuous engineered cover. All engineered covers would be designed to slope away from buildings and paved surfaces and towards existing stormwater infrastructure. Engineered covers would be inspected annually and repaired as needed. All existing structures located in the Eastern Remediation Area, besides the tennis courts, would remain in place. The intact rail line in the Western Remediation Area would be undisturbed and left uncapped.

As described in Section 2.3, the Western Warehouse Area would be permanently managed by the Port using ICs and land use restrictions. There would be no removal of facilities and no major construction in this area; however, some areas of existing damaged pavement would be fixed.

## **2.6 Construction Schedule**

The proposed construction schedule with proposed equipment list is presented in Table 3. There would be no export of contaminated soils; all soils would be managed and consolidated on-site. All clean fill will be sourced from within the Port. Material used to cap soils would be scraped from adjacent areas on the project site and obtained from existing dredge material stored on the West Complex. During construction, traffic would be restricted to the Port of Stockton Expressway and Navy Drive. Construction staging would be entirely within the footprint of the project site shown in Figure 3, likely within the southern portion of the site.

**Table 3  
Construction Schedule and Equipment List**

<b>Phase 1: Site Preparation and Remediation in Warehouse Development Area</b>			
<ul style="list-style-type: none"> <li>• Site preparation activities</li> <li>• Backfilling Drainage Ditch 1 and constructing a replacement drainage ditch and two detention basins</li> <li>• Over-excavating surficial contaminated soils, installing a demarcation layer above the contaminated soils, and placing clean soil above the demarcation layer</li> <li>• Installing drilled displacement columns</li> <li>• Applying lime and cement treatment and compacting layers of clean soil, aggregate base, and concrete slabs</li> <li>• Excavating clean soil and placing, compacting, and grading the soil cover and fill material</li> <li>• Placing and compacting aggregate base and constructing exterior concrete and asphalt slabs, driveways, parking, and railroad spurs</li> </ul>	8 Months (2022)	Sweeper Tractor Excavator Crane Grader Loader Dozer Haul/Dump Truck	Compactor Backhoe Welder Generator Scrapper Roller/Paver Flat Bed Truck
<b>Phase 2: Construction of Warehouse and Improvements in Warehouse Development Area</b>			
<ul style="list-style-type: none"> <li>• Constructing a 655,200 sf, 36-foot clear height, concrete tilt-wall build-to-suit warehouse structure</li> <li>• Constructing a 293,951-sf outdoor storage area (exterior slab-on-grade), 418 car and trailer parking spaces, trailer storage, and truck docks, water tank and pumphouse; guard house; and minor ancillary structures</li> <li>• Extending rail service via adding two rail spurs, a railcar storage track</li> <li>• Utility extensions (gas, electricity, water, wastewater, and telecommunications)</li> </ul>	20 Months (2022–2024)	Dozer Flat Bed Truck Welder Crane Excavator Crane	Haul/ Dump Truck Generator Water Truck DDC Tiller
<b>Phase 3: Remediation of Western and Eastern Remediation Areas and Western Warehouse Area</b>			
<ul style="list-style-type: none"> <li>• Site preparation activities, including surveying the top and lateral extent of the contaminated soil and bottom of the cap</li> <li>• Clearing and grubbing vegetation</li> <li>• Removing former tennis courts in the Eastern Remediation Area</li> <li>• Preparing the site to receive fill by compacting the subgrade and grading away from existing paved areas</li> <li>• Installing a demarcation layer above the contaminated soils</li> <li>• Importing borrow fill material for the soil cover and fill areas</li> <li>• Placing clean soil above the demarcation layer to achieve the bottom of cap elevation</li> <li>• Compacting and grading soil cover and fill material</li> </ul>	2 Months (2024)	Sweeper Tractor Excavator Crane Grader Loader Dozer Haul/ Dump Truck	Compactor Backhoe Welder Generator Scrapper Roller/Paver Flat Bed Truck

## 2.7 Proposed Project Operations

Operation of the proposed project could include wholesaling and distribution and warehousing. The distribution facility's design and operational throughput assumptions could accommodate any of these uses. For the purposes of this document, it is assumed that the distribution facility would operate 365 days a year from 6:30 a.m. to 10:30 p.m., with truck operations occurring primarily Monday through Saturday.

It is anticipated that the distribution facility may initially be used for storage and bulk distribution of building products and consumer goods to be identified based on customer demand. Bulk materials would be nationally sourced and delivered to the project site by truck or rail; sorted, batched, and stored on site; and exported from the project site by truck to the final off-site delivery location within the local Stockton region. Occasional outbound shipments via rail may also occur but would be sporadic and intermittent.

Facility throughput would be dependent on customer demand; a conservative estimate of maximum annual truck and railcar trips associated with proposed project operations is presented in Table 4.

**Table 4**  
**Proposed Project Cargo Throughput (Maximum)**

Mode <sup>1</sup>	Maximum Annual Calls <sup>2</sup>
Inbound Truck Calls	32,287
Outbound Truck Calls	63,211
Total Truck Calls	95,498
Total Rail Calls <sup>3</sup>	2,053

Notes:

1. Cargo would be delivered to the facility by truck and rail. All cargo would be distributed from the facility by truck.
2. Calls are expressed in round trips. Each truck and train call makes two trips: one trip in and one trip out.
3. Rail cargo would be shipped via manifest rail.

Operations at the proposed facility are anticipated to require 100 employees working over two daily shifts with a 30-minute overlap between shifts (6:30 a.m. to 2:30 p.m. and 2:00 p.m. to 10:30 p.m.). Parking would be accommodated on site through the proposed employee parking. The site design includes ingress and egress points and other design measures to accommodate the anticipated volume of vehicular traffic, minimize queueing, and facilitate traffic flow within the boundary of the project site and adjoining roadways. Industry-standard emergency procedures for operations would be developed by the on-site management team, and all associates would be trained in those procedures. A single emergency generator would be installed and operated as needed. Up to 56 forklifts and two power saws would operate at the site daily (7 days a week).

Table 5 identifies operational utility demands, which would be comparable to similar warehouse structures and accommodated by connections to existing utilities. Wastewater demand would be limited to plumbing waste from employee use; no process or industrial wastewater would be generated. Non-potable water demand would be limited to as-needed emergency fire controls. The proposed improvements would be solar ready. Facility lighting, including appropriate shielding, would be installed as part of the proposed project.

**Table 5  
Operational Utility Demand**

Utility	Operations	
	Annual	Peak Daily
Gas	13,868 therms	42 therms
Electricity	3,316,962 kWh	9,500 kWh
Water (potable)	3,975 kgal	12 kgal

As described, the proposed project includes filling an existing drainage ditch, creating a replacement drainage ditch alignment, and constructing two detention basins. The replacement drainage ditch would provide stormwater filtration and conveyance to the existing Port drainage system. The detention basins would limit discharge of post-construction stormwater runoff. Together, the replacement drainage ditch and detention basins would restrict post-construction runoff to pre-construction runoff rates, as required by the Port’s Storm Water Development Standards (Port 2009).

The Western and Eastern Remediation Areas are anticipated to remain vacant and unused for the foreseeable future. The remedial engineered cover placed in Phase 3 would be protected from future disturbance in accordance with existing LUC restrictions. Inspections of the engineered cover would be conducted annually, with repairs as needed. These inspections would be documented on a 5-year frequency at a minimum.

As described in Section 2.3, the Western Warehouse Area would be permanently managed by the Port using ICs and land use restrictions, and there would be no operational changes associated with the proposed project. The existing warehouse operations in this area would continue to operate at existing levels; therefore, no operational changes are assessed for this area in the DEIR.

## 2.8 Alternatives Evaluated in this Environmental Impact Report

Per CEQA Guidelines Section 15126.6, an EIR must describe a reasonable range of alternatives to a proposed project that could feasibly attain most of the basic project objectives and would potentially avoid or substantially lessen any of the proposed project’s significant effects. Additionally, a “No

Project” alternative must be analyzed. The purpose of the proposed project is to operate a 60-acre distribution facility to accommodate Port-bound building products and consumer goods and to remediate Site 47. As discussed in Section 2.2, the project objectives are as follows:

- Remediate Site 47 per applicable regulations and standards.
- Initiate a lease with the Port consistent with the proposed project.
- Provide modern warehouse space to meet the existing need for an on-demand logistical model as the current growth in logistics has outpaced the availability of modern warehouse space.
- Receive, store, and ship bulk building products and consumer goods in a manner that promotes safe and efficient handling while ensuring environmental protection and controls.
- Increase the availability of building materials and supplies to the local area, region, and state.

The following alternatives are currently being considered for further analysis in this DEIR: No Project Alternative, Reduced Project Alternative, and Alternative Site Locations.

### *2.8.1 No Project Alternative*

The No Project Alternative, which is required for inclusion in an EIR by CEQA, represents what would reasonably be expected to occur in the foreseeable future if the proposed project were not approved. Under this alternative, no new warehouse building or associated improvements would be constructed, and there would be no change to operations on the site. Additionally, no remediation of Site 47 would occur as part of the distribution facility construction, and a different remedial design that meets cleanup goals would be selected through the RAP approval process.

### *2.8.2 Reduced Project Alternative*

The Reduced Project Alternative would consist of warehouse building construction and operation at two-thirds the capacity of the proposed project. This alternative includes development of a warehouse building and associated infrastructure (e.g., parking areas) over a 40-acre area at the same location as the proposed project. With the smaller warehouse building, there would be a commensurate reduction in throughput capacity. Because this alternative would still overlap with Site 47, it is anticipated that the extent of remediation associated with this alternative would be the same as that of the proposed project. While a warehouse of this size would not meet the Project Objective of providing a modern warehouse for existing logistical needs, this alternative is being analyzed based on comments received during public scoping.

### *2.8.3 Alternative Site Locations*

This alternative considers locating the proposed TC NO. CAL. Development warehouse at another site within the Port. It considers whether an available existing facility could be retrofitted to provide

warehousing or whether a separate parcel of land could be developed to meet project objectives. As part of this alternative, no remediation of Site 47 would occur as part of the proposed project. However, if any of the alternative sites also require remediation, the regulatory process governing remediation would need to be completed specific to the selected site.

### 3 Environmental Impact Analysis

This section discusses the CEQA requirements and terminology used in the environmental impact analysis. The environmental resource analysis sections discuss the possible effects of the proposed project on the specific environmental resource areas. To assist the reader in comparing information about the various environmental issues, Sections 3.1 through 3.13 each contain the following information for the specific resource area:

- **Environmental setting.** The physical conditions at the time of baseline, specific to the resource area
- **Regulatory setting.** The rules, regulations, and plans specific to the proposed project and resource area
- **Methodology for determining impacts.** A description of the quantitative or qualitative methods used to analyze potential impacts, including specific thresholds of significance (the criteria against which the analysis results are compared)
- **Impacts of the proposed project.** Potential impacts are compared to the thresholds of significance to determine their level of significance
- **Mitigation measures.** Mitigation measures, as well as a plan to implement measures and findings of significance after the measures are implemented, are provided where potentially significant impacts are identified

In accordance with Section 15064 of the CEQA Guidelines, the environmental impact analysis for each resource section includes an evaluation of the direct physical changes in the environment that may be caused by the proposed project, as well as reasonably foreseeable indirect physical changes in the environment that may be caused by the proposed project. Factors that may be affected by the proposed project are evaluated using the criteria set forth in Appendix G of the CEQA Guidelines (Environmental Checklist) as amended (December 28, 2018). CEQA distinguishes the characteristics of a substantial or potentially substantial impact as follows:

Substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant. (CEQA Guidelines Section 15382)

Short- and long-term impacts are also considered. Short-term impacts are of a limited duration, such as those that occur during a construction phase. Long-term impacts are those of a greater duration, such as those that would encompass the proposed project duration and beyond.

As reflected in CEQA Guidelines Section 15126, impacts resulting from the proposed project on environmental resources can be included in one of the following categories:

- **No impact.** No impact to the identified environmental resource would occur as a result of the proposed project.
- **Less than significant.** Some impacts to the environmental resource may result from the proposed project; however, the impacts do not reach the threshold of significance.
- **Potentially significant but mitigation measures are available to reduce impacts to a less-than-significant level.** Significant adverse impacts may occur; however, with appropriate mitigation, they can be reduced to a less-than-significant level.
- **Significant and unavoidable adverse impacts.** The environmental effect reaches or exceeds the threshold of significance even after mitigation measures have been applied to minimize their severity or no mitigation is available to reduce the impacts to a less-than-significant level.

Potential cumulative impacts for the proposed project for each environmental resource area are summarized in Section 4. Irreversible environmental changes that would be caused by the proposed project and growth-inducing impacts of the proposed project are identified in Section 5. In Section 6, the alternatives are compared to the proposed project and CEQA baseline and ranked relative to each other based on anticipated impacts for each resource area to determine the environmentally preferred alternative.

## **3.1 Aesthetics**

This section describes existing aesthetic and visual conditions in the project area and analyzes how the proposed project may affect those conditions. It also describes applicable rules and regulations pertaining to aesthetics that could affect the proposed project. For the purposes of the aesthetics analysis, the study area is defined as the regional and study area settings, which affect the visual character at and around the project site. The loss of identified scenic resources or the introduction of contrasting features that could degrade the visual character of the project area is the focus of the aesthetics analysis.

### ***3.1.1 Environmental Setting***

The Environmental Setting section discusses the aesthetic and visual context in which the proposed project would be constructed and operate, including the regional land uses that affect the visual character at and around the project site as well as immediate surrounding properties.

#### **3.1.1.1 Regional Setting**

The proposed project would occur entirely within Port property. All of the Port's land is zoned for industrial development and is leased for a variety of industrial uses. The Port is located on flat lands that do not possess significant natural topographic variation. Industrial developments are characterized by storage tanks, power production towers, cement and grain silos, railroad tracks, large storage buildings, and stockpiles of various commodities (Stockton Port District 2013). As noted in Section 2.1, the project site is located on the Port's West Complex, which is characterized by the presence of large warehouse buildings, the San Joaquin River and Stockton DWSC to the north and east, maritime terminals, railroad facilities, large storage buildings, and stockpiles of various commodities.

Regional land uses that affect the visual character at and around the project site include residential infill (the closest residential receptors are located approximately 3,300 feet south and 3,500 feet north of the project site, off of Rough and Ready Island), industrial/commercial facilities (south, west, and east of the project site), internal Port rail network (north of the project site), the San Joaquin River (serving industrial, recreational, and natural uses), located approximately 2,500 feet north of the project site, and Burns Cutoff, located approximately 1,500 feet south of the project site.

#### **3.1.1.2 Study Area Setting**

The project site includes the 102-acre largely vacant (outside of the Western Warehouse Area) project site. The terrain is primarily flat throughout the entire project site. As described in Section 2.1, the project site includes four distinct areas proposed for remediation or development: the Warehouse Development Area, Western Remediation Area, Eastern Remediation Area, and Western Warehouse Area.

As described in Section 2.3.3, the Warehouse Development Area is bordered to the north by McCloy Avenue and Port railways; to the west by the Port of Stockton Expressway; to the south by the Ferguson Building warehouse parking lot at 530 Port of Stockton Expressway, stormwater drainage ditches, and undeveloped Port land; and to the east by the DR commercial facility and abandoned structures (Figure 2; Photograph 1). The Warehouse Development Area is surfaced in ruderal vegetation, including non-native grasses, a small area of remnant asphalt or concrete paving, and a narrow informal access road that bisects the site from north to south. As depicted in Photographs 2 and 3, vegetation on the Warehouse Development Area is limited to ruderal vegetation on or surrounding the existing parcel. Three ditches are located within the Warehouse Development Area.

Ruderal vegetation are the plant species that colonize disturbed lands and are commonly fast-growing weeds.

The Western Remediation Area is an irregularly shaped, approximately 7-acre area west of and across from the Port of Stockton Expressway and the Warehouse Development Area (Figure 2). The Western Remediation Area is surfaced in ruderal vegetation with small areas of remnant barren concrete, asphalt, or compacted dirt. A rail spur extends northeast to southwest across the area's northern portion. The Western Remediation Area is bordered by Daggett Road, Port of Stockton Expressway, and McCloy Avenue. Photograph 4 shows the rail spur and typical ruderal vegetation in the Western Remediation Area.

The Eastern Remediation Area is a rectangular 9-acre area immediately east of and adjacent to the Warehouse Development Area (Figure 2). The Eastern Remediation Area has three derelict abandoned structures and degraded tennis and basketball courts associated with the West Complex's former Navy use (Photograph 5). This area also includes asphalt or concrete surfacing, ruderal vegetation, ornamental grass lawn, and mature native and non-native ornamental trees. It is bordered to the east by North Hooper Street, to the north by McCloy Avenue, and to the south by a narrow strip of vegetation and an asphalt-paved parking area.

The Western Warehouse Area is an approximately 26-acre area west of the Port of Stockton Expressway and the Western Remediation Area (Figure 2). The Western Warehouse Area is composed of five existing warehouses that are currently used for storage and logistics services (Photograph 6). The Western Remediation Area is surfaced with asphalt or concrete with one mature ornamental tree located near the western portion of the area. The Western Warehouse Area is bordered to the east by Port of Stockton Expressway, to the south by Gillis Avenue, to the north by McCloy Avenue, and to the west by Humphreys Street and a strip of compacted dirt and ornamental grass lawn.

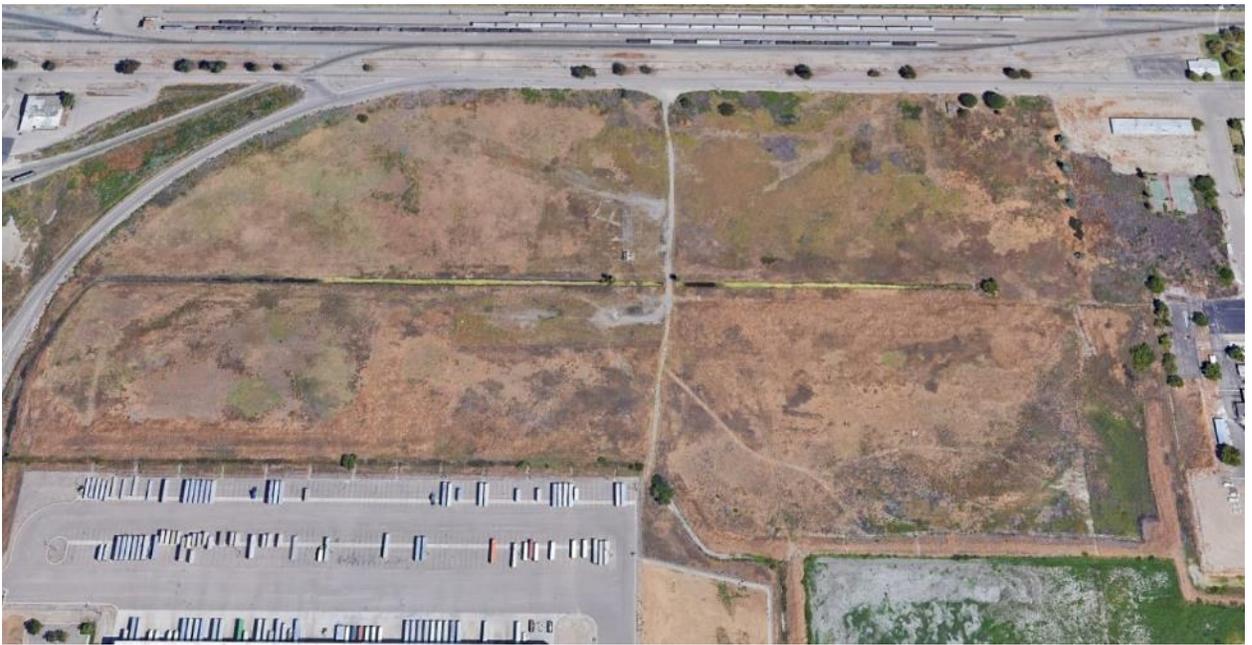
The following features are adjacent to the project site: internal Port rail network to the north (Photographs 7 and 8), the Ferguson Building warehouse, a wholesale distributor of plumbing, HVAC,

waterworks, fire protection, and facility supplies, and a parcel owned by the San Francisco Naval Communication to the south (Photograph 2); Central Valley Ag Grinding Yard Stockton, an agricultural product wholesaler (Photograph 9), DR Pipeline, Inc., a utility contractor, and Savage Services, a business management consultant, to the east; and a large open vegetated area owned by the San Francisco Naval Communication to the west. The properties owned by San Francisco Naval Communication are nearly devoid of trees. The developed areas located to the north, south, and east of the project site include industrial properties that contain warehouses, concrete pavement, lawns, trees, and shrubs. Vegetation occurs within a largely developed industrial landscape.

The tallest structures around the project site are the Ferguson Building warehouse, an electrical tower near Savage Services, and the warehouses to the west of the project site. All structures in the vicinity of the project site are generally below 40 feet in height. The color palette of the existing structures is neutral with tones such as tan, grey, beige, light brown, and white. A few of the adjacent facilities are opened and operate throughout the night and have exterior lighting.

Regional views of the project site are largely obscured on all sides by industrial developments, rail lines, and railcars. Complete views of the project site are only available from immediately adjacent roadways, Port of Stockton Expressway, McCloy Avenue and North Hooper Street. These roads exclusively serve to provide access to industrial sites in the immediate project vicinity. The project site is not visible from the nearest residential receptors, located approximately 3,300 feet south and 3,500 feet north of the project site, off of Rough and Ready Island.

**Photograph 1**  
**Aerial View of the Proposed Warehouse Development Area**



Source: Google Earth

**Photograph 2**

**View of the Proposed Warehouse Development Area from McCloy Avenue, Looking South**



Source: Photograph taken by Anchor QEA at the project site in February 2021

**Photograph 3**  
**View of the Proposed Warehouse Development Area from Port of Stockton Expressway,**  
**Looking North**



Source: Photograph taken by Anchor QEA at the project site in February 2021

**Photograph 4**

**View of the Western Remediation Area from McCloy Avenue, Looking South**



Source: Photograph taken by Anchor QEA at the project site in February 2021

**Photograph 5**

**View of Tennis and Basketball Courts from Parking Lot South of McCloy Avenue, Looking South**



Source: Photograph taken by Anchor QEA at the project site in February 2021

**Photograph 6**

**View of Existing Warehouses from Port of Stockton Expressway, Looking West**



Source: Photograph taken by Anchor QEA at the project site in February 2021

**Photograph 7**

**View of the Internal Port Rail Network Located North of McCloy Avenue, Looking West**



Source: Photograph taken by Anchor QEA at the project site in February 2021

**Photograph 8**  
**View from Eastern Remediation Area North End Facing North**



Source: Photograph taken by Anchor QEA at the project site in February 2021

**Photograph 9**

**View of Adjacent Property from North Hooper Street Facing East**



Source: Photograph taken by Anchor QEA at the project site in February 2021

### *3.1.2 Applicable Regulations*

#### **3.1.2.1 State Regulations**

California's Scenic Highway Program was created by the state legislature in 1963 with the purpose of protecting and enhancing the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 284. A list of California's scenic highways and a map showing their locations may be obtained from Caltrans' Scenic Highway Coordinators (Stockton Port District 2013). There are no designated state scenic highways in the immediate vicinity of the proposed project. The closest scenic highway to the project site is the portion of State Route 580 from Interstate 5 to State Route 205. This roadway is located 20 miles to the southwest of the Port.

### 3.1.2.2 Local Regulations

The City's 2040 General Plan (City 2018a) sets out policies for land use, transportation, safety, and community health for the City. The land use chapter of the 2040 General Plan addresses visual quality, including urban design and aesthetics issues.

Discussions under the 2040 General Plan land use chapter, which may be applicable to the proposed project, are as follows:

- Require the incorporation of scenic views, including open space features like waterways, wetlands, natural landscapes, and parks, into design of the built environment (Action LU-1.3C)
- Integrate nature into the City and maintain Stockton's urban forest (Policy LU-5.1)
  - Require renovated and new projects to provide open spaces that create gateways, act as collectors for pedestrian systems, and/or provide a social focal point for a project and the surrounding community and corridor, as appropriate (Action LU-5.1A)
- Protect natural resource areas, fish and wildlife habitat, scenic areas, open space areas, agricultural lands, parks, and other cultural/historic resources from encroachment or destruction by incompatible development (Policy LU-5.2)
- Design public facilities and infrastructure to maintain and improve the visual quality of the urban environment, including through the following approaches:
  - Designing buildings and infrastructure to fit into and complement their ultimate surroundings.
  - Buffering buildings and infrastructure from their surroundings as appropriate to shield unsightly areas from public view.
  - Providing appropriate landscaping (Action LU-6.2D).

### 3.1.3 *Environmental Impacts and Mitigation Measures*

#### 3.1.3.1 Baseline

At the time of publication of the NOP for the proposed project, the project site was largely vacant, except for logistic operations at the five existing warehouses located in the Western Warehouse Area. Features within the project site are described in detail in Section 3.1.1.2. As described, the terrain is primarily flat throughout the entire project site and contains a ruderal vegetation, including non-native grasses, lawn, mature native and non-native ornamental trees, remnant asphalt, concrete paving, and compacted dirt (Photographs 2, 3, and 4). The project site also has three derelict abandoned structures and degraded tennis and basketball courts associated with the West Complex's former Navy use (Photograph 5) and five existing warehouses. The areas adjacent to the site are a mix of industrial developed areas and parcels including only ruderal vegetation. Industrial developed areas include several warehouses below 40 feet in height with neutral color tones and industrial features, including a wholesale distributor of plumbing, HVAC, waterworks, fire protection,

and facility supplies, an agricultural product wholesaler, a utility contractor, and a business management consultant. A few of these adjacent facilities are opened and operate throughout the night. Views of the project site are largely obscured on all sides by industrial developments, rail lines, and railcars.

### 3.1.3.2 Thresholds

For purposes of this DEIR, the following thresholds, which are based on Appendix G of the CEQA Guidelines (Environmental Checklist), were used to determine whether the proposed project would result in impacts on aesthetics. The proposed project would have an impact on aesthetics if:

- **AES-1:** The project would have a substantial adverse effect on a scenic vista.
- **AES-2:** The project would substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- **AES-3:** The project would substantially degrade the existing visual character or quality of public views of the site and its surroundings.
- **AES-4:** The project would create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

### 3.1.3.3 Methodology for Determining Impacts

The proposed project involves construction of a 655,200-sf, 36-foot-tall concrete warehouse, 293,951-sf outdoor storage area (exterior slab-on-grade), 418 car and truck trailer parking spaces, truck docks, extension of two rail spurs, and construction of minor ancillary structures on the existing vacant Warehouse Development Area. The warehouse would be built using a concrete tilt-wall process where pre-constructed concrete panels would be installed on-site. Operations are expected to begin following warehouse construction and would involve truck and rail deliveries of commercial products. Operations are anticipated to occur 365 days a year between the hours of 6:30 a.m. and 10:30 p.m. and would require operational and security lighting. The proposed project also includes remediation of Site 47. Overall construction is anticipated to occur between 2022 and 2024 for approximately 28 months.

The CEQA Guidelines define a substantial adverse effect on aesthetics as a significant effect on the environment. A substantial adverse effect on would include impacts on scenic vistas and scenic resources, or associated with visual quality and view blockage, and nighttime illumination and glare. The loss of scenic resources or the introduction of contrasting features that could degrade the visual character of the project area is the focus of the aesthetics analysis. The analysis also addresses project consistency with applicable zoning and other regulations and policies.

An adverse visual impact may occur when an action perceptibly changes the existing physical features of the landscape that are characteristic of the region or local settings; an action introduces new features to the physical landscape that are perceptibly uncharacteristic of the region or local

settings or become visually dominant in the viewshed; or an action blocks or totally obscures aesthetic features of the landscape (CPUC 2010).

### 3.1.3.4 Impact Analysis

#### 3.1.3.4.1 *AES-1: Except as provided in Public Resources Code Section 21099, would the project have a substantial adverse effect on a scenic vista?*

The project site is a largely flat vacant site (outside of the Western Warehouse Area) with no identified scenic vistas located on or adjacent to the site. While the proposed project involves development of the site, including a new 36-foot-tall warehouse, all areas proposed for development are shielded from long-distance views on all sides by existing topography, industrial developments, rail lines, railcars, landscaping, and buildings. The closest residential receptors are located approximately 3,300 feet south and 3,500 feet north of the project site, off of Rough and Ready Island. The project site is not visible from these or any other residential area. The proposed warehouse would be visible from the adjacent roadways, Port Expressway, McCloy Avenue and North Hooper Street; however, it would be consistent with the visual character of the study area.

**Impact Determination:** Because there are no scenic vistas in the project area, and the proposed project is in line with the surrounding visual character, the proposed project would have no effect on a scenic vista.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

#### 3.1.3.4.2 *AES-2: Except as provided in Public Resources Code Section 21099, would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a scenic highway?*

Scenic resources are the visible physical features of a landscape and historic structures that contribute to a unique and exemplary visual setting. Scenic resources constitute all scenery visible to people, including trees, rock outcroppings, and historic buildings within a state scenic highway. Rock outcroppings are visible exposures of bedrock or ancient superficial deposits on the surface of the Earth. There are no scenic resources in the project area. The closest scenic highway to the project is the California Delta Highway, located 20 miles to the southwest of the project site. The proposed project would not be visible from this highway.

**Impact Determination:** The project site is not located along or visible from a scenic highway; therefore, it would not affect scenic resources along a scenic highway.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

*3.1.3.4.3 AES-3: Except as provided in Public Resources Code Section 21099, would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project site is largely vacant (outside of the Western Warehouse Area) and on primarily flat terrain with ruderal vegetation, including non-native grasses, lawn, mature native and non-native ornamental trees, remnant asphalt, concrete paving, compacted dirt, three derelict abandoned structures, and degraded tennis and basketball courts. The most prominent permanent visual change resulting from the proposed project would be from the construction of the warehouse, which would be 36 feet tall. Proposed site conditions, including the warehouse, would be consistent with the existing visual character of the project site and its surroundings, which includes other industrial features similar in scale, such as the Ferguson Building warehouse.

Construction would result in the removal of several mature trees in the Warehouse Development Area. As part of the project, TC NO. CAL. Development would plant at least 30 trees, including Patmore ash, Chinese pistache, coast redwood, and multi-trunk chaste tree, on the Warehouse Development Area. Planted trees would be visible from adjacent roads and benefit views in the immediate vicinity of the project site.

Although the project proposed warehouse would be visible from adjacent roads, including McCloy Avenue, Humphreys Street, Pinter Avenue, Gillis Avenue, North Hooper Street, and the Port of Stockton Expressway, these roads exclusively serve to provide access to industrial sites in the immediate project vicinity. Views of the project site are largely obscured on all sides by existing topography, industrial developments, rail lines, railcars, landscaping, and buildings; the project site is not visible from the nearest residential areas, located approximately 3,300 feet south and 3,500 feet north of the project site, off of Rough and Ready Island.

The warehouse color palette would include grey tones similar to warehouses in the project site's surrounding environment. The warehouse would fit into and complement its ultimate surroundings, which are Port industrial uses. The proposed project is consistent with all applicable zoning and regulations discussed above governing aesthetics and scenic quality.

The proposed project would result in new truck and rail calls in the project area, which constitutes a change in the existing landscape. However, truck and rail operations under the proposed project would be aesthetically similar and consistent with those of existing conditions within the immediately adjacent industrialized areas, including truck operations at the Ferguson Building warehouse, and

would not be visible except from adjacent roads that exclusively serve to provide access to industrial sites within the Port. Short-term construction activities, including warehouse construction and remediation activities, would be similarly obscured from view by on-site and adjoining developments. Therefore, truck, rail, or other vehicle traffic generated by construction and operation would not alter the visual character of the project site and surroundings due to its location within an industrialized area.

No changes to the existing visual character and quality of public views of the site and its surroundings would occur as a result of implementing ICs in the Western Warehouse Area, because of the non-engineering nature of ICs.

**Impact Determination:** While the proposed project would result in a change in the visual character of the project area itself, specifically from changing the Warehouse Development Area from a largely vacant site mostly with ruderal vegetation to a fully constructed and operational 36-foot-tall warehouse, the coherence and unity of the established patterns of landscape features with the adjoining properties would be maintained due to the proposed project's similar aesthetic. Moreover, public views of the project site are limited. Based on the conditions described above, there would be a less-than-significant impact to the existing visual character or quality of the project site from the proposed project.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

*3.1.3.4.4 AES-4: Except as provided in Public Resources Code Section 21099, would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Artificial light impacts are typically associated with light that occurs during the evening and nighttime hours, and may include streetlights, illuminated signage, vehicle headlights, and other point sources. Glare is primarily caused by the reflection of sunlight or artificial light from highly polished surfaces or reflective materials. As described, the Warehouse Development Area is currently vacant with no lighting. The new development would include new exterior lights on all buildings and structures and light stations throughout the parking lots and outdoor storage areas.

New sources of glare would include new windows on the building and from cars and trucks accessing and parking on-site. The warehouse facility would be opened and operational during periods of the night. Short-term construction activities, including warehouse construction and remediation activities, would similarly introduce temporary but new sources of light and glare.

No changes to light and glare would occur as a result of implementing ICs in the Western Warehouse Area, because of the non-engineering nature of ICs.

While the new development would introduce new sources of light and glare, these new sources would not be visible from any residential areas or other sensitive visual receptors and would be consistent with adjacent day and nighttime views in the project area, including the Ferguson Building warehouse.

**Impact Determination:** As discussed, the warehouse facility would be operational throughout the night, and operational and security lighting changes are anticipated as part of the proposed project. Additionally, the proposed project would introduce new sources of glare. However, these new sources of light and glare would be limited to an industrial area with day and nighttime views that are both already affected as well as shielded from sensitive visual receptors by existing topography, industrial developments, rail lines, railcars, landscaping, and buildings. Based on the conditions described above, there would be a less-than-significant impact to daytime and nighttime views from the proposed project.

**Mitigation Measures:** While impacts would be less than significant, implementation of the following mitigation measure would ensure that project lighting and sources of glare are shielded from surrounding areas. The following mitigation measure would be implemented to ensure that no day or nighttime views would be adversely affected in the project area:

- **MM-AES-1: Lighting Plan.** TC NO. CAL. Development will submit for approval a lighting plan for the proposed facilities prior to building permit issuance. The lighting plan shall demonstrate that project lighting is shielded from surrounding areas, and that only the minimum amount of lighting required for safety purposes is provided to avoid adverse effects on surrounding areas. The lighting plan shall also include shielding that would be installed to meet City and Port requirements. In general, lighting fixtures shall be shielded downward and away from the adjacent streets and properties. Construction of the warehouse and related facilities shall be in conformance with the approved plan.

**Residual Impact:** Implementation of MM-AES-1 would ensure that any new source of substantial light or glare would not adversely affect day or nighttime views in the area as compared to existing conditions. Impacts would remain less than significant.

## 3.2 Air Quality

This section describes existing air quality conditions in the project area and analyzes how the proposed project may affect air quality. It also describes applicable rules and regulations pertaining to air quality that could affect the proposed project. For the purposes of the air quality analysis, the study area is defined as the project site and the surrounding area, including roadways, railways, and the San Joaquin River/Stockton DWSC. The closest residential receptors are located approximately 3,300 feet south and 3,500 feet north of the project site off Rough and Ready Island.

### 3.2.1 *Environmental Setting*

The proposed project would occur in the northern portion of the San Joaquin Valley Air Basin (SJVAB), which is managed by SJVAPCD. The SJVAB is bounded by the Sierra Nevada Mountains to the east, the Coast Ranges to the west, and the Tehachapi mountains to the south; and is made up of eight counties in California's Central Valley: San Joaquin; Stanislaus; Merced; Madera; Fresno; Kings; Tulare; and the SJVAB portion of Kern. The climate within the SJVAB is typical of inland valleys in California with hot, dry summers and cool, mild winters. Daytime temperatures in the summer often exceed 100°F, with lows in the 60s. In winter, daytime temperatures are usually in the 50s, with lows around 35°F. Fog is common in the winter and may persist for days. Winds are predominantly up-valley (from the north) in all seasons, but more so in the summer and spring months. Winds in the fall and winter are generally lighter and more variable in direction, but generally blow toward the south and southeast.

Air quality in the SJVAB is impacted by several sources, including motor vehicle emissions, oil production and refining, and agriculture. Because of the valley's unique physical characteristics, the potential for pollution is very high. Surrounding elevated terrain, in conjunction with temperature inversions, frequently restrict lateral and vertical dilution of pollutants. Ozone (O<sub>3</sub>), the major component of the valley's summertime smog, is formed via chemical reactions between reactive organic gases (ROG) and nitrogen oxides (NO<sub>x</sub>) in the presence of ultraviolet radiation or sunlight. Abundant sunshine and warm temperatures in summer are ideal conditions for the formation of photochemical oxidants, and the photochemical pollution (O<sub>3</sub>) becomes common. Tiny particles of solids or liquids (excluding pure water) that are suspended in the atmosphere are known as particulate matter (PM) and are classified according to their diameter in microns as either PM<sub>2.5</sub> (PM less than 2.5 microns in diameter) or PM<sub>10</sub> (PM less than 10 microns in diameter). PM can be emitted directly (primary PM, such as dust or soot), and also can form in the atmosphere through photochemical reactions or gaseous precursors (secondary PM). Much of the valley's ambient PM<sub>10</sub> and PM<sub>2.5</sub> is secondary PM, formed in atmospheric reactions of NO<sub>x</sub>. Due to the combined air pollution sources within the SJVAB and meteorological and geographical effects that limit dispersion of air pollution, the SJVAB can experience high air pollutant concentrations.

### 3.2.1.1 Air Pollutants

Air pollutants are defined as two general types: 1) criteria pollutants, representing pollutants for which the USEPA and ARB have set health- and welfare-protective ambient air quality standards (National Ambient Air Quality Standards [NAAQS] and California Ambient Air Quality Standards [CAAQS]); and 2) TACs, which may lead to serious illness or increased mortality even when present at relatively low concentrations. TACs generally do not have ambient air quality standards.

#### 3.2.1.1.1 Criteria Pollutants

USEPA and ARB classify an area as attainment, unclassified, or non-attainment depending on whether the monitored ambient air quality data show compliance, lack of data, or noncompliance with the ambient air quality standards, respectively. The NAAQS and CAAQS relevant to the proposed project are provided in Table 6. Areas without monitoring data are considered unclassified and are generally treated as attainment areas. As discussed above, the NAAQS and CAAQS are health-based standards. Table 6 includes information on the main health effects associated with exceeding the standards. ARB monitors NAAQS and CAAQS to protect public health. For example, if the state annual average PM<sub>2.5</sub> standard was met, approximately 1,000 premature deaths would be avoided annually (ARB 2015). Local air districts use the NAAQS and CAAQS to develop localized thresholds based on regional risk factors such as weather patterns and geography.

**Table 6  
National and California Ambient Air Quality Standards**

Pollutant	Averaging Period	California Standards	National Standards	Health Effects
O <sub>3</sub>	1-hour	0.09 ppm	--	Breathing difficulties, lung tissue damage
	8-hour <sup>b</sup>	0.070 ppm	0.070 ppm	
PM <sub>10</sub>	24-hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	Increased respiratory disease, lung damage, cancer, premature death
	Annual	20 µg/m <sup>3</sup>	--	
PM <sub>2.5</sub>	24-hour <sup>c</sup>	--	35 µg/m <sup>3</sup>	Increased respiratory disease, lung damage, cancer, premature death
	Annual	12 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>	
CO	1-hour	20 ppm	35 ppm	Chest pain in heart patients, headaches, reduced mental alertness
	8-hour	9.0 ppm	9 ppm	
NO <sub>2</sub>	1-hour	0.18 ppm	0.100 ppm <sup>a</sup>	Lung irritation and damage
	Annual	0.030 ppm	0.053 ppm	
SO <sub>2</sub>	1-hour	0.25 ppm	0.075 ppm <sup>a</sup>	Increases lung disease and breathing problems for asthmatics
	24-hour	0.04 ppm	0.14 ppm	
	Annual	--	0.030 ppm	

Pollutant	Averaging Period	California Standards	National Standards	Health Effects
Lead	30-day	1.5 µg/m <sup>3</sup>	--	Increased body burden and impairment of blood formation and nerve conduction
	Quarter	--	1.5 µg/m <sup>3</sup>	
	3-month	--	0.15 µg/m <sup>3</sup>	
Sulfates	24-hour	25 µg/m <sup>3</sup>	--	Decrease in ventilator function, aggravation of asthmatic symptoms, aggravation of cardiopulmonary disease
Visibility-reducing particles	8-hour	In sufficient amount to give an extinction coefficient of >0.23 inverse kilometers (visual range to less than 10 miles with relative humidity less than 70%)	--	--
Hydrogen sulfide	1-hour	0.03 ppm	--	Odor
Vinyl chloride	24-hour	0.01 ppm	--	Short-term exposure: central nervous system effects – dizziness, drowsiness, and headaches; Long-term exposure: liver damage, cancer

Notes:

Source: ARB 2021a

- The federal 1-hour NO<sub>2</sub> and SO<sub>2</sub> standards are based on the 3-year average of the ninety-eighth and ninety-ninth percentile of daily maximum values, respectively.
- The federal 8-hour O<sub>3</sub> standard is based on the annual fourth highest daily maximum 8-hour concentration, averaged over 3 years.
- The federal 24-hour PM<sub>2.5</sub> standard is based on the 3-year average of the ninety-eighth percentile of the daily values.

The criteria pollutants of primary concern assessed in this DEIR are O<sub>3</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), and sulfur dioxide (SO<sub>2</sub>). Lead, hydrogen sulfide, and vinyl chloride would not be generated as part of the proposed project; therefore, these pollutants are not evaluated.

O<sub>3</sub> is a unique criteria pollutant because it is not directly emitted from proposed project-related sources. Rather, O<sub>3</sub> is a secondary pollutant, formed from the precursor pollutants ROG and NO<sub>x</sub>, which react to form O<sub>3</sub> in the presence of sunlight through a complex series of photochemical reactions. Thus, unlike inert pollutants, O<sub>3</sub> levels usually peak several hours after the precursors are emitted and many miles downwind of the source. Because of the complexity and uncertainty in predicting photochemical pollutant concentrations, O<sub>3</sub> impacts are indirectly addressed by comparing proposed project-generated emissions of ROG and NO<sub>x</sub> to daily emission thresholds set by SJVAPCD.

Table 7 summarizes the federal and state attainment status of criteria pollutants for the SJVAB based on the NAAQS and CAAQS, respectively.

**Table 7**  
**San Joaquin Valley Air Pollution Control District Attainment Status**

Pollutant	Attainment Status	
	Federal	State
O <sub>3</sub>	Nonattainment (8-hour) – Extreme	Nonattainment (1-hour) – Severe Nonattainment (8-hour)
PM <sub>10</sub>	Attainment – Maintenance	Nonattainment
PM <sub>2.5</sub>	Nonattainment – Moderate (Annual) Nonattainment – Serious (24-hour)	Nonattainment
CO	Attainment – Maintenance	Attainment
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment	Attainment
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Attainment
Lead (Pb)	Attainment	Attainment
Hydrogen Sulfide (H <sub>2</sub> S)	No Federal Standard	Unclassified
Visibility-Reducing Particles	No Federal Standard	Unclassified

Note:

Sources: ARB 2021b; USEPA 2021a

### 3.2.1.1.2 Local Air Monitoring Levels

Table 8 shows the most recent 3 years of monitored values for those criteria pollutants currently monitored at the Hazelton Street station (1593 East Hazelton Street, Stockton, California) located approximately 4.5 miles east of the project site. During this time, there were exceedances of the state and national 8-hour O<sub>3</sub> standard, the state PM<sub>10</sub> standard, and the state and national PM<sub>2.5</sub> 24-hour standard. No violations were recorded of the NO<sub>2</sub> or CO standards.

**Table 8**  
**Maximum Pollutant Concentrations Measured at the Stockton-Hazelton Street Monitoring Station**

Pollutant/Parameter	2013	2014	2015
<b>O<sub>3</sub></b>			
Maximum 1-hour/8-hour average concentration (ppm)	0.080/0.067	0.090/0.077	0.094/0.078
Number of days state/national 1-hour standard exceeded (ppm)	0	0	0
Number of days state/national 8-hour standard exceeded	0	4	2

Pollutant/Parameter	2013	2014	2015
<b>PM<sub>10</sub></b>			
Maximum state/national 24-hour concentration (µg/m <sup>3</sup> )	95.5/90.1	94.0/90.0	55.3/54.1
Number of days state/national 24-hour standard exceeded	58.2/0.0	18.0/0.0	24.5/0.0
<b>PM<sub>2.5</sub></b>			
Maximum state/national 24-hour concentration (µg/m <sup>3</sup> )	66.5/66.5	56.8/56.8	58.8/58.8
Annual state/national average	--/17.6	12.3/12.1	12/12.8
Number of days national 24-hour standard exceeded	27.6	16.0	12.2
<b>NO<sub>2</sub></b>			
Maximum 1-hour average concentration (ppb)	62.4	66.9	58.0
Annual average (ppb)	16	13	12
Number of days state/national standard exceeded	0/0	0/0	0/0
<b>CO</b>			
Maximum 1-hour/8-hour average concentration (ppm)	2.7/1.8	2.8/2.1	2.3/1.5
Number of days state/national 1-hour standard exceeded	0	0	0
Number of days state/national 8-hour standard exceeded	0	0	0

Notes:

Sources: ARB 2021b; USEPA 2021a

O<sub>3</sub> 8-hour exceedances are based on 0.070 ppm.

### 3.2.1.1.3 Toxic Air Contaminants

TACs are airborne compounds that are known or suspected to cause adverse human health effects after long-term or short-term exposure. Cancer risk can result from long-term exposure, and non-cancer health effects can result from either chronic or acute exposure. Examples of TAC sources are diesel- and gasoline-powered internal combustion engines in mobile sources; industrial processes and stationary sources such as dry cleaners, gasoline stations, and paint and solvent operations; and stationary fossil fuel-burning combustion sources, such as power plants. Table 9 describes health effects of the possible TACs of concern monitored in California. Of the pollutants listed in Table 9, diesel particulate matter (DPM) from combustion engines in rail and trucks would be the primary TAC of concern.

**Table 9  
Toxic Air Contaminant Health Effects**

Pollutant	Health Effects
Benzene	Central nervous system depression, nausea, tremors, drowsiness, dizziness, headache, irritation of the eyes and respiratory tract. Chronic exposure may reduce the production of both red and white blood cells resulting in aplastic anemia. Exposure to benzene may result in an increased risk of contracting cancer
Chlorobenzene	Headaches, numbness, sleepiness, nausea, and vomiting

<b>Pollutant</b>	<b>Health Effects</b>
Diesel particulate matter	Respiratory damage and premature death, and may result in increased risk of contracting cancer
Ethyl benzene	Eye and throat irritation; exposure to high levels can result in vertigo and dizziness
Ethylene glycol monobutyl ether	Eye, respiratory tract, and skin irritation and burns; inhalation may cause headaches and hemolysis (red blood cell breakage)
Hexane	Short-term exposure affects the nervous system and can cause dizziness, nausea, headaches, and even unconsciousness. Chronic exposure can cause more severe damage to the nervous system
Isopropyl alcohol	Skin rash, itching, dryness and redness, irritation of the nose and throat. Repeated high exposure can cause headache, dizziness, confusion, loss of coordination, unconsciousness and even death
Methanol	Chronic exposure can cause visual problems and blindness, convulsions, coma, loss of consciousness, kidney failure, liver damage, low blood pressure, respiratory arrest, and damage to the central nervous system
Naphthalene	May cause nausea, vomiting, diarrhea, blood in the urine, and a yellow color to the skin
Propylene glycol monomethyl ether	Can irritate the nose, throat, and lungs causing coughing, wheezing, and/or shortness of breath, headaches, dizziness, lightheadedness, and passing out
Toluene	Irritation of the eyes and nose; weakness, exhaustion, confusion, euphoria, dizziness, headache; dilated pupils, lacrimation (discharge of tears); anxiety, muscle fatigue, insomnia; numbness or tingling of the skin; dermatitis; liver and kidney damage
Xylenes (mixed)	Depression of the central nervous system, with symptoms such as headache, dizziness, nausea, and vomiting

Note:

Source: USEPA Integrated Risk Information System (USEPA 2021b)

## 3.2.2 *Applicable Regulations*

### 3.2.2.1 **Federal**

#### 3.2.2.1.1 *Clean Air Act*

USEPA is responsible for setting and enforcing the NAAQS for O<sub>3</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead under the Clean Air Act (CAA). USEPA also establishes emission standards for on-road vehicles and off-road engines. The CAA forms the basis for national pollution control and delegates the enforcement of the federal standards to the states. In California, ARB and local air agencies have the shared responsibility for enforcing air pollution regulations, with the local agencies having primary responsibility for regulating stationary emission sources. In the SJVAB, SJVAPCD has this responsibility.

In federal nonattainment areas, the CAA requires preparation of a State Implementation Plan (SIP) detailing how the state will attain the NAAQS within mandated time frames. In response to this requirement, local air quality agencies, in collaboration with other agencies, such as ARB, periodically

prepare Air Quality Management Plans (AQMPs) designed to bring the area into attainment with federal requirements and to incorporate the latest technical planning information. The AQMP for each nonattainment area is then incorporated into the SIP, which is submitted by ARB to USEPA for approval. USEPA often approves portions and disapproves other portions of submitted SIPs.

#### *3.2.2.1.2 Emission Standards for Non-Road Diesel Engines*

USEPA has established a series of progressively cleaner emission standards for new non-road (off-road) diesel engines. Tier 1 standards were phased in from 1996 to 2000; Tier 2 standards were phased in from 2001 to 2006; Tier 3 standards were phased in from 2006 to 2008; and Tier 4 standards, which may require add-on emission control equipment, were phased in from 2008 to 2015. For each tier, the phase-in schedule is driven by engine size. To enable sulfur-sensitive control technologies in Tier 4 engines, USEPA mandated reductions in the sulfur content of non-road diesel fuels to 15 parts per million (ppm; also known as ultra-low-sulfur diesel), effective 2010 (DieselNet 2017). The federal fuel standard is preempted by the California standard, which took effect in 2006. These standards would apply primarily to construction equipment associated with the proposed project.

### **3.2.2.2 State**

#### *3.2.2.2.1 California Clean Air Act*

The California Clean Air Act (CCAA), adopted in 1988, requires nonattainment areas to achieve and maintain CAAQS and mandates that local air districts develop triennial plans for attaining CAAQS. ARB is responsible for establishing CAAQS, ensuring CCAA implementation, and regulating emissions from consumer products and motor vehicles. ARB established CAAQS for all pollutants for which USEPA has established NAAQS, as well as for sulfates, visibility, hydrogen sulfide, and vinyl chloride. CAAQS are generally more stringent than NAAQS.

#### *3.2.2.2.2 California Diesel Fuel Regulation*

ARB has set sulfur limitations for diesel fuel sold in California for use in on- and off-road motor vehicles and to fulfill ARB's 2000 Diesel Risk Reduction Plan. Harbor craft and intrastate locomotives (switch locomotives) were originally excluded from the rule but were later included by a 2004 rule amendment. Under this rule, diesel fuel used in motor vehicles, except harbor craft and intrastate locomotives, has been limited to 500 ppm sulfur since 1993 and to 15 ppm sulfur since September 2006. Diesel fuel used in intrastate locomotives has been limited to 15 ppm sulfur since January 1, 2007. The proposed project would not involve the use of harbor craft.

#### *3.2.2.2.3 California Air Resources Board Heavy-Duty Truck Idling Regulation*

This ARB rule became effective in 2005 and prohibits heavy-duty diesel trucks from idling for longer than 5 minutes at a time, unless they are queueing, provided the queue is located beyond 100 feet from homes or schools.

#### *3.2.2.2.4 California Air Resources Board Cargo Handling Equipment at Ports and Intermodal Rail Yards*

This rule became effective in December 2005 when ARB approved the Regulation for Mobile Cargo Handling Equipment at Ports and Intermodal Rail Yards (13 CCR 79), which was designed to use best available control technology to reduce diesel PM and NO<sub>x</sub> emissions from mobile cargo handling equipment at ports and intermodal rail yards. Since January 1, 2007, the regulation has imposed emission performance standards on new and in-use terminal equipment that vary by equipment type. In October 2012, the Office of Administrative Law approved amendments to the regulation to provide additional flexibility for cargo handling equipment owners/operators in an effort to reduce compliance costs while continuing to reduce emissions.

#### *3.2.2.2.5 California Air Resources Board In-Use Off-Road Diesel Vehicle Rule*

In July 2007, ARB adopted a rule that requires owners of off-road mobile equipment powered by diesel engines 25 horsepower or larger to meet the fleet average or best available control technology requirements for NO<sub>x</sub> and PM emissions by March 1 of each year. The rule is structured by fleet size: large, medium, and small. Medium-sized fleets receive deferred compliance, and small fleets are exempt from NO<sub>x</sub> requirements and receive deferred compliance. The regulation was adopted in April 2008 and amended in 2011, delaying the initial compliance date for all fleets by 4 years.

#### *3.2.2.2.6 California Air Resources Board Statewide Bus and Truck Regulation*

This regulation, adopted in 2008, requires the installation of PM retrofits on all heavy-duty trucks beginning in 2012 and replacement of older trucks starting in 2015. All vehicles must have 2010 model year engines or equivalent by 2023.

#### *3.2.2.2.7 Toxic Air Contaminant Regulations*

California established the California TAC Program (AB 1807 and AB 2728) in 1983. This program sets provisions to implement the national program for control of hazardous air pollutants. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588), established in 1987, is designed to provide information to state and local agencies and to the public on the extent of airborne TAC emissions from stationary sources and the potential public health impact of those emissions. The Hot Spots Act requires that the Office of Environmental Health Hazard Assessment develop Health Risk Assessments (HRA) guidelines. The Hot Spots Act requires operators of certain stationary sources to

inventory air toxic emissions from their operations and prepare an HRA, if directed by their local air district, to determine the potential health impacts of their air toxic emissions.

#### *3.2.2.2.8 Senate Bill 1000: The Planning for Healthy Communities Act*

The Planning for Healthy Communities Act (Senate Bill [SB] 1000) authored by Senator Connie Leyva and cosponsored by the California Environmental Justice Alliance and the Center for Community Action and Environmental Justice was passed in 2016. SB 1000 requires cities and counties to adopt an Environmental Justice element, or integrate environmental justice-related policies, objectives, and goals throughout other elements of their general plan. This law also includes a process for community members to become involved in the decision-making processes associated with land use planning.

#### *3.2.2.2.9 Assembly Bill 617: Nonvehicular Air Pollution*

The Nonvehicular Air Pollution Act (AB 617) was passed to address criteria air pollutants and toxic air contaminants from sources other than vehicles. AB 617 is focused on environmental justice communities and establish a community-scale emissions abatement program specific to the community's needs. The law also updates air quality standards for certain stationary sources located in or contributing to nonattainment areas; provides for improved enforcement; and ensures community participation in the process. In response to AB 617, ARB established the CAPP, which identifies the communities that would fall under the AB 617 program and be subject to the community air monitoring system or community emissions reduction plan (CERP) requirements. The law gives the responsibility to develop and implement AB 617 to California's local air quality management districts and requires those local districts to develop a focused process to engage the community and address emissions. As described in Section 1.3.3.2, in response to AB 617, ARB and SJVAPCD approved a CERP for the Southwest Stockton community in March 2021.

### **3.2.2.3 Regional**

California's air quality is monitored and regulated at the state level by ARB and at the local and regional level by air pollution control authorities known as Air Pollution Control Districts or Air Quality Management Districts. The role of the air districts includes developing clean air plans and CEQA guidance.

#### *3.2.2.3.1 San Joaquin Valley Air Pollution Control District*

SJVAPCD is responsible for implementing federal and state regulations in the air basin, permitting stationary sources of air pollution, and developing the local elements of the SIP. Emissions from indirect sources, such as automobile traffic associated with development projects, are addressed through SJVAPCD's air quality plans, which are each air quality district's contribution to the SIP. The

most recent 2018 PM<sub>2.5</sub> Plan was adopted by the District Governing Board on November 15, 2018, and by ARB on January 24, 2019, and has been forwarded to USEPA for final approval.

In addition to permitting and rule compliance, air quality management at the local level is also accomplished through development of regional CEQA significance thresholds and mitigation measures. SJVAPCD's thresholds of significance are based on the CAAQS and NAAQS and represent a regional approach to meeting CAAQS and NAAQS recognizing the air districts attainment status, emission sources, and regional geography. SJVAPCD's CEQA significance thresholds are applicable to the proposed project.

SJVAPCD is responsible for permitting several components of the proposed project's operation. The facility currently is authorized to operate various unloading operations under a PTO. Specific regulations applicable to the project include the following.

- **SJVAPCD Rule 4101 – Visible Emissions:** SJVAPCD Rule 4101 prohibits a single source to discharge any air contaminant, other than uncombined water vapor, which exceeds the standards set forth in Section 5 of this Rule. The facility is subject to requirements of this rule and will continue to comply with SJVAPCD Rule 4101.
- **SJVAPCD Rule 4102 – Nuisance:** SJVAPCD Rule 4102-4 prohibits the discharge any air contaminants, which would cause injury, detriment, nuisance, or annoyance to the public. The facility is subject to requirements of this rule and will continue to comply with SJVAPCD Rule 4102.
- **SJVAPCD Rule 4201 – Particulate Matter Concentration:** SJVAPCD Rule 4201-3 prohibits a single source to discharge dust, fumes, or suspended PM in excess of 0.1 grains per dry standard cubic foot under dry conditions. The facility is subject to the requirements of this rule and will continue to comply with SJVAPCD Rule 4201.
- **SJVAPCD Rule 4202 – Particulate Matter Emission Rate:** SJVAPCD Rule 4202-4 prohibits the discharge of PM into the atmosphere at a rate which exceeds the limitations determined by the process weight as defined and detailed in SJVAPCD Rule 4202. The facility is subject to the requirements of this rule and will continue to comply with SJVAPCD Rule 4202.
- **SJVAPCD Rule 8021 – Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities:** SJVAPCD Rule 8021 provides fugitive dust control requirements for any construction, demolition, excavation, extraction, and other earthmoving activities. TC NO. CAL. Development and the Port will comply with all provisions of SJVAPCD Rule 8021.
- **SJVAPCD Rule 8061 – Paved and Unpaved Roads:** SJVAPCD Rule 8061 limits fugitive dust emissions from paved and unpaved roads by implementing control measures and design criteria. This rule applies to any new or existing public or private paved or unpaved road, road construction project, or road modification project.

- **SJVAPCD Rule 8041 – Carryout and Track Out:** SJVAPCD Rule 8041 limits fugitive dust emissions from carryout and track out. Under this rule, the owner/operator shall remove all visible carry out and trackout at the end of each workday.
- **AB 617 CERP:** The Stockton area has an ARB-approved CERP as of March 2021 pursuant to SB 617.

### 3.2.2.3.2 *Sacramento Metropolitan Air Quality Management District*

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is the regional agency responsible for air quality regulation within the Sacramento Valley Air Basin. The SMAQMD regulates air quality through its planning and review activities; has permit authority over most types of stationary emission sources; and can require stationary sources to obtain permits and impose emission limits, set fuel or material specifications, or establish operational limits to reduce air emissions. The SMAQMD regulates new or expanding stationary sources of TACs. For state air quality planning purposes, Sacramento County is classified as a severe nonattainment area for ozone. The “severe” classification triggers various plan submittal requirements and transportation performance standards. One such requirement is that SMAQMD update the Clean Air Plan every 3 years to reflect progress in meeting the air quality standards and to incorporate new information regarding the feasibility of control measures and new emission inventory data.

## 3.2.3 *Environmental Impacts and Mitigation Measures*

### 3.2.3.1 **Baseline**

At the time of publication of the NOP for the proposed project, most of site is vacant with no operations. There are five existing warehouses on the Western Warehouse areas which were in operation under baseline conditions and would continue to operate at existing levels post-project. Therefore, these operations are not considered as part of the air quality assessment as there would be no change to these operations as a result of the proposed project.

### 3.2.3.2 **Thresholds**

In addition to the SJVAB, the proposed project would also result in truck and rail trips in other California air basins. Trucks and rail would travel to various destinations in Northern California, including through areas managed by the SMAQMD.

For purposes of this DEIR, the following thresholds, which are based on the Appendix G of the CEQA Guidelines (Environmental Checklist), SJVAPCD guidance, and applicable air district thresholds (Table 10), were used to determine whether the proposed project would result in air quality impacts. The proposed project would have an impact on air quality if:

- **AQ-1:** The project would conflict with or obstruct implementation of the applicable air quality plan.

- **AQ-2:** The project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.
- **AQ-3:** The project would expose sensitive receptors to substantial pollutant concentrations.
- **AQ-4:** The project would result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

**Table 10  
Air Districts Criteria Pollutant Thresholds**

Pollutant	Construction Emission Thresholds (tons per year)	Operations		
		Annual (tons per year)		Daily (pounds per day)
<b>San Joaquin Valley Air Pollution Control District<sup>1</sup></b>				
		<b>Non-Permitted Equipment and Activity Threshold (tons per year)</b>	<b>Permitted Equipment and Activity Threshold (tons per year)</b>	
NO <sub>x</sub>	100	100	100	100
ROG	10	10	10	100
CO	100	100	100	100
PM <sub>10</sub>	15	15	15	100
PM <sub>2.5</sub>	15	15	15	100
SO <sub>2</sub>	27	27	27	100
<b>Sacramento Metropolitan Air Quality Management District<sup>2</sup></b>				
PM <sub>10</sub>	NA	14.6		80
PM <sub>2.5</sub>	NA	15.0		82
NO <sub>x</sub>	NA	--		65
VOC	NA	--		65

Notes:

1. Source: SJVAPCD 2015a
2. Source: SMAQMD 2020

### 3.2.3.3 Methodology for Determining Impacts

A summary of assumptions related to the air quality analysis is provided in the following subsections. Complete details, as well as modeling results related to the air quality analysis, can be found in Appendix D.

### 3.2.3.3.1 Construction

Construction emissions would be generated by construction equipment, including trucks used to transport material on-site and limited off-site movements, and worker vehicles associated with remediation and terminal construction and are anticipated to occur over a period of 28 months between 2022 and 2024. The proposed project construction would consist of the following improvements over three phases that would generally occur sequentially:

- **Phase 1: Site Preparation and Remediation in Warehouse Development Area.** Anticipated to occur in 2022 (expected 8-month duration)
- **Phase 2: Construction of Warehouse and Improvements in Warehouse Development Area.** Anticipated to occur in 2022 and 2024 (expected 20-month duration with 1 month of potential overlap with Phase 1)
- **Phase 3: Remediation of Western and Eastern Remediation Areas, and Western Warehouse Area.** Anticipated to occur in 2024 (expected 1-month duration)

Based on the construction schedule (Table 3), maximum daily and annual construction emissions were calculated by individual activity and total activity. Construction emissions would result from diesel-fueled construction equipment and on-road vehicles. Land-based construction emissions for the proposed project were calculated using CalEEMod software, version 2016.3.2 (CAPCOA 2016). A full description of construction assumptions, including equipment horsepower ratings, can be found in Appendix D.

### 3.2.3.3.2 Operations

Operational emissions would originate from terminal operations including on-terminal equipment, rail activities, trucks, and employee vehicle movements. The warehouse would operate 365 days a year from 6:30 a.m. to 10:30 p.m. between Monday and Friday with operations occurring on Saturdays from 6:30 a.m. to 2:30 p.m. and on Sundays from 2:00 p.m. to 10:30 p.m. The facility would require 100 daily employees working two shifts with a 30-minute overlap (6:30 a.m. to 2:30 p.m. and 2:00 p.m. to 10:30 p.m.).

Truck trips would be a mixture of local and regional travel deliveries. The average truck trip was assumed to be 22 miles per conversations with TC NO. CAL. Development. Exhaust, brake wear, and tire wear emission factors reflect existing USEPA on-road engine standards per ARB's On-Road EMFAC Database (ARB 2021c). Entrained road dust emissions were quantified per ARB's methodology for entrained road dust (ARB 2016). Emissions were calculated by multiplying truck activity by the emission factors. On-site mobile sources include forklifts and yard hostlers.

Table 11 presents a summary of the proposed project's operational travel assumptions.

**Table 11  
Fleet Travel Assumptions**

<b>Fleet Type</b>	<b>Average Trip Rate one-way trips/day</b>	<b>Average Trip Length miles/one-way trip</b>	<b>Annual Activity days/year</b>	<b>Annual Trips one-way trips/year</b>	<b>Annual VMT miles/year</b>
Passenger	200	16.8	313	62,600	1,051,680
Delivery Trucks	610	22	313	190,996	4,165,324
Yard Hostler	202	1.5	313	63,211	94,817

Rail deliveries would be made by manifest rail. Line-haul trains would transport the product from the Port to Union Pacific Railroad’s (UP’s) J.R. Davis Yard in Roseville, California; line-haul locomotive emissions were therefore calculated within both SJVAPCD and SMAQMD. From Roseville, train cars would be shipped to a variety of destinations in unknown numbers. Switcher trains owned by CCT, the switcher operator at the Port, would be used to assemble/disassemble line-haul trains and provide short transport to the UP line-haul connection. Switcher locomotives would operate within or near the Port in SJVAPCD; therefore, switcher emissions were calculated within SJVAPCD.

Line-haul locomotive emissions were calculated based on locomotive fuel use and locomotive emission factors. Fuel use was determined based on the number and weight of filled railcars needed to transport product, the number and weight of locomotives needed to transport the required railcars, rail transit distance, and a fuel consumption factor reported by ARB for line-haul locomotives (ARB 2021c). Line-haul locomotive emission factors for each engine tier were obtained by calculating an average of the USEPA line-haul emission factors weighted by ARB’s line-haul engine tier distribution for each analysis year (ARB 2021c).

Switcher locomotive emissions were calculated based on locomotive fuel use and locomotive emission factors. Fuel use was calculated based on the number of switcher locomotives required for a switch, an average number of switching events, and average switching time based on past Port documents and confirmed by TC NO. CAL. Development. Switcher locomotive emission factors reflect USEPA short-haul distance locomotive emission factors for each engine tier (ARB 2021c), weighted by CCT’s switcher engine distribution (CCT 2018).

Rail assumptions are presented in Table 12.

**Table 12**  
**Rail Assumptions**

	<b>Values</b>
Weight of Empty Railcar	73,400 lb/car
Weight of Materials Imported	200,000 lb/car
Locomotives per Train	2.0 locomotive/train
Weight of Locomotive	416,000 lb/locomotive
Cars per Train	10 car/train
Net Aggregated Fuel Consumption Index	868 ton-mi/gal
Miles Traveled	25 mi/one-way
Baseline Trip Rate	554 cars/yr
Full Build-out Trip Rate	2,053 cars/yr
Baseline Fuel Consumption (Inbound)	2,844 gallons/yr
Baseline Fuel Consumption (Outbound)	1,249 gallons/yr
Full Build-out Project Fuel Consumption (Inbound)	10,541 gallons/yr
Full Build-out Project Fuel Consumption (Outbound)	4,629 gallons/yr

All operational modeling assumptions and emission factors can be found in Appendix D. Emissions were calculated using industry-accepted emission factors, and source activity (e.g., truck transit distance) provided by TC NO. CAL. Development. Truck activity and calculated emissions are provided in Appendix D. Rail activity and calculated emissions are provided in Appendix D.

### 3.2.3.4 Impact Analysis

#### 3.2.3.4.1 *AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?*

SJVAPCD has established thresholds of significance for criteria pollutant emissions, which are based on New Source Review offset requirements for stationary sources and the NAAQS and CAAQS. These thresholds represent a regional approach to meeting the NAAQS and CAAQS, recognizing SJVAPCD's attainment status, emission sources, and regional geography. Because the SJVAB is an extreme O<sub>3</sub> nonattainment area, stationary sources in SJVAPCD are subject to some of the toughest regulatory requirements in the nation. Emission reductions achieved through implementation of offset requirements are a major component of SJVAPCD's air quality plans. Therefore, projects with emissions below the thresholds of significance for criteria pollutants would be determined to not

conflict or obstruct implementation of the air quality plans, while emissions exceeding those thresholds would conflict with and obstruct implementation.

SMAQMD also has established thresholds aimed at reducing criteria pollutant emissions below applicable air quality plans to meet SIP standards in its air basin. Likewise, projects with emissions below the thresholds of significance for criteria pollutants would be determined to not conflict or obstruct implementation of the air quality plans, while emissions exceeding those thresholds would conflict with and obstruct implementation.

Tables 13 and 14 present the construction and operational emissions resulting from the proposed project. As shown, construction emissions would be below significance thresholds, but annual operational emissions would exceed SJVAPCD thresholds. Because rail would travel within areas managed by the SMAQMD, operational emissions are also compared to SMAQMD threshold. Annual emissions within this area would be less than SMAQMD thresholds.

In addition to the regional plans, the proposed project is within the planning area identified under Stockton's CERP (see Section 3.2.2.2.9). The CERP describes the sources of pollution impacting the Southwest Stockton community. Strategies for reducing air pollution impacts and health risk reduction from these sources were evaluated and selected as part of the public engagement process between the AB 617 Community Steering Committee, SJVAPCD, and ARB.

Construction would result in the removal of several mature trees. As part of the proposed project, TC NO. CAL. Development would plant at least 30 trees, including Patmore ash, Chinese pistache, coast redwood, and multi-trunk chaste tree, on the Warehouse Development Area to compensate for the loss of vegetation. The Community Steering Committee has identified installation of vegetative barriers as a priority for air pollutant mitigation. The committee has expressed the need for the installation of vegetative barriers (and sound walls) around and near sources of concern such as schools, along truck routes, and near the Port, Charter Way, Boggs Tract, and El Dorado with an additional priority along Interstate 5.

**Impact Determination:** As shown under AQ-2, because the proposed project would exceed thresholds, it would conflict with and obstruct implementation of SJVAPCD's O<sub>3</sub> attainment plans, including its most recent 2016 plan for the 2008 8-hour O<sub>3</sub> standard. Impacts would be considered significant. While the project site is not within the priority areas for vegetative barriers as identified in the CERP, TC NO. CAL. Development's planting plan conforms with the CERP's goals to increase vegetation to reduce air pollution.

**Mitigation Measures:** The following mitigation measures would be implemented to reduce potential impacts related to applicable SJVAPCD plans:

- **MM-AQ-1: Construction Truck Idling** (see AQ-2 for more information).

- **MM-AQ-2: Use of Final Tier 4 Engines During Construction** (see AQ-2 for more information).
- **MM-AQ-3: Truck Idling Reductions** (see AQ-2 for more information).
- **MM-AQ-4: Use of Clean Trucks** (see AQ-2 for more information).
- **MM-AQ-5: Use of Clean Cargo Handling Equipment** (see AQ-2 for more information).

**Residual Impact:** Implementation of MM-AQ-1 through MM-AQ-5 would reduce construction and operational emissions below applicable air quality thresholds.

As discussed in Section 1.3.3.2, the Port is an active member of the AB 617 Community Steering Committee and is working to develop strategies to protect public health and the environment. A primary concern expressed by AB 617 Community Steering Committee members during meeting discussions is that heavy-duty truck exhaust, specifically attributable to truck traffic and idling at the Port and from highways and freeways, result in increased exposure to emissions for residents that live near these heavy-duty trucking corridors and major thoroughfares in the community. MM-AQ-1, MM-AQ-3, and MM-AQ-5 are consistent with the goals of the CERP. As discussed in Section 1.5.2, the Port is developing longer-term plans and strategies to better understand and reduce air emissions related to Port development and projects.

Therefore, impacts are considered less than significant.

*3.2.3.4.2 AQ-2: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

SJVAPCD has developed quantitative criteria to evaluate the significance of air emissions under CEQA. Specifically, a significant impact would occur if implementation of a project would result in emissions that exceed the SJVAPCD-established thresholds shown in Table 9. SJVAPCD’s CEQA thresholds represent the emission levels that would result in a direct or indirect project impact, as well as impacts resulting in a cumulatively considerable net increase in pollutants. SJVAPCD applies the CEQA thresholds separately to three emission categories: 1) construction emissions; 2) operational non-exempt equipment emissions; and 3) operational exempt emissions.

**Construction.** Table 13 shows that the proposed project would not generate construction emissions that exceed SJVAPCD’s thresholds.

**Table 13  
Proposed Project Construction Emissions (Tons per Year)**

Year	ROG	NOx	PM <sub>10</sub>	PM <sub>2.5</sub>	CO	SOx
2022	0.9	3.4	2.1	0.010	0.23	0.12

2023	3.7	1.9	2.6	0.0103	0.29	0.10
2024	0.0139	0.0065	0.0042	0.0000	0.0005	0.0002
2025	0.12	1.0	0.85	0.0025	0.053	0.039
Threshold	10	10	15	15	10	27
Significant	N	N	N	N	N	N

Notes:

Emissions may not add precisely due to rounding.

Emissions estimated using CalEEMod 2016.3.1.

**Operations.** Operational non-permitted emissions include emissions from all operational sources that are exempt from stationary source air permitting, including both stationary and mobile sources. Operational permitted emissions include emissions from any operational source subject to stationary source air permitting (SJVAPCD 2015a). Table 14 presents the unmitigated emissions of all sources assuming full operations.

**Table 14**  
**Proposed Project Operational Emissions (Full Build-Out, 2024), Unmitigated (Tons per Year)**

<b>Emissions Source</b>	<b>ROG</b>	<b>NOx</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>CO</b>	<b>SOx</b>
<b>Non-Permitted Sources</b>						
Architectural Coating	4.8	--	--	--	--	--
Consumer Products	2	--	--	--	--	--
Natural Gas Use	0.0075	0.068	0.0052	0.0052	0.057	4.10E-04
Vehicles (Employees)	0.11	0.1	0.192	0.0329	1.4	0.0039
Delivery Trucks	0.397	8.69	1.2721	0.392	1.41	0.397
Yard Hostlers	0.0047	0.315	2.26E-02	5.91E-03	6.10E-02	0.0047
Class I Rail (Mainline)	0.081	1.9	0.044	0.04	0.45	0.0016
Class III Rail (Switching)	0.027	0.42	0.015	0.013	0.13	5.30E-04
Terminal Equipment	0.0025	0.033	0.0018	0.0018	0.019	4.60E-05
<b>Total Non-Permitted Emissions</b>	<b>7.4</b>	<b>12</b>	<b>1.5</b>	<b>0.49</b>	<b>3.6</b>	<b>0.061</b>
SJVAPCD Air Quality Thresholds of Significance	10	10	15	15	100	27
Exceeds Significance	No	<b>Yes</b>	No	No	No	No
<b>Permitted Sources</b>						
Emergency Generator	0.0078	0.69	0.0074	0.0074	0.065	7.60E-04
<b>Total Permitted Emissions</b>	<b>0.0078</b>	<b>0.69</b>	<b>0.0074</b>	<b>0.0074</b>	<b>0.065</b>	<b>7.60E-04</b>
SJVAPCD Air Quality Thresholds of Significance	10	10	15	15	100	27
Exceeds Significance	No	No	No	No	No	No

As discussed previously, rail would travel to various destinations in northern California, including through areas overseen by SMAQMD. While determining actual travel routes (and the specific numbers of trains on each route) in the regional area is somewhat speculative, some mainline trains would travel to north to the Roseville rail yard within the SMAQMD. However, emissions would be less than 0.1 ton per year for both PM<sub>10</sub> and PM<sub>2.5</sub>, which would be well under SMAQMD thresholds. **Impact Determination:** As shown in Table 13, construction emissions would be below SJVAPCD significance thresholds.

As shown in Table 14, operational emissions would exceed annual SJVAPCD NO<sub>x</sub> thresholds in the SJVAB. NO<sub>x</sub> emissions would be generated by truck operations on terminal and travel and rail operations on terminal and travel. Accordingly, impacts would be considered significant.

**Mitigation Measures:** The following mitigation measures would be implemented to reduce construction and operational emissions:

- **MM-AQ-1: Construction Idling Reductions.** TC NO. CAL. Development and the Port will require construction contractors to minimize heavy-duty construction idling time to 2 minutes where feasible. Exceptions include vehicles that need to idle to perform work (such as a crane providing hydraulic power to the boom), vehicles being serviced, or vehicles in a queue waiting for work.
- **MM-AQ-2: Use of Tier 4 Engines During Construction.** All off-road diesel-powered heavy equipment exceeding 50 horsepower used to construct the proposed project will be equipped with Tier 4 engines, except for specialized equipment or when Tier 4 engines are not available. In place of Tier 4 engines, off-road diesel-powered heavy equipment will incorporate retrofits such that emission reductions achieved equal or exceed that of a Tier 4 engine.
- **MM-AQ-3: Truck Idling Reductions.** TC NO. CAL. Development will require trucks to minimize idling time to 2 minutes while on terminal.
- **MM-AQ-4: Use of Clean Trucks.** TC NO. CAL. Development will encourage its customers to use clean trucks (defined as model year 2017 or newer) to transport cargo. TC NO. CAL. Development will also educate customers about the SJVAPCD Truck Replacement Program via direct or electronic mailings. In addition, TC NO. CAL. Development will require all trucks be in compliance with ARB air quality regulations for on-road trucks, including ARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program (PSIP), and the Statewide Truck and Bus Regulation. TC NO. CAL. Development will post a copy of the SJVAPCD Truck Replacement Program information currently available at <http://valleyair.org/grants/truck-replacement.htm> and applicable ARB regulations at the terminal.
- **MM-AQ-5: Use of Clean Yard Equipment.** TC NO. CAL. Development will require terminal and yard equipment, including yard hostlers, yard equipment, forklifts, and pallet jacks to be

the cleanest available equipment (for future purchases). Considerations for clean equipment will include a first preference for zero-emission equipment, a second preference for near-zero equipment, and then for the cleanest available equipment if neither zero nor near-zero equipment are available or feasible. TC NO. CAL. Development will ensure the proper infrastructure to support such equipment is available.

**Residual Impact:** Table 15 presents the mitigated emissions.

**Table 15  
Proposed Project Construction and Operational Emissions (Full Build-Out, 2024), Mitigated  
(Tons per Year)**

Emissions Source	ROG	NOx	PM <sub>10</sub>	PM <sub>2.5</sub>	CO	SOx
<b>Construction Emissions</b>						
2022	0.7	1.2	2.0	0.010	0.14	0.042
2023	3.7	0.9	2.6	0.0103	0.25	0.057
2024	0.014	0.003	0.004	0.00003	0.0003	0.0001
2025	0.024	0.22	0.65	0.0025	0.018	0.0065
SJVAPCD Air Quality Thresholds of Significance	10	10	100	27	15	15
<b>Exceeds Significance</b>	No	No	No	No	No	No
<b>Operational Emissions; Non-Permitted Sources</b>						
Architectural Coating	4.8	--	--	--	--	--
Consumer Products	2.0	--	--	--	--	--
Natural Gas Use	0.0075	0.068	0.0052	0.0052	0.057	4.1E-04
Vehicles (Employees)	0.11	0.10	0.02	0.01	1.44	0.00
Delivery Trucks	0.18	5.09	0.55	0.24	0.65	0.06
Yard Hostlers						
Class I Rail (Mainline)	0.081	1.9	0.044	0.040	0.45	0.0016
Class III Rail (Switching)	0.027	0.42	0.015	0.013	0.13	5.3E-04
Terminal Equipment	9.0E-04	0.012	6.3E-04	6.3E-04	0.0068	1.6E-05
<b>Total Non-Permitted Emissions</b>	<b>7.2</b>	<b>7.8</b>	<b>1.5</b>	<b>0.44</b>	<b>2.8</b>	<b>0.064</b>
SJVAPCD Air Quality Thresholds of Significance	10	10	15	15	100	27
<b>Exceeds Significance</b>	No	No	No	No	No	No
<b>Operational Emissions; Permitted Sources</b>						
Emergency Generator	0.0078	0.69	0.0074	0.0074	0.065	7.60E-04
<b>Total Permitted Emissions</b>	<b>0.0078</b>	<b>0.69</b>	<b>0.0074</b>	<b>0.0074</b>	<b>0.065</b>	<b>7.60E-04</b>
SJVAPCD Air Quality Thresholds of Significance	10	10	15	15	100	27

Exceeds Significance	No	No	No	No	No	No
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As shown in Tables 14 and 15, the proposed project’s operational emissions in the SJVAB are mainly the result of truck emissions. While truck idling restrictions would reduce emissions slightly, truck emissions are being generated mainly through transit; therefore, MM-AQ-3 would not reduce emissions below significance. Through MM-AQ-4, use of cleaner trucks (defined as model year 2017 or newer) implemented through contracts with material suppliers would result in reduced transit emissions. However, it is unknown at this time how many such trucks would visit the terminal. While heavy-duty electric trucks are under development, they are not readily available throughout the state at commercial levels, and it is unknown whether they would be by 2030.

Implementation of MM-AQ-5 would reduce emissions from terminal equipment. While not a significant source of emissions, transitioning to clean cargo handling equipment is consistent with state and regional plans and provides for electrical infrastructure, which could potentially be used for zero-emission trucks in the future.

Because there are only two mainline rail companies (UP and BNSF) that service the entire rail network as well as interstate commerce, mainline locomotives are regulated by the federal and state governments. ARB is addressing rail emissions through a statewide rail plan, which includes agreements directly with the two mainline locomotive companies. The 2005 Statewide Railyard Agreement, which was completed in 2015, included a statewide idle reduction program, maximized the use of state and federal ultra-low-sulfur (15 ppm maximum) diesel fuel, and established a statewide visible emissions reduction and repair program. The agreement also required the preparation of 17 railyard inventories and HRAs. Switcher engines are also a source of emissions. CCT has also recently upgraded several of its locomotives, including upgrading gensets and adding a new ultra-low-emissions locomotive purchased through USEPA’s Diesel Emissions Reduction Program. To achieve further emissions reductions would require purchases of new equipment or a move to electrification, which is beyond the scope of one terminal project.

All feasible mitigation has been applied. For the reasons noted above, emissions are below significance and no additional mitigation is required.

#### 3.2.3.4.3 AQ-3: *Would the project expose sensitive receptors to substantial pollutant concentrations?*

A significant impact would occur if a project would emit TACs that could cause a significant increase in health risks, including both carcinogenic and non-carcinogenic risks. A project is considered to have a significant TAC impact if it would:

- Result in ground-level concentrations of carcinogenic TACs that would increase the probability of contracting cancer for the maximally exposed individual by 20 in 1 million or more (SJVAPCD 2015b)
- Increase ground-level concentrations of non-carcinogenic TACs that would result in an acute or chronic hazard index exceeding 1 for the maximally exposed individual receptor (SJVAPCD 2015b)

Impacts to sensitive receptors are typically evaluated in terms of exposure to TACs. ARB classifies DPM as a TAC and uses PM<sub>10</sub> emissions from diesel exhaust as a surrogate for DPM. Health effects from carcinogenic TACs are described in terms of individual cancer risk, which is based on a 30-year lifetime exposure to TACs. More than 90% of DPM is less than 1 micrometer in diameter, and thus is a subset of PM<sub>2.5</sub>. PM<sub>2.5</sub> comes from a variety of sources, but primarily from the burning of carbon-based fuels, such as gasoline, diesel, and wood. Numerous scientific studies have linked exposure to airborne PM<sub>2.5</sub> to increased severity of asthma attacks, development of chronic bronchitis, decreased lung function in children, respiratory and cardiovascular hospitalizations, and even premature death in people with existing heart or lung disease (ARB 2021b). Because DPM is a subset of PM<sub>2.5</sub>, DPM also contributes to the same non-cancer health effects as PM<sub>2.5</sub> exposure. These effects include premature death, hospitalizations, and emergency department visits for exacerbated chronic heart and lung disease, including asthma, increased respiratory symptoms, and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies. Those most vulnerable to non-cancer health effects are children whose lungs are still developing and the elderly, who often have chronic health problems (ARB 2021b)

CEQA does not require comprehensive quantification of health risk for every project. Rather, projects are evaluated or screened for a need to quantify health risks and a quantitative HRA is conducted if it is determined that impacts could potentially exceed thresholds of significance. An HRA is dependent on several key variables: TAC emissions, TAC potency, exposure duration, and distance from sensitive receptors. If one of these variables (such as TAC emissions) is low, that, by itself, is not a basis for determining whether an HRA is needed. However, taken together these variables make a compelling argument for determining the need for a quantitative HRA. For example, low TAC emissions emitted far from sensitive receptors and for a short duration would indicate that impacts are unlikely to exceed thresholds of significance.

SJVAPCD recommends conducting a screening analysis that includes all sources of emissions and recommends using the California Air Pollution Control Officers Association’s (CAPCOA's) updated methodology to determine prioritization. However, CAPCOA’s Prioritization Guidance is intended as a screening methodology for facilities subject to AB 2588,<sup>1</sup> which is applicable to stationary sources and does not account for mobile sources (i.e., sources which move around on site or transit off site) which are the majority of the proposed project’s source of emissions. CAPCOA’s Prioritization Guidelines for stationary sources includes two methodologies. The first and most conservative serves as the basis for SJVAPCD’s prioritization calculator. This conservative approach, called the Emissions and Potency Procedure, is based on three parameters: emissions, toxicity, and proximity to receptors. CAPCOA’s second screening approach, called the Dispersion Adjustment Procedure, adjusts the first screening approach to address dispersion of pollutants for sources with different release heights. SJVAPCD’s prioritization calculator is based on CAPCOA’s Emissions and Potency Procedure and as such does not account for dispersion of pollutants for sources with different release heights. CAPCOA’s Dispersion Adjustment Procedure shows that the prioritization score calculated using the Emissions and Potency Procedure would be reduced by 85% and 99% for sources with stacks that are greater than 20 and 45 meters, respectively. Because nearly all proposed project emissions would occur from mobile sources such as locomotive and trucks, and stationary sources are electric and therefore would not have stack emissions, CAPCOA’s Prioritization Guidance would not provide a useful screening tool in determining health impacts from these sources. For these reasons, the CAPCOA methodology is not applicable to the proposed project and a HRA was performed.

Proposed project construction activities would result in temporary DPM emissions, from the combustion of diesel fuel in off-road construction equipment engines and on-road trucks. Operation of the proposed project would result in DPM emissions from trucks, rail, and other diesel-fueled equipment. Table 16 presents the results of the HRA analysis. As shown, the proposed project would be under applicable thresholds and would not result in acute or chronic health risk.

**Table 16**  
**Maximum Health Impacts Associated with Construction and Operation (Unmitigated)**

Source Category <sup>1</sup>	Excess Lifetime Cancer Risk <sup>2,3</sup> (in 1 million)	Chronic HI <sup>4</sup>
<b>Construction Sources</b>		
Off-Road Construction Equipment	0.276	0.031
On-Road Mobile Vehicles	3.0E-04	2.2E-05

<sup>1</sup> The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels.

Source Category <sup>1</sup>	Excess Lifetime Cancer Risk <sup>2,3</sup> (in 1 million)	Chronic HI <sup>4</sup>
Construction Subtotal	0.276	0.031
<b>Operational Sources</b>		
Emergency Generator	0.16	--
Cargo Handling Equipment - Forklifts	1.3	--
Cargo Handling Equipment - Yard Hostler	0.36	--
Delivery Truck Operations	1.9	--
Class III Rail Operations	0.14	--
Operations Subtotal	3.8	--
<b>Total Risk</b>		
Construction + Operations Total	4.1	0.031
Significance Threshold <sup>5</sup>	20	1.0
Exceeds Threshold?	No	No
<b>Maximum Receptor (2022)</b>		
UTMx	644,720	645,060
UTMy	4,201,000	4,201,080
<b>Receptor Type<sup>6</sup></b>		
Classification	Worker	Worker

Notes:

- Excess lifetime cancer risk and chronic HI from operational sources represent full build-out operations of the proposed project. Per conversations with the Port, operations are expected to begin in June 2024. For the purposes of this analysis, operations are conservatively assumed to begin on January 1, 2024.
- Excess lifetime cancer risks were estimated using Equation 1:

**Equation 1**

$$\text{Risk}_{\text{inh}} = \sum C_i \times CF \times IF_{\text{inh}} \times CPF_i \times ASF$$

where:

Risk <sub>inh</sub>	=	cancer risk for the inhalation pathway (unitless)
C <sub>i</sub>	=	annual average air concentration for chemical "i" µg/m <sup>3</sup>
CF	=	conversion factor (mg/µg)
IF <sub>inh</sub>	=	intake factor for inhalation (m <sup>3</sup> /kg-day)
CPF <sub>i</sub>	=	cancer potency factor (mg/kg-day <sup>-1</sup> )
ASF	=	age sensitivity factor (unitless)

Excess lifetime cancer risk was evaluated for two exposure scenarios, with the intent of identifying the most conservative scenario. Scenario 1 started exposure at the start of construction; Scenario 2 started exposure at the start of operation. Scenario 1 included overlapping construction and operational emissions, whereas Scenario 2 included operational emissions and the remediation phase of construction only. Ultimately, Scenario 1 yielded the highest risk results of the exposure scenarios, which are shown in Table 16. The other scenario resulted in lower risks, which are not presented for that reason.

- Chronic HI for each receptor was estimated using Equation 2:

**Equation 2**

$$HI_{\text{inh}} = \sum C_i / cREL$$

where:

HI <sub>inh</sub>	=	cancer risk for the inhalation pathway (unitless)
C <sub>i</sub>	=	annual average air concentration for chemical "i" (µg/m <sup>3</sup> )
cREL	=	chronic reference exposure level (µg/m <sup>3</sup> )

4. Thresholds of significance are based on information from San Joaquin Valley Air Pollution Control District, Air Quality Thresholds of Significance - Toxic Air Contaminants.
5. This table shows the maximum exposed individual receptor, but two different receptor types were analyzed for this analysis: residential and worker.
6. Only the subset of off-site receptors located on residential buildings or homes were considered residential receptors. The remaining receptors were analyzed as workers.

Source: San Joaquin Valley Air Pollution Control District, Air Quality Thresholds of Significance - Toxic Air Contaminants. Available at: <http://www.valleyair.org/transportation/0714-GAMAQI-TACs-Thresholds-of-Significance.pdf>.

**Impact Determination:** Less than Significant

**Mitigation Measures:** While not required to meet health risk thresholds, MM-AQ-1 through MM-AQ-5 would further reduce emissions and result in less risk than was identified in Table 16.

**Residual Impact:** Less than significant

#### 3.2.3.4.4 *AQ-4: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

SJVAPCD's CEQA guidance defines a significant odor impact as one that creates objectionable odors affecting a substantial number of people. SJVAPCD's guidance lists facility types that commonly produce odors and the separation distance from sensitive receptors (typically 1 mile) needed to prevent significant odor impacts (SJVAPCD 2015a). As noted in SJVAPCD's guidance, the list of facility types is not meant to be all-inclusive. Consequently, SJVAPCD recommends that all potential odor sources be evaluated in additional detail if they are located within 1 mile of sensitive receptors. The predominant winds are from the northwest, west-northwest, and west. The closest residential sensitive receptors to the terminal are located approximately 1.7 miles to the southeast and 1.6 miles to the east—both communities are not located on Rough and Ready Island. While residences to the north/northwest and the single residence to the southwest are closer (0.6 mile and 0.5 mile respectively), those locations would be located downwind of the project site on a very infrequent basis, and are therefore unlikely to experience nuisance odors from the proposed project.

During construction, diesel exhaust produced by off-road construction equipment could generate odors; however, several pieces of construction equipment would need to operate concurrently in a relatively small area to generate a constant plume of diesel exhaust that would cause objectionable odors for a substantial number of people. These circumstances would not occur as part of the proposed project because construction would occur over a broad area and construction equipment would not all operate at the same time.

During operation, diesel exhaust produced by trucks could generate odors. Odors from the product unloading area are not expected to be significant because of the low amount of fugitive emissions that would be generated and because of the substantial distance of the product unloading area from residences. In addition, the proposed project involves the construction of two detention ponds (one

near the southwest boundary (the site and one near the east boundary of the site), which have the potential to generate odors. Maintaining water quality in stormwater detention ponds is challenging, as they are designed to retain constituents in stormwater that can degrade receiving waters. Common indications of poor water quality include an off color (e.g., bright green sheen from algae) or unpleasant odor (e.g., presence of bacteria). Poor water quality can be caused by low dissolved oxygen and organic over-enrichment. Given that the nearest residences are more than 1 mile away (the shortest screening "buffer" distance published by SJVAPCD for the most common odor-causing sources), it seems unlikely that odors from the detention ponds would result in nuisance complaints from these residents.

**Impact Determination:** Construction and operational odors would not affect a substantial number of people. Therefore, this impact is considered to be less than significant.

**Mitigation Measures:** None required.

**Residual Impact:** Less-than-significant impact.

### **3.3 Biological Resources**

This section describes existing biological resources conditions in the study area and analyzes how the proposed project may affect these resources. It also describes applicable rules and regulations pertaining to biological resources that could affect the proposed project.

#### **3.3.1 Environmental Setting**

The project site is a largely vacant 102-acre parcel on the Port's West Complex, except for five existing operational warehouses in the northwestern corner of the site. The project site is located within a highly developed and industrialized area surrounded by existing industrial developments characterized by storage tanks, industrial buildings, concrete surface storage or staging areas, stockpiles of various commodities, roadways, and rail lines.

The site is completely flat (less than 1% slope) and is surfaced primarily with ruderal vegetation, with some limited areas of asphalt, concrete, and compacted dirt. The central area of the site is the proposed 60-acre Warehouse Development Area. Three drainage ditches are located on the Western Warehouse Area (Figure 2). To the west of the Port of Stockton Expressway is the proposed 7-acre Western Remediation Area. To the east of the Warehouse Development Area is the Eastern Remediation Area, an additional 9-acre area with two one story buildings and a derelict sport court.

Biological conditions in the project area were observed during surveys of the project area and a jurisdictional waters and wetlands delineation conducted in 2021 (Anchor QEA 2021b; WRA 2021). A search of the California Natural Diversity Database (CNDDDB) was conducted to identify recorded special status species occurrences within the U.S. Geological Survey Stockton West 7.5-minute quadrangle and surrounding quadrangles (Terminous, Lodi South, Waterloo, Stockton East, Manteca, Lathrop, Union Island, and Holt; CDFW 2021). This section summarizes the results of the surveys, delineation, and database searches.

##### **3.3.1.1 Wildlife Habitat Overview**

Vegetation on the project site is primarily non-native grasses, with a few trees on the northern edge of the parcel, near McCloy Avenue and around the remnant buildings in the Eastern Remediation Area. Trees include a mix of native (cottonwood, valley oak, and arroyo willow) and non-native ornamental species (Canary Island date palm), as illustrated in Photographs 1 through 9 in Section 3.1 (Anchor QEA 2021b; WRA 2021). Vegetation on the east edge of the Eastern Remediation Area includes approximately 30 ornamental trees and an area of maintained turf lawn. Approximately 20 trees are present on the remaining 67 acres where no landscape maintenance occurs. Emergent wetlands are present on the margins of the existing drainage ditches; however, these are sparse (WRA 2021). Overall, there is limited habitat for wildlife at the project site. The San Joaquin River and

Burns Cutoff and associated riparian areas as well as more natural (historically undeveloped) areas on the West Complex may provide wildlife habitat, but these are outside of the project area.

### 3.3.1.2 Wetlands and Jurisdictional Waters

A wetland delineation conducted for the proposed project concluded that the project site contains approximately 0.09-acre of seasonal wetland, 0.09-acre alkaline scald area mapped as “other waters,” and 1.58 acres (4,400.67 linear feet) of drainage ditches (WRA 2021). The delineation found that none of these features meet the definition of jurisdictional waters of the United States as confirmed by USACE (2021).

Water is conveyed from the drainage ditches to the Port’s stormwater system, which is actively managed and ultimately discharges into Burns Cutoff. The stormwater ditches in the project area do not meet the definition of a wetland under the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State that was adopted on April 2, 2019, by the SRWQCB as the ditches are artificial (not a wetland created by modification of surface waters of the state) and are subject to ongoing operation and maintenance (WRA 2021). Per the Procedures, the stormwater ditches are not waters of the state because they are artificial wetlands that were constructed and are currently used and maintained primarily for one or more of the following purposes:

- Settling of sediment
- Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program
- Treatment of surface waters

The small seasonal wetland and alkaline scald mapped in the study area would likely be subject to RWQCB regulation pursuant to the Porter-Cologne Water Quality Control Act.

The drainage ditches on site include narrow bands of freshwater emergent wetlands along the channel edges; however, it is unlikely that the ditches or bands of emergent vegetation would be subject to CDFW jurisdiction pursuant to Section 1602 of the California Fish and Game Code since they are ditches that were constructed in uplands to convey stormwater runoff; the ditches do not function as natural tributaries or streams because flows are managed by a pump that is activated only to remove accumulated stormwater from the site. However, the ultimate determination of jurisdiction is the responsibility of the regulatory agencies.

Alkaline refers to the soil type, and scald means that it is burned such that hydrology (surface water) cannot be absorbed. For the proposed project, scald refers to an area that has been burnt or scarred by environmental conditions—in this case, due to the alkaline nature of the soil.

### 3.3.1.3 Special Status Species

The CNDDDB identifies 21 special status (threatened or endangered under the federal Endangered Species Act or California Endangered Species Act, state species of special concern, or California Department of Fish and Wildlife fully protected species) wildlife and plant species within the study area, as identified through a search of the proposed project quadrangle and eight surrounding quadrangles (Appendix E). Potential species occurrences were determined based on habitat requirements and on-site conditions.

The project site's degraded condition and presence within a highly industrialized area make it unlikely that most terrestrial special status species listed in Appendix E would be present, although several special status species may have a very low to low potential for occurrence in or around the project site. This includes Swainson's hawk (*Buteo swainsoni*; state threatened), white-tailed kite (*Elanus leucurus*; CDFW fully protected), tricolored blackbird (*Agelaius tricolor*; state candidate endangered), burrowing owl (*Athene cunicularia*; state species of special concern), western pond turtle (*Emys marmorata*; state species of special concern), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*; federal threatened), loggerhead shrike (*Lanius ludovicianus*; state species of special concern), and giant garter snake (*Thamnophis gigas*; federal and state threatened). The project site may also provide roosting habitat for bats and suitable nesting habitat for Migratory Bird Treaty Act (MBTA)-protected bird species. None of the fish species identified in Appendix E have the potential to be present at the project site.

#### 3.3.1.3.1 Swainson's Hawk

Swainson's hawk is a long-distance migrant species. Central Valley populations winter primarily in Mexico and arrive at their Central Valley breeding grounds in mid-March to early April. Nests are generally found in scattered trees or along riparian systems adjacent to agricultural fields or pastures. Egg laying generally occurs in April, and young are present in May and June. Most young have fledged the nest by the end of July and are relatively independent of parental protection; however, fledged young remain with their parents until they depart in the fall for migration. Migration to wintering grounds generally occurs around September; however, some individuals or small groups may winter in California (Caltrans and Port 2013). Swainson's hawks are regularly observed throughout the Port. Trees along the San Joaquin River and Burns Cutoff shorelines to the east, west, and south of the project site may provide nesting habitat to the Swainson's hawk.

#### 3.3.1.3.2 White-Tailed Kite

White-tailed kites nest and forage in a variety of settings. They hunt over grassland, savanna, cultivated fields, marshes, and riparian woodland and are also commonly observed foraging along freeway medians and edges. Kites prey primarily on voles and other small rodents but also eat birds, snakes, lizards, frogs, and large insects. They build stick nests in the tops of trees, preferentially near an open foraging area,

and typically forage within 0.5 mile of the nest during breeding season, which extends from February through October. The nearest white-tailed kite occurrence was recorded approximately 3.6 miles southeast of the project area in April 2002 (CDFW 2021). As with Swainson's hawk, trees along the San Joaquin River and Burns Cutoff shorelines to the east, west, and south of the project site may provide nesting habitat for white-tailed kites.

#### 3.3.1.3.3 *Tricolored Blackbird*

The tricolored blackbird requires very dense thickets of vegetation for nesting, such as blackberry (*Rubus* sp.), cattails (*Typha* sp.), or tules (*Scirpus* sp.). Breeding colonies require a nearby source of water, suitable nesting substrate, and natural grassland, woodland, or agricultural cropland biomes in which to forage. There are no recorded occurrences of tricolored blackbird within a 2-mile radius of the project area (CDFW 2021). Nonetheless, there is a low potential for this species to forage within inundated drainages in the project area.

#### 3.3.1.3.4 *Burrowing Owl*

The burrowing owl is a year-round resident of open spaces, such as grasslands and agricultural fields, in the Central Valley. Nests are typically found in abandoned burrows of small mammals and occasionally within culverts and other structures. The project site lacks sufficient foraging habitat to support nesting populations of burrowing owl. There are no recorded occurrences of this species within a 2-mile radius of the project site (CDFW 2021). Any occurrence of this species within the project area would be limited to foraging within ruderal vegetation, grassland habitat, or other areas with low vegetation.

#### 3.3.1.3.5 *Western Pond Turtle*

The western pond turtle is a highly aquatic species found in ponds, marshes, rivers, streams, lakes, creeks, and irrigation ditches throughout central and coastal California up to 6,000 feet in elevation. Suitable habitat typically includes aquatic areas with rocky or muddy bottoms, aquatic vegetation, and basking habitat (e.g., logs, rocks, or riprap). Although there are no recorded occurrences of the western pond turtle within a 2-mile radius of the project area (CDFW 2021), drainage ditches crossing the project area may provide suitable basking habitat for this species.

#### 3.3.1.3.6 *Valley Elderberry Longhorn Beetle*

The valley elderberry longhorn beetle is a medium-sized beetle endemic to the riparian habitats in the Sacramento and San Joaquin valleys that is dependent upon elderberry shrubs (*Sambucus* spp.) during its entire life cycle. Adult beetles emerge in the spring from pupation inside the wood of these trees as they begin to bloom. Emerging adults form distinctive, small oval exit holes in elderberry shrubs. The valley elderberry longhorn beetle is nearly always found on or close to its host plant. Throughout its range, valley elderberry longhorn beetle is estimated to inhabit 20% of all suitable elderberry shrubs. Elderberry shrubs are found in or near riparian and oak woodland habitats. The presence of exit holes in

elderberry stems indicates previous VELB habitat use (USACE 2017). There are no recorded occurrences of the beetle within the project area; however, the valley elderberry longhorn beetle's elderberry host plant does occur throughout Rough and Ready Island. Valley elderberry shrubs were not identified during site surveys in 2021 (Anchor QEA 2021b; WRA 2021); however, there remains a very low potential for the species to be present in the vicinity of the project site.

#### 3.3.1.3.7 *Loggerhead Shrike*

Loggerhead shrike are present year-round throughout parts of California, which includes the Central Valley although regional population levels have recently declined (Shuford and Gardali 2008). They breed mainly in shrublands or open woodlands with a fair amount of grass cover and areas of bare ground. They require tall shrubs, trees, fences, or power lines for hunting perches and open areas of short grasses, forbs, or bare ground for hunting. There are no recorded occurrences of loggerhead shrike within 2 miles of the project area; however, there is a low potential for grassland, ruderal vegetation, and various shrubs in the project area to provide foraging habitat for this species.

#### 3.3.1.3.8 *Giant Garter Snake*

Giant garter snakes (GGS) inhabit agricultural wetlands and other waterways such as rice fields, irrigation and drainage canals, sloughs, ponds, small lakes, low gradient streams, and adjacent uplands in the Central Valley. GGS feed primarily on small fishes, tadpoles, and frogs. They inhabit small mammal burrows and other soil crevices above prevailing flood elevations throughout the winter dormancy period, and require emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat during the active season (early April to mid-October; USACE 2017). Per the CNDDDB, there are no recorded occurrences of GGS on Rough and Ready Island (CDFW 2021). The nearest mapped occurrence of GGS was recorded at the Port's East Complex approximately 2 miles east of the project site; however, this occurrence is from 1880, and the CNDDDB entry states that the location information is general. The second nearest occurrence was recorded approximately 3 miles northwest of the project area in 2018, on the south bank of the San Joaquin River at Blackslough Landing (CDFW 2021). In addition, GGS require a prey base to be present on site. The ditches on site do not support sufficient fish or other prey items to allow GGS to reside in these ditches, only as potential migration corridors. There is a low potential for giant garter snake to be present within drainage ditches in the project area.

#### 3.3.1.3.9 *Special Status Plant Species*

There are 20 plant species considered rare, threatened, or endangered by the California Native Plant Society (CNPS; a CNPS Rank 1 or 2 species) with recorded occurrences in the vicinity of the project site, as identified through a search of the proposed project quadrangle and eight surrounding quadrangles (Appendix E; CDFW 2021). Of these 19 species, two are state or federal endangered: palmate-bracted bird's-beak (*Chloropyron palmatum*; federal and state endangered) and Delta button-celery (*Eryngium*

*racemosum*; state endangered). Due to the lack of suitable habitats within the project area, none of the special status plant species with recorded occurrences have the potential to occur within the project site.

### 3.3.1.3.10 *Migratory Bird Treaty Act Protected Birds and Raptors*

Several species of birds protected by the MBTA may occur in the proposed project vicinity. Although the shoreline in the project area serves industrial functions, MBTA-protected birds could nest in disturbed but barren areas within the project site such as on the armored shoreline adjacent to the rail trestle. MBTA-protected birds could also roost or nest in mature trees located across the San Joaquin River or downstream from the project site. Several MBTA-protected birds have been observed at the Port, including but not limited to the following (Anchor QEA 2018):

- Barn swallow (*Hirundo rustica*)
- Bushtit (*Psaltriparus minimus*)
- Belted kingfisher (*Megaceryle alcyon*)
- House finch (*Haemorhous mexicanus*)
- Cliff swallow (*Petrochelidon pyrrhonota*)
- White-tailed kite (*Elanus leucurus*)
- Swainson's hawk (*Buteo swainsoni*)
- Common raven (*Corvus corax*)

## 3.3.2 *Applicable Regulations*

### 3.3.2.1 **Federal**

#### 3.3.2.1.1 *Federal Endangered Species Act*

Under the ESA, the Secretary of the Interior and the Secretary of Commerce have the joint authority to list a species as threatened or endangered (16 USC 1533[c]). Pursuant to the requirements of the ESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present in the study area and determine whether the proposed project may affect or "take" such species. Per the ESA, take means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct" (16 USC 1532[19]). Section 7 of the ESA requires USACE to consult with the U.S. Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service to determine whether the proposed project is likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat or habitat proposed to be designated for such species (16 USC 1536[a][3]).

### 3.3.2.1.2 *Migratory Bird Treaty Act*

The MBTA of 1918 (16 USC 703–712) is the primary legislation in the United States to conserve migratory birds. It implements the United States’ commitment to four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The MBTA prohibits the taking, killing, trading, or possessing of migratory birds. This includes disturbance that causes nest abandonment or loss of reproductive effort (e.g., killing or abandonment of eggs or young).

### 3.3.2.2 **State**

#### 3.3.2.2.1 *California Endangered Species Act*

Under the California Endangered Species Act (CESA), CDFW is responsible for maintaining a list of threatened, endangered, and candidate species (California Fish and Game Code [FGC] 2070). CDFW also designates “fully protected” or “protected” species as those that may not be taken or possessed. Species designated as fully protected or protected may or may not be listed as endangered or threatened. CDFW also tracks species of special concern, which are animal species whose populations have diminished and may be considered for listing if declines continue. Pursuant to the requirements of the CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the study area and determine whether the proposed project would have a potentially significant impact on such species. “Take” of a species, under the CESA, means to “hunt, pursue, catch, capture, kill, or attempt to hunt, pursue, catch, capture, or kill” (FGC 86). The CESA definition of “take” does not include “harm” or “harass,” as is included in the ESA. As a result, the threshold for a take under the CESA may be higher than under ESA because habitat modification is not necessarily considered take under the CESA. CDFW may issue incidental take permits when adequate minimization measures are met, and issuance of the permit would not jeopardize the continued existence of a state-listed species. Should the project applicant receive authorization to take federally listed species under ESA, take authorization may also be sought as a “consistency determination” from CDFW under FGC 2080.1.

#### 3.3.2.2.2 *California Native Plant Protection Act*

The California Native Plant Protection Act (CNPS) (FGC 1900–1913), Natural Communities Conservation Planning Act, and CESA provide guidance on the preservation of plant resources. Vascular plants listed as rare or endangered by the CNPS, but which may have no designated status or protection under federal or state endangered species legislation, are defined as follows:

- Rank 1A: Plants presumed to be extirpated in California and either rare or extinct elsewhere.
- Rank 1B: Plants rare, threatened, or endangered in California and elsewhere.
- Rank 2A: Plants presumed to be extirpated in California, but more common elsewhere.
- Rank 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.

- Rank 3: Plants about which more information is needed—a review list.
- Rank 4: Plants of limited distribution—a watch list.

In general, plants listed as CNPS Ranks 1A, 1B, 2A, or 2B also meet the definition of FGC 1901, Chapter 10 of the Native Plant Protection Act, and FGC 2062 and 2067.

**3.3.2.2.3 California Fish and Game Code 3503, 3511, 3513, 4700, 5050, and 5515**  
Provisions of the MBTA are adopted through the FGC. Under FGC 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or related regulations. FGC 3513 prohibits take or possession of any designated migratory non-game bird or any part of such migratory non-game bird. The state code offers no mechanism for obtaining an incidental take permit for the loss of non-game migratory birds.

The FGC strictly prohibits the incidental or deliberate take of fully protected species. CDFW cannot issue a take permit for fully protected species, except under narrow conditions for scientific research or the protection of livestock; therefore, avoidance measures may be required to avoid a take (FGC 3511 for birds, 4700 for mammals, 5050 for reptiles and amphibians, and 5515 for fish).

### **3.3.2.3 Local**

**3.3.2.3.1 San Joaquin County Multi-Species Habitat Conservation and Open Space Plan**  
The SJMSCP, in accordance with ESA Section 10(a)(1)(B) and CESA Section 2081(b) Incidental Take Permits, provides compensation for the conversion of open space to non-open space uses which affect the plant, fish, and wildlife species covered by the plan. The SJMSCP covers 97 species, including federal and state-listed species, as well as species specifically addressed by CEQA.

For projects with the potential to adversely affect special status species or habitats, project proponents may opt into the SJMSCP to obtain take coverage for species covered by the plan. Opting into the SJMSCP typically entails adhering to avoidance and minimization measures during project construction and mitigating for potential species take or loss of habitat (through credit purchase or other means).

### **3.3.2.3.2 Stockton Municipal Code Title 16, Division 5, Chapter 16.130**

Title 16, Division 5, Chapter 16.130 of the City Municipal Code provides protection for heritage oaks in the City. Heritage oak trees are defined as any *Quercus lobata* (commonly known as valley oak), *Quercus agrifolia* (coast live oak), or *Quercus wislizeni* (interior live oak) tree which is located on public or private property within the limits of the City and which has a trunk diameter of 16 inches or more, measured at 24 inches above actual grade. Removal of any heritage oak requires a permit from the City Community Development Department.

### 3.3.3 *Environmental Impacts and Mitigation Measures*

#### 3.3.3.1 **Baseline**

At the time of publication of the NOP for the proposed project, the site consisted of largely vacant disturbed land with five operational warehouses in the northwest corner. The surface of the project site consists of ruderal vegetation (e.g., ripgut brome, black mustard, and milk thistle), remnant barren concrete, asphalt, compacted dirt, rail spurs, ornamental grass lawn, mature native and non-native ornamental trees, abandoned structures, and a degraded sport court (WRA 2021). There are three drainage ditches located within the project site. Drainage Ditch 1 is an open stormwater drainage ditch that bisects the center of the Warehouse Development Area. Drainage Ditch 2 is located on the western edge of the Warehouse Development Area. Drainage Ditch 3 extends east to west on the southern edge of the site, immediately north of the existing Ferguson Building warehouse. The southern drainage ditch connects to the western ditch with no obstructions or culverts. The central drainage ditch flows into the western ditch, which flows to a culvert under Port of Stockton Expressway to a ditch that flows further west. These ditches are part of the Port's West Complex drainage system, which conveys stormwater to a single pump-controlled discharge point on the west side of the West Complex. Stormwater that reaches this discharge point is held in a stormwater retention basin on the western end of the West Complex. During years when the retention basin reaches a high level, stormwater is pumped to the San Joaquin River (WRA 2021).

#### 3.3.3.2 **Thresholds**

For purposes of this DEIR, the following thresholds, based on Appendix G of the CEQA Guidelines (Environmental Checklist), were used to determine if the proposed project would result in impacts on biological resources. The proposed project would have an impact on biological resources if:

- **BIO-1:** The project would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- **BIO-2:** The project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- **BIO-3:** The project would have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means.
- **BIO-4:** The project would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- **BIO-5:** The project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

- **BIO-6:** The project would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

### 3.3.3.3 Methodology for Determining Impacts

Potential impacts on biological resources were qualitatively evaluated based on the habitat preferences for various species known or suspected to be in the project area, as well as the quantity and quality of existing habitat. Potential impacts were analyzed based on recent USFWS and CDFW lists for special status species with the potential to inhabit the project site, the wetland delineation report (WRA 2021), local observations, and professional expertise and judgment in evaluating how the proposed project could interact with biological resources.

The proposed measurement indices used to evaluate impacts on biological resources include impacts on special status species or habitats and consistency with applicable regulations and policies protecting biological resources. The proposed project would be considered to have a significant impact if it would have a substantial adverse effect on special status species or habitats or if it is determined to be inconsistent with applicable regulations and policies protecting biological resources.

### 3.3.3.4 Impact Analysis

*3.3.3.4.1 BIO-1: Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The proposed project would be constructed within a lot that is largely vacant (outside of the Western Warehouse Area) and is not likely to have habitat suitable for special status wildlife. Most vegetation removal during remediation and construction would be limited to grubbing sparse ruderal vegetation with little or no habitat value. In addition, several existing native and non-native mature trees would be removed in the Warehouse Development Area. TC NO. CAL. Development would plant 30 trees to replace the trees removed.

Features away from the project site may have habitat value to special status species (e.g., the Burns Cutoff or the San Joaquin River), but these features would not be directly affected by the proposed project. Construction of the proposed project is not anticipated to generate significant noise or other effects that would disturb special status species away from the project site. Stormwater runoff from the project site would be conveyed through a new drainage ditch to the Port's existing drainage system.

The project area is within the Pacific Flyway, an established air route of waterfowl and other birds migrating between wintering grounds in Central and South America and nesting grounds in Pacific Coast states and provinces of North America. Migratory birds have been known to roost on trees within the Port. There are mature trees on-site that have the potential to serve as roosting sites, and while unlikely, some birds may forage in the existing vegetation on site. Several of the existing trees would be removed to construct the warehouse, which could remove roosting sites. Site grading, excavation, and construction activities associated with remediation and terminal construction could also temporarily affect or displace potential bird nesting activities on site.

Construction has the potential to result in accidental spills, if improperly managed. Various contaminants, such as fuel oils, grease, and other petroleum products used in construction activities, could be introduced into the system either directly or through surface runoff. Contaminants may be toxic to wildlife. Because the proposed project would include more than 1 acre of ground disturbance, a NPDES Construction Stormwater General Permit addressing these types of impacts would be required.

Operations of the proposed project would not result in additional impacts to habitats or special status species. There would be an additional 80 railcars and 320 trucks per month calling on the project site. This increase would be negligible when considered in the context of total Port facility operations. Railcars and trucks would operate on existing roads and railways. The Western and Eastern Remediation Areas are anticipated to remain vacant and unused.

**Impact Determination:** While the existing habitat at the project site is not likely to support special status species, there remains the possibility that special status species could use the mature trees, drainage channels, and grasslands on the site for foraging or possibly nesting. Accordingly, tree removal and construction activities have the potential to significantly impact special status species should they be present on-site during construction. Impacts would be considered potentially significant.

**Mitigation Measures:** The following mitigation measures would be implemented to reduce the potential impacts to biological resources:

- **MM-BIO-1: Obtain Coverage under the SJMSCP or Implement Protective Measures for Nesting Birds, Western Pond Turtle, Giant Garter Snake, and Valley Elderberry Longhorn Beetle.** To avoid impacts on potentially present special status species, the proposed project proponent will obtain coverage under the SJMSCP. TC NO. CAL. Development will submit an application for coverage to SJCOG within 60 days of project construction. SJCOG will review the proposed project, prepare a staff report, and submit the report to the SJMSCP Habitat Technical Advisory Committee, which determines whether the proposed project will be covered under the SJMSCP. Assuming the proposed project is approved for coverage, a SJCOG biologist will conduct a site visit to determine which incidental take minimization measures (ITMMs) included in the SJMSCP are applicable to the project. SJCOG will then execute a final summary of applicable ITMMs for the project. ITMMs would include surveys, monitoring, and applying temporary construction buffers, if determined appropriate by SJCOG. TC NO. CAL. Development will implement all required ITMMs identified by the SJCOG. Ground disturbance will not occur until the ITMMs have been satisfied.

If the proposed project is not able to obtain coverage under the SJMSCP, TC NO. CAL. Development will implement avoidance and minimization measures specific to nesting birds, western pond turtle, giant garter snake, and valley elderberry longhorn beetle as detailed below.

- For nesting birds, alternatives to SJMSCP coverage will include surveys and avoidance measures consistent with CDFW's standard requirements. If equipment staging, site preparation, or other project-related construction work is scheduled to occur between February 1 and September 15, the nesting season of protected raptors and other avian species, a CDFW-approved biologist will conduct a pre-construction survey of the project area for active nests within 7 days prior to commencing project construction. The minimum survey area will be 250 feet for passerines, 500 feet for small raptors, and 1,000 feet for larger raptors. Surveys will be conducted during periods of peak activity (early morning or dusk) and be of sufficient duration to observe movement patterns. If a lapse in project-related work of 15 days or longer occurs, another survey will be performed before construction is re-initiated. If any active bird nests are found, a buffer around the nest will be established by the biologist in coordination with CDFW. The buffer area will be fenced off from work activities and avoided until the young have fledged, as determined by the biologist. The biologist will monitor the active nest until the young have fledged for at least 2 hours per day when project activities are occurring to observe the behavior of the nesting birds. If the birds show signs of

disruption to nesting activities (e.g., defensive flights/vocalizations directed toward project personnel, standing up from a brooding position, or flying away from the nest), the buffers will be expanded by the biologist until no further interruptions to nesting behavior are detectable.

- For western pond turtle, alternatives to SJMSCP coverage will include establishing a buffer area of 300 feet between any nesting turtle sites and the waters located near the nesting site. These buffers shall be indicated by temporary fencing if construction has or will begin before nesting periods are ended (the period from egg laying to emergence of hatchlings is normally April to November).
- For giant garter snake, alternatives to SJMSCP coverage will include limiting construction activities that may disturb potential giant garter snake habitat to between May 1 and September 30 to the extent practicable. If construction activities are necessary in giant garter snake habitat between October 1 and April 30, a qualified biologist would conduct a survey within 24 hours prior to construction and monitor construction activities to ensure that individuals of giant garter snake encountered during construction are avoided. If a giant garter snake is encountered during construction activities, the biologist will have the authority to stop construction activities until appropriate corrective measures are completed or it is determined that the snake will not be harmed. Giant garter snakes encountered during construction activities will be allowed to move away from the construction area on their own. If giant garter snakes are observed in burrows or other wintering habitat, burrows will be flagged, and a 200-foot buffer will be established and maintained until the biologist confirms that snakes are no longer present. The project area will be reinspected by the biologist whenever a lapse in construction activity of 2 weeks or more has occurred.
- For valley elderberry longhorn beetle, alternatives to SJMSCP coverage will include conducting a survey of the project site to confirm the presence of any elderberry shrubs. If elderberry shrubs are identified on the project site and cannot be avoided, TC NO. CAL. Development will coordinate a removal and replanting effort with CDFW.
- **MM-BIO-2: Obtain and Implement NPDES Construction Stormwater General Permit.** A NPDES Construction Stormwater General Permit will be obtained for the proposed project, which will require the development of a construction Stormwater Pollution Prevention Plan (SWPPP). The construction SWPPP would include BMPs including or similar to use of barriers (e.g., netting or sandbags) to prevent pollutants from entering drainage channels, equipment inspection for spills, and maintenance and implementation of material spill prevention and cleanup plans. The construction SWPPP would ensure that contaminants are not accidentally introduced into the drainage channels.
- **MM-BIO-3: Tree Replanting.** TC NO. CAL. Development will plant a minimum of 30 trees, including Patmore ash (*Fraxinus p. 'Patmore'*), Chinese pistache (*Pistachia chinensis*), coast

redwood (*Sequoia sempervirens*), and multi-trunk chaste tree (*Vitex agnus-castus*), on the project Warehouse Development Area in locations where future removal is not likely to be required. TC NO. CAL. Development is required to prepare a planting plan that must be reviewed and approved by the Port prior to planting.

**Residual Impact:** In the unlikely event that nesting birds, western pond turtle, giant garter snake, and valley elderberry longhorn beetle are found on the project site, implementation of MM-BIO-1 and MM-BIO-2 would ensure that significant impacts to special status species are avoided. Mitigation measure MM-BIO-1 would reduce the potential exposure of special status species to construction impacts. This includes reducing potential presence of special status species by completing surveys, establishing buffer zones, complying with construction windows, and conducting monitoring. Mitigation measure MM-BIO-2 would reduce the potential for pollutant inputs into drainage channels, which could adversely impact special status aquatic species. Mitigation measure MM-BIO-3 would ensure that roosting habitat opportunities are maintained on the project site for the long term. With implementation of mitigation measures, impacts would be less than significant.

3.3.3.4.2 *BIO-2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

There are no riparian habitats or other identified sensitive natural communities within or directly adjacent to the project site. As discussed in BIO-1, off-site riparian habitats within the Port would not be impacted by construction or operation of the proposed project.

**Impact Determination:** No impact.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

3.3.3.4.3 *BIO-3: Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?*

The jurisdictional waters delineation conducted for this project concluded that the project site contains approximately 0.09-acre of seasonal wetland, 0.09-acre alkaline scald mapped as "other waters," and 1.58 acres (4,400.67 linear feet) of drainage ditches (WRA 2021). As discussed below, while these features meet the technical criteria for a wetland or non-wetland waters, they were determined to be exempt from USACE regulation based on a review of information regarding their

creation and use. None of these features are jurisdictional waters of the United States as confirmed by USACE (USACE 2021).

The manufactured drainage ditches were constructed in the uplands with no connection to historical watercourses. Topographic maps as far back as 1913 indicate no stream or other aquatic features in the vicinity of the existing ditches. The central and western drainage ditches were constructed in upland areas in 1954 to drain stormwater runoff on Rough and Ready Island. The southern ditch was constructed in 2006 to route water around the Ferguson development that was constructed immediately to the south of the project site. The alignment of the ditches does not fall within the footprint of a historical stream, marsh, or wetland boundary. The exemption of the manufactured ditches is consistent with the USACE's long-standing, historic position that nontidal ditches excavated in upland (and historically described as "dry land") are not jurisdictional, including stormwater control features constructed or excavated in upland areas. The seasonal wetland and alkaline scald are not subject to Section 404 jurisdiction since these features are not adjacent to traditional navigable waters or other bodies of water over which the USACE has jurisdiction (WRA 2021).

The stormwater ditches on the project site do not meet the definition of a wetland under the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* that was adopted on April 2, 2019, by the State Water Resources Control Board because the ditches are artificial (not a wetland created by modification of surface waters of the state) and are subject to ongoing operation and maintenance (WRA 2021). Per the Procedures, the stormwater ditches are not waters of the state since they are constructed artificial wetlands and are currently used and maintained.

However, it is anticipated that the 0.09-acre area determined to be seasonal wetland and the 0.09-acre alkaline scald mapped as "other waters" will be subject to CVRWQCB jurisdiction as waters of the state (WRA 2021). Both of these areas would be filled and converted to parking lots.

**Impact Determination:** There would be no impacts to federally jurisdictional waters from the proposed project. However, construction of the proposed project would fill wetlands and other waters present on the project site that are likely to be jurisdictional under state law. This would constitute a potentially significant impact.

**Mitigation Measures:** The following mitigation measure would be implemented to offset impacts on jurisdictional waters:

- **MM-BIO-4: Compensatory Wetland and Waters Mitigation.** If determined to be subject to CVRWQCB jurisdiction as waters of the state, TC NO. CAL. Development will purchase appropriate wetland mitigation credits at a ratio of 1:1 to compensate for the loss of state

waters. To compensate for permanent impacts to the small seasonal wetland and alkaline scald totaling 0.18 acre, TC NO. CAL. Development shall purchase credits from the National Fish and Wildlife Foundation in-lieu fee program (Aquatic Resource Service Area - San Joaquin River) at a ratio of 1:1.

**Residual Impact:** With implementation of MM-BIO-4, the proposed project would have less-than-significant impacts on state protected wetlands.

*3.3.3.4.4 BIO-4: Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The lack of connected aquatic features within the project site would eliminate potential project-related direct impacts to resident and migratory fish on site. As discussed in BIO-1, the project area is along the Pacific Flyway, an established air route of waterfowl and other birds migrating between wintering grounds in Central and South America and nesting grounds in Pacific Coast states and provinces of North America. While the project area's small size and industrial nature make it unlikely to be used as a stopover site during migration, there are several mature trees on site that have the potential to support roosting migratory birds. The proposed project involves tree removal as well as noise and human activity from construction and operations.

**Impact Determination:** While the existing habitat at the project site is not likely to support special status species, there remains the possibility that special status species could use the mature trees, drainage channels, and grasslands on the site for foraging or possibly nesting. Accordingly, tree removal and construction activities have the potential to disrupt the activities of migratory birds. Impacts would be considered potentially significant.

**Mitigation Measures:** The following mitigation measures would be implemented to reduce the potential impacts:

- **MM-BIO-1: Obtain Coverage under the SJMSCP or Implement Protective Measures for Nesting Birds, Western Pond Turtle, Giant Garter Snake, and Valley Elderberry Longhorn Beetle** (see BIO-1 for more information).
- **MM-BIO-3: Tree Replanting** (see BIO-1 for more information).

**Residual Impact:** Implementation of MM-BIO-1 would ensure that impacts on nesting birds would be avoided, and MM-BIO-3 would ensure that on-site roosting habitat is maintained for the long term. Accordingly, the proposed project would have less-than-significant impacts on migratory species, wildlife corridors, or nursery sites.

3.3.3.4.5 *BIO-5: Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Construction and operation of the proposed project would require tree removal; however, none of the trees to be removed are heritage oaks protected under the Stockton Heritage Tree Ordinance or street trees protected under the City Municipal Code. The proposed project would therefore not conflict with the Stockton Heritage Tree Ordinance or the City Municipal Code. There are no other local policies or ordinances for protecting biological resources that are applicable to the project site.

**Impact Determination:** Based on the analysis presented above, the proposed project would not conflict with local policies or ordinances pertaining to biological resources.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

3.3.3.4.6 *BIO-6: Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The SJMSCP is the only conservation plan in the project area. As discussed under BIO-1, the project site could potentially provide habitat for species protected under the SJMSCP. Migratory birds have been known to roost on trees within the Port. Mature trees on-site have the potential to serve as roosting sites and other areas of the project site may offer foraging habitat to other species. These areas could be temporarily affected during construction of the proposed project.

**Impact Determination:** Because the proposed project has the potential to temporarily adversely affect special status species, it has the potential to conflict with biological resource goals and policies from the SJMSCP, which would constitute a significant impact.

**Mitigation Measures:** The following mitigation measures would be implemented to reduce the potential impacts:

- **MM-BIO-1: Obtain Coverage under the SJMSCP or Implement Protective Measures for Nesting Birds, Western Pond Turtle, Giant Garter Snake, and Valley Elderberry Longhorn Beetle** (see BIO-1 for more information).

**Residual Impact:** Implementing MM-BIO-1 includes adherence with SJMSCP requirements or implementation of equivalent avoidance measures. With implementation of this mitigation measure, impacts would be less than significant.

### 3.4 Cultural Resources

This section details the existing historical and archaeological resources within the project area; the variety of resources in the project area and surrounding vicinity; and the relevant federal, state, and local regulations and policies. The information presented in this section is largely based on historical maps and documents about the development of the project area.

Cultural resources are defined as archaeological sites, elements of the historic built environment (e.g., buildings, structures, bridges, or other built features), and places of traditional cultural importance that meet one of the following criteria (14 CCR 15064.5):

- Listed in or eligible for listing in the California Register of Historical Resources (CRHR)
- Listed in a local preservation register
- Identified as significant in a historical resource survey (unless the preponderance of evidence demonstrates that it is not historically or culturally significant)
- Determined to be significant by the CEQA lead agency, provided the determination is supported by substantial evidence considering the whole record

For the purposes of this analysis, the study area is defined as the project site. Because the project site is an industrial port and there would be no change in use, no effects to setting or landscape are expected.

#### 3.4.1 *Environmental Setting*

Prior to historic land modifications, the region surrounding the project site was characterized by extensive wetlands, with dry land available only on small hills and natural levees (Wagner 1981). The project area was a seasonally inundated island, part of the low-lying Sacramento-San Joaquin Delta. To the east was the higher ground of the Central Valley. Soils are Egbert mucky clay loam and Scribner clay loam, which are derived from alluvium. It is poorly drained, and “drains are required to control both surface and subsurface water” (NRCS 2001). Underlying Holocene alluvium are deltaic and alluvial deposits dating to the Pleistocene and earlier.

The Delta area has probably been occupied since the late Pleistocene to early Holocene period, beginning around 11,000 years ago. However, alluvial processes have likely erased most early archaeological sites. The earliest documented sites in the region date to about 9,000 years ago and are thought to have been mobile communities focused on hunting and fishing (Chartkoff and Chartkoff 1984; Milliken et al. 2007). Warm and dry conditions in the mid-Holocene period (about 7,000 to 3,000 years ago) are associated with a change from a subsistence focus towards plant gathering; milling stones are common during this period, though communities are still thought to have been fairly mobile (Fagan 2003). Later in this period, a trend towards sedentary communities and economic diversification emerged. The late Holocene period is characterized by a continued

increase in economic diversity and sociopolitical complexity, with emphasis on long-distance trade (Chartkoff and Chartkoff 1984; Moratto 1984). Cultures from this period correspond with ethnographically described cultures.

The project site is in the traditional territory of the Yokuts Tribe and may also have been used or settled by Plains Miwok and Wintun peoples. Yokuts communities were organized into a number of Tribes who were united by a common language (Golla 2007). They lived throughout the San Joaquin Valley and relied on the region's rich fishing and hunting resources (Kroeber 1976). Native American communities were severely impacted by European contact (Milliken 1995); however, Yokuts people have endured and are now members of several federally recognized Tribes.

The earliest European contact in the region dates to the late 1500s and was characterized by the establishment of Spanish missions and pueblos. Trappers from the Hudson's Bay Company also settled in the area that would become Stockton in the early 1800s, founding what is still known as French Camp (Wood 1973). The new Mexican government took control of California in 1822 and began to distribute lands to private owners. In 1842, German immigrant Charles Weber passed through what would become Stockton; he settled there and established a store in 1847 (Wood 1973).

The gold rush that began in 1848 spurred a boom in the Stockton area, and the City incorporated in 1850. Hundreds of vessels, from paddlewheelers to barks, plied the area serving miners. The Swamp Land Act of 1850 (also known as the Overflow Land Act) allowed for the transfer of wetlands from federal to state ownership, which began the process of reclaiming lands through drainage, dredging, levee construction, and fill placement (Garone 2011). After the gold rush, the economy was driven by shipbuilding and agriculture.

Prior to historic land-making, the project site would have been seasonally inundated in the winter and early spring (Uribe & Associates 1996). Levees were constructed on Rough and Ready Island beginning in 1850, and the island was originally agricultural and residential. In 1917, an article in the *Journal of Electricity* describes construction and testing of irrigation infrastructure for cattle ranching on the island (Halloran 1917). Early maps show the northern boundary of the island followed the San Joaquin River's original meanders.

Rough and Ready Island became a U.S. Navy property in 1944, to serve the expanding needs of the Pacific theater in World War II. Various developments occurred across Rough and Ready Island while the base was operated by the U.S. Navy, and the construction of the Stockton DWSC resulted in the straightening of the island's northern shoreline. Former military facilities still present on the island include buildings, roads, and rail lines, many of which are contributing properties to the Naval Supply Annex Stockton National Historic District (NHD).

The Department of Defense transferred its property on Rough and Ready Island to the Port between 2000 and 2011. A recent re-evaluation of the NHD found that “the majority of the warehouses at Rough and Ready Island are occupied, and continue to be used for their originally intended purpose, to store and transport goods. Conversely, the administration buildings are mostly vacant” (Terracon 2018).

Results of geotechnical testing conducted for the proposed project reflect this history. The 52 borings excavated from 9.5 to 67.5 feet below the ground surface revealed that “the Site is blanketed by an approximately 7- to 36-foot-thick layer of soft to medium stiff clay with interbedded layers of soft to medium stiff silt and sandy silt and medium dense sand and silty sand [...] Some areas of the Site have a 1- to 3-foot thick layer of near-surface fill” (H&A 2020a, pp. 10-11). Groundwater was encountered at approximately -3 feet North American Vertical Datum of 1988 (NAVD88). The surface across the site is approximately +2 feet NAVD88, indicating that groundwater is present at about 5 feet below the ground surface, and likely higher in the rainy season. These results indicate alluvial deposition in a low-lying environment.

Two recorded historic properties are located near the project area: the Naval Supply Annex Stockton NHD and the Daggett Road Bridge, which is both individually eligible for NRHP listing and a contributing element of the NHD. The NHD was determined NRHP-eligible in 1996. The integrity and condition of the historic district was reassessed by a reconnaissance-level survey conducted for the Port in 2018. The 2018 survey confirmed that the NHD is still NRHP-eligible, despite some loss of integrity since the 1996 determination. The project area is outside the NHD boundaries.

A search of the Central California Information Center of the California Historical Resources Information System in January 2021 revealed no additional resources in the project area. There are no archaeological sites recorded within a mile of the project area. Two archaeological surveys have occurred on Rough and Ready Island; both were outside the project area and neither located archaeological resources (BRAI 1996; Gross 2007).

A search of the NAHC’s Sacred Lands file was requested on March 26, 2021. On April 23, 2021, the NAHC responded that no Sacred Lands were identified in the project area.

## **3.4.2** *Applicable Regulations*

### **3.4.2.1** **State**

#### **3.4.2.1.1** *California Environmental Quality Act*

CEQA and the CEQA Guidelines include procedures for identifying, analyzing, and disclosing potentially significant adverse impacts of a project to historical and unique archaeological resources, including resources listed in or formally determined eligible for the National Register of Historic

Places (NRHP), the CRHR, or local registers. CEQA requires the lead agency to consider the effects of a project on archaeological resources and determine whether any identified archaeological resource is a historical resource (i.e., if the archaeological resource meets the criteria for listing in the CRHR) (CEQA Guidelines Sections 15064.5[a][1],[3] and 15064.5[c][1–2]). An archaeological resource that qualifies as a historical resource under CEQA generally qualifies for listing under Criterion 4 of the CRHR (CEQA Guidelines Section 15064.5[a][3][D]; NRHP Criterion D). An archaeological resource may qualify for listing under Criterion 4 when it can be demonstrated that the resource has the potential to significantly contribute to questions of scientific or historical importance. Archaeological resources that are not historical resources according to the above definitions may be “unique archaeological resources,” as defined in PRC 21083.2, which generally provides that “non-unique archaeological resources” do not receive any protection under CEQA. If an archaeological resource is neither a unique archaeological resource nor a historical resource, the effects of a project on those resources are not considered significant under CEQA.

#### *3.4.2.1.2 California Executive Order W-26-92*

California Executive Order (EO) W-26-92 affirms that all state agencies shall recognize, preserve, and maintain significant heritage resources of the state.

### **3.4.2.2 Local**

#### *3.4.2.2.1 City of Stockton Municipal Code*

The City designates Landmarks and Historic Sites under the City Municipal Code, Title 16, Division 7, Chapter 16.220. Landmarks are artifacts, natural features, or structures notable for one or more of the following: archaeological interest; architectural artisanship, style, or type; association with a historic event or person; association with the heritage of the City, state, or nation; visual characteristics; relationship to another landmark; or integrity as a natural environment. Historic sites are areas, neighborhoods, properties, or sites which meet one or more of the following: archaeological interest; association with the heritage of the City, state, or nation; visual characteristics; association with a particular way of life important to the City; or association with a historic event, significant person, or a person significant to a specific national origin. Historic sites cannot be relocated or demolished without a permit.

### *3.4.3 Environmental Impacts and Mitigation Measures*

#### **3.4.3.1 Baseline**

At the time of publication of the NOP for the proposed project, the site consisted of largely vacant disturbed land with five operational warehouses in the northwest corner. As described in Section 2.3, the Warehouse Development Area consists of ruderal vegetation, including non-native grasses, a small area of asphalt or concrete paving, and an access road. Three open stormwater drainage

ditches are located within the Warehouse Development Area. Areas adjacent to the Warehouse Development Area have similar characteristics.

### 3.4.3.2 Thresholds

For purposes of this DEIR, the following thresholds, which are based on Appendix G of the CEQA Guidelines (Environmental Checklist), were used to determine whether the proposed project would result in impacts on cultural resources. The proposed project would have an impact on cultural resources, including tribal cultural resources, if:

- **CHR-1:** The project would cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
- **CHR-2:** The project would cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- **CHR-3:** The project would disturb any human remains, including those interred outside of formal cemeteries.

### 3.4.3.3 Methodology for Determining Impacts

The CEQA Guidelines define a substantial adverse change in the significance of a historical resource as a significant effect on the environment. A substantial adverse change to archaeological or historical resources is defined to include physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired (CEQA Guidelines Section 15064.5[b][1]). The significance of a historical resource is materially impaired when a project diminishes the characteristics that convey its historical significance and that justify its inclusion on a historic register. This is consistent with the criteria for determination of adverse effect in the National Historic Preservation Act (NHPA) Section 106 regulations and guidelines.

### 3.4.3.4 Impact Analysis

#### 3.4.3.4.1 *CHR-1: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?*

There are no historical resources present on the project site. The proposed project would not modify the existing setting (as an industrial zone of the Port) or otherwise indirectly affect the NHD or any individually eligible structures. Therefore, there would be no impacts to historical resources.

**Impact Determination:** No historical resources are present in the project area, and no impacts are expected.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

3.4.3.4.2 *CHR-2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?*

The proposed project would include the following ground disturbance:

- Site grading: up to 3 feet below the ground surface
- Construction of stormwater detention ponds and utility vaults, and removal of the existing fire water line: up to 6 feet below the ground surface
- Utility trenching: up to 12 feet below the ground surface
- Installation of drilled displacement columns below the outdoor storage area and building: up to 55 feet below the ground surface

Excavation would encounter native sediments, which are present across the project area. However, Rough and Ready Island has low potential for archaeological resources due to its low elevation and seasonal flooding prior to the construction of levees (Uribe & Associates 1996). Recent consultation by the Port with Native American Tribes has indicated increased concern with areas of Rough and Ready Island that are adjacent to the San Joaquin River, where natural levees could have existed, and cultural practices are known to have occurred. The proposed project is not near any of these higher-potential areas. It is unlikely that archaeological materials would be encountered.

**Impact Determination:** The proposed project is not expected to encounter intact archaeological resources. However, because the proposed project includes disturbance of soil through direct removal, if archaeological materials are present in previously undisturbed native sediments, they could potentially be disturbed during construction, which would constitute a potentially significant impact.

**Mitigation Measures:** While the proposed project is not expected to encounter archaeological resources, in the unlikely event of such a discovery, the following mitigation measure would be implemented to reduce any impacts:

- **MM-CHR-1: Stop Work in the Area If Prehistoric or Historical Archaeological Resources Are Encountered.** A qualified archaeologist will provide training materials to the construction contractor in identification of cultural resources, and in the event that any artifact, or an unusual amount of bone, shell, or non-native stone, is encountered during construction, work would be immediately stopped and relocated to another area. The contractor would stop construction within 10 meters (30 feet) of the exposure of these finds until a qualified archaeologist can be retained by the Port to evaluate the find (see 36 CFR 800.11.1 and 14 CCR 15064.5[f]). Examples of such cultural materials might include concentrations of ground stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; flakes of stone not consistent with the immediate geology, such as obsidian or fused shale; a historic trash pit containing bottles and/or ceramics; or structural

remains. Native American Tribes and the Office of Historic Preservation would be notified of the find. If the resources are found to be significant, they would be avoided or if avoidance is not possible, mitigated. Mitigation would be developed in coordination with Native American Tribes and could include development of a treatment plan to guide data recovery and interpretation of results for the public. This interpretation could include adding information on the resources to the Port's website, which will include a history portal site, developing informational brochures or signage on site or in the Port administrative building, and/or providing material to the Tribes.

**Residual Impact:** With implementation of MM-CHR-1, impacts would be less than significant.

*3.4.3.4.3 CHR-3: Would the project disturb any human remains, including those interred outside of formal cemeteries?*

**Impact Determination:** As described under CHR-2, the proposed project includes excavation extending into native sediments that have low potential for human remains. However, because the proposed project includes disturbance of soil through direct removal, if remains are present in previously undisturbed native sediments, they could potentially be disturbed during construction, which would constitute a potentially significant impact.

**Mitigation Measures:**

- **MM-CHR-1: Stop Work in the Area If Prehistoric or Historical Archaeological Resources Are Encountered** (see CHR-2 for more information).

**Residual Impact:** With implementation of MM-CHR-1, impacts would be less than significant.

## **3.5 Energy**

This section describes the existing energy usage in the study area and analyzes how the proposed project may affect the consumption of energy resources and plans for renewable energy or energy efficiency.

### **3.5.1 Environmental Setting**

#### **3.5.1.1 State Energy Resources and Use**

Due to the size of its population, California's energy consumption ranks as the second highest in the country, with an estimated total consumption of 7,802 trillion British thermal units (Btu) in 2019. The state's energy consumption per capita, however, ranks as the fourth lowest because of its mild climate and policies related to energy efficiency (USEIA 2021). California is the fourth highest producer of energy, producing 2,449 trillion Btu in 2019. It is the nation's top producer of solar, geothermal, and biomass energy and the second highest producer of hydroelectric power generation (USEIA 2021). Electricity demand, usage, and production in the state is projected to increase in the near future due to population growth and other factors, including climate change (CEC 2020).

#### **3.5.1.2 Regional Energy Resources and Use**

Pacific Gas and Electric Company (PG&E) provides natural gas and electricity to Northern California, including to the Port and the project site. Their service area includes 70,000 square miles in Northern and Central California and approximately 16 million people. In 2017, PG&E produced an estimated 34,861 gigawatt-hours (GWh), with the majority coming from fossil fuel-fired plants (PG&E 2021). Within San Joaquin County, PG&E owns most of the transmission and distribution facilities, except for those owned and maintained by Lodi Electric, MID, and the Port. In 2019, total electricity consumption in the County was estimated at 5583.34 GWh (CEC 2021).

#### **3.5.1.3 Port of Stockton Energy Resources and Use**

The Port owns and maintains the utility system infrastructure, including power lines and poles, on the Port's West Complex. PG&E provides electricity to the West Complex with wholesale electric transmission service from the California Independent System Operator's electric grid. The point of interconnection is located at the Port's Rough and Ready substation (Port 2020b). The Port's electrical load consists of commercial and industrial customers.

## 3.5.2 *Applicable Regulations*

### 3.5.2.1 **State**

#### 3.5.2.1.1 *Senate Bill 350: Clean Energy and Pollution Reduction Act*

The Clean Energy and Pollution Reduction Act (SB 350), enacted in 2015, established clean energy, clean air, and GHG reduction goals, including reducing GHG to 40% below 1990 levels by 2030 and to 80% below 1990 levels by 2050. The California Energy Commission is working with other state agencies to implement the bill. The bill increases California's renewable electricity procurement goal from 33% by 2020 to 50% by 2030. In addition, SB 350 requires California to double statewide energy efficiency savings in electricity and natural gas end use by 2030.

#### 3.5.2.1.2 *Senate Bill 100: California Renewables Portfolio Standard Program*

The California Renewables Portfolio Standard Program (SB 100), enacted in 2018, set a goal of powering all retail electricity sold in California and state agency electricity needs with renewable and zero-carbon resources (such as solar and wind energy) that do not emit climate-altering GHGs by 2045. SB 100 updates the state's Renewables Portfolio Standard to ensure that by 2030 at least 60% of California's electricity is renewable. It also requires the California Energy Commission, California Public Utilities Commission, and ARB to use programs under existing laws to achieve 100% clean electricity and issue a joint policy report on SB 100 by 2021 and every 4 years thereafter.

#### 3.5.2.1.3 *California Green Building Standards Code*

The California Green Building Standards Code (CALGreen; 24 CCR Part 11) is a state-mandated green building code. Its purpose is to improve public health, safety, and general welfare through enhanced design and construction of buildings using concepts that reduce negative impacts and promote those principles that have a positive environmental impact and encourage sustainable construction practices. CALGreen was adopted to address planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality.

### 3.5.2.2 **Local**

#### 3.5.2.2.1 *City of Stockton General Plan*

The following local policies pertaining to energy are included the 2040 General Plan (City 2018a):

- **Policy LU-5.4:** Require water and energy conservation and efficiency in both new construction and retrofits.
  - **Action LU-5.4B:** Require all new development, including major rehabilitation, renovation, and redevelopment, to incorporate feasible and appropriate energy conservation and green building practices, such as building orientation and shading, landscaping, and the use of active and passive solar heating and water systems.

### 3.5.2.2.2 *Renewable Portfolio Standard Procurement Plan*

In order to comply with SB SX1-2 and SB 350 standards, the Port has developed and implemented a *Renewable Portfolio Standard Procurement Plan* (Port 2016). In the plan's most recent iteration, the Port determined the most efficient and cost-effective approach to meeting these standards is through continued purchase of sufficient state-approved renewable energy products from the active California market. For the compliance period from 2021 through 2030, the Port will determine and implement the most cost-effective options for complying with newly codified laws (Port 2016).

As of July 2019, the Port also offers its tenants financial incentives to install high-efficiency equipment or systems. Incentives are paid on the energy savings and permanent peak demand reduction beyond baseline energy performance, which include state-mandated codes, federal-mandated codes, industry-accepted performance standards, or other baseline energy performance standards (Port 2019b).

## 3.5.3 *Environmental Impacts and Mitigation Measures*

### 3.5.3.1 **Baseline**

At the time of publication of the NOP for the proposed project, the site consisted of largely vacant disturbed land with five operational warehouses in the northwest corner. Utility connections are located at the southwest corner of the site. The warehouses were in operation under baseline conditions and would continue to operate at existing levels post-project. Therefore, these operations are not considered as part of the energy assessment because there would be no change to these operations as a result of the proposed project.

### 3.5.3.2 **Thresholds**

For purposes of this DEIR, the following thresholds, which are based on Appendix G of the CEQA Guidelines (Environmental Checklist), were used to determine whether the proposed project would result in impacts on energy. The proposed project would have an impact on energy, including renewable energy and energy efficiency, if:

- **ENE-1:** The project would result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- **ENE -2:** The project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

### 3.5.3.3 **Methodology for Determining Impacts**

The energy analysis considered the proposed project's energy use to determine if such use would result in wasteful, inefficient, or unnecessary use of energy or wasteful use of energy resources, thereby resulting in a significant impact. This analysis considered the proposed project's energy use

for all project phases and components, including transportation-related energy, during construction and operation, as well as the proposed project's adherence to building code compliance, and whether overall scope of the proposed project (including such factors as size, location, orientation, equipment use, and any renewable energy features) would result in potential impacts. Potential impacts on energy were qualitatively evaluated based on a review of the proposed project's energy usage, including from utilities and fuels to support transportation, and the Port's *Renewable Portfolio Standard Procurement Plan* (Port 2016).

### 3.5.3.4 Impact Analysis

#### 3.5.3.4.1 *ENE-1: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Construction of the proposed project would use equipment that consumes fossil fuels but would not require any unusual or excessive equipment or practices compared to projects of similar type and size. The proposed project would comply with all federal, state, and local regulations related to energy usage and fuel consumption.

The main direct energy use on site would be through use of electricity and natural gas. The proposed distribution facility would require energy to power lights and equipment, including computers, machineries, and heating and cooling units. The proposed project would obtain energy from local providers by connecting to existing Port power infrastructure, including electricity from PG&E. As noted in Table 5, the proposed project would generate an annual demand for 3.3 million kilowatt hours (kWh) of electricity and 13,868 therms of natural gas. In 2020, San Joaquin County non-residential use consumed 3,621 million kWh of electricity (CEC 2020); the proposed project would represent of 0.009% of total use.

The distribution facility will meet all required measures of California Green Building Standards Code, which requires sustainable building practices as part of all new buildings in California. Mandatory requirements involve water and energy efficiencies, indoor air quality, and the use of sustainable building materials. The proposed design will also include energy-efficient lighting fixtures.

It is anticipated that the distribution facility would consume approximately 5.06 kWh of electricity per square foot annually. Non-refrigerated warehouses in the United States use an average of 6.1 kWh of electricity and 13,400 Btu of natural gas per square foot annually. Therefore, energy usage associated with the distribution facility would be comparable to similar warehouse structures. Because the proposed project would be designed and constructed to comply with CALGreen, would include provisions to use new trucks and electric terminal equipment, and would comply with other state and

local plans and policies, the energy consumption from the proposed project would not be wasteful, inefficient, or unnecessary, and thus would be less than significant.

**Impact Determination:** Construction and operation of the proposed project would not include energy consumption that is wasteful, inefficient, or unnecessary compared to projects of a similar size and scope. Impacts would be considered less than significant.

**Mitigation Measures:** None required.

**Residual Impact:** Less-than-significant impact.

#### 3.5.3.4.2 *ENE-2: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

To comply with the *Renewable Portfolio Standard Procurement Plan* (Port 2016), the Port has committed to purchasing state-approved renewable energy from the active California market. Energy use associated with construction and operation of the warehouse would comply with this plan as the warehouse would connect to the existing power grid at the Port. The Port would also offer TC NO. CAL. Development financial incentives to install high-efficiency equipment during warehouse construction as required by the *Renewable Portfolio Standard Procurement Plan*.

In addition, the City's 2040 General Plan (City 2018a) requires that new developments incorporate energy conservation and green building practices. As noted above in ENE-1, the proposed project would comply with all required provisions of the California Green Building Standards Code, which requires green building practices.

**Impact Determination:** Because the proposed warehouse incorporates energy conservation and green building practices, impacts would be considered less than significant.

**Mitigation Measures:** The following mitigation measures would be implemented to address further reduce energy consumption:

- **MM-GHG-1: Energy Audit** (See also GHG-1 in Section 3.7.3.4, "Impact Analysis"): Within 9 months of the effective date of the new lease, TC NO. CAL. Development will conduct an energy audit and develop a plan for reducing overall terminal energy from 2021 levels by within 5 years of the effective date of the lease. The plan must be submitted to the Port for review and approval. The plan will incorporate the following measures at a minimum:
  - Evaluate the level of solar panels that are required to meet the facility's electrical needs, both on buildings and for high mast lighting. Based on the evaluation, TC NO. CAL. Development will install solar unless a technical feasibility issue is identified.
  - Replace less-efficient bulbs with energy-efficient light bulbs, where applicable and safe. Lighting within the interior of buildings on the premises and outdoor high mast

terminal lighting will be replaced with LED lighting or a technology with similar energy-saving capabilities within 2 years after the effective date of a new lease.

**Residual Impact:** Implementation of MM-GHG-1 would ensure efficient consumption of resources and reduce the proposed project's impacts to a less-than-significant level.

## 3.6 Geology and Soils

This section describes the geology and soil conditions at the project site and analyzes how the proposed project may affect those conditions. This section also describes applicable rules and regulations pertaining to geology and soil conditions, including seismic hazards. For the purposes of the geology and soils analysis, the study area is defined as the project site including the Warehouse Development Area, Western Remediation Area, Eastern Remediation Area, and Western Warehouse Area (Figure 2), and immediate adjacent areas. The analysis in this section is based on regional soil and seismic hazard information provide by federal, state, and local government agencies, and in part on information and data presented in the *Preliminary Geotechnical Investigation Report* prepared for the proposed project (H&A 2020a).

### 3.6.1 Environmental Setting

#### 3.6.1.1 Soils

The project site has been mapped by the National Resources Conservation Service as underlain primarily with Egbert mucky clay loam with 0% to 2% slopes, with smaller portions of the site underlain with Egbert-Urban land complex with 0% to 2% slopes, Scribner clay loam with 0% to 2% slopes, and urban land. Egbert mucky clay loam, Egbert-Urban land complex, and Scribner clay loam are poorly drained with slow infiltration rates and are associated with high water tables (4 to 6 feet below ground surface for Egbert mucky clay loam and Egbert-Urban land complex and 3 to 5 feet below ground surface for Scribner clay loam) (NRCS 2021). Haley & Aldrich prepared the *Preliminary Geotechnical Investigation Report* for the proposed project and reported the following:

The Site is blanketed by an approximately 7- to 36-foot-thick layer of soft to medium stiff clay with interbedded layers of soft to medium stiff silt and sandy silt and medium dense sand and silty sand. The upper weak clay layer is underlain by interbedded layers of stiff to very stiff clay and silt and medium dense to dense sand, silty sand, and clayey sand to the maximum depths explored during this investigation. Some areas of the Site have a 1- to 3-foot thick layer of near-surface fill primarily consisting of clayey gravel or gravelly clay with variable amounts of sand and larger cobbles. (H&A 2020a).

The report goes on to confirm that groundwater was encountered at approximately -3 feet NAVD88. The surface across the site is approximately +2 feet NAVD88, indicating that groundwater is present at about 5 feet below ground surface and likely higher in the rainy season (H&A 2020a).

### 3.6.1.2 Fault Rupture

Fault rupture almost always follows pre-existing faults, which are zones of weakness. The *Preliminary Geotechnical Investigation Report* identified two

Surface fault rupture is defined as slip on a fault plane that has spread to the Earth's surface and caused a rupture or disturbance.

known active faults within 25 miles of the project area—Great Valley 7 (17.4 miles) and Greenville Connected (24.2 miles)—and numerous other active and potentially active faults farther east and west of the project site. However, the project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone (H&A 2020a).

### 3.6.1.3 Ground Shaking

Ground shaking is the most widespread effect of earthquakes. The estimated likelihood of a magnitude 6.7 or greater earthquake in greater San Francisco Bay area before 2044 is 72% (Field and 2014 Working Group on California Earthquake Probabilities 2015). For individual faults in proximity to the project site, forecasted probabilities include 0.17% for the Great Valley 7 fault (17.4 miles from project site; the closest earthquake fault to the project site) and 4.03% for the Greenville Connected Fault (24.2 miles from project site; Field and 2014 Working Group on California Earthquake Probabilities 2015). The project site's setback from active earthquake faults would help mitigate impacts related to ground shaking. For other similar industrial sites at the Port in proximity to the project site, the estimated Maximum Considered Earthquake peak ground acceleration adjusted for site class effects was determined to be 0.393g (based on both probabilistic and deterministic seismic ground motion; SEG 2018). Nonetheless, regional seismic activity could cause accelerations severe enough to cause major damage to structures and foundations not designed to resist the forces generated by earthquakes. Underground utility lines are also susceptible where they lack sufficient flexibility to accommodate the seismic ground motion (City 2018a).

### 3.6.1.4 Liquefaction

Liquefaction normally occurs under saturated conditions in soils such as sand in which the strength is purely frictional. Primary factors that trigger liquefaction are moderate to strong ground shaking (seismic source); relatively clean, loose granular soils (primarily poorly graded sands and silty sands); and saturated soil conditions (shallow groundwater). Because of the increasing overburden pressure with depth, liquefaction of granular soils is generally limited to the upper 50 feet of a soil profile. However, liquefaction has occurred in soils other than clean sand.

Soil liquefaction is a state of soil particle suspension caused by a complete loss of strength when the effective stress drops to zero.

The California Geological Survey (CGS) and U.S. Geological Survey have not mapped any seismically induced liquefaction hazard zones at the project site or within the City (City 2018a). The *Preliminary Geotechnical Investigation Report* determined that the top 50 feet of soil at the project site have a

moderate vulnerability to liquefaction, but that there is sufficient non-liquefiable soil on top of potentially liquefiable soil to prevent secondary liquefaction effects (e.g., sand boils or lurch cracking) following a major earthquake (H&A 2020a). The type of ground movement expected from large earthquakes in San Joaquin County is a rolling type of motion, which would be less likely to cause liquefaction (San Joaquin County 2010).

### **3.6.1.5 Lateral Spreading**

During an earthquake, lateral spreading usually takes place along weak shear zones that have formed within a liquefiable soil layer. Lateral

Lateral spreading is a form of liquefaction that results in lateral ground movement during which cohesive soil layers may fracture, subside, rotate, or disintegrate as a result of seismic activity.

spreading has generally been observed to take place in the direction of a free face (i.e., retaining wall, slope, and channel) but has also been observed to a lesser extent on ground surfaces with very gentle slopes. As noted, the project site may be susceptible to liquefaction and therefore may also be susceptible to lateral spreading. However, this susceptibility is reduced because of the flat topographic conditions of the project site.

### **3.6.1.6 Slope Failure and Slope Stability**

Earthquakes can cause significant slope stress, potentially resulting in earthquake-induced landslides. Landslides most commonly occur in areas with steep slopes or within slide-prone geologic units that contain excessive amounts of water. Other factors that affect slope stability include site geology, climate, and human activity. The project site largely has flat topography, steep slopes are not present on the project site, and this area is not likely to be susceptible to seismic-induced slope failure. CGS has not mapped any landslide hazard zones in the project area or in its immediate vicinity (City 2018a).

### **3.6.1.7 Expansive Soils**

Expansive soils are high in clay content and increase and decrease in volume upon wetting and drying, respectively. The change in volume exerts stress on buildings and other loads placed on these soils. Expansive soils are common throughout California and can cause damage to foundations and slabs unless properly treated during construction. Grading, site preparations, and backfill operations associated with subsurface structures can often eliminate the potential for expansion.

The project site is mapped as containing Egbert mucky clay loam and Egbert-Urban land complex, which are highly expansive (linear extensibility of approximately 7% through the soil column), Scribner clay loam, which is moderately expansive (linear extensibility of approximately 3.4% through the soil column) and urban land, which is not expansive (NRCS 2021).

### 3.6.1.8 Subsidence and Settlement

Land surface subsidence can result from both natural and artificial phenomena, including tectonic deformation, consolidation, hydrocompaction, collapse of underground cavities, oxidation of organic-rich soils, rapid sedimentation, and the withdrawal of groundwater. Expansive soils and materials are more susceptible to subsidence, including estuarine sediments, organic detritus, or thick organic deposits. Settlement occurs when ground shaking reduces the amount of pressure existing between soil particles, resulting in a reduction of the volume of the soil. Areas are susceptible to differential settlement if they are underlain by compressible sediments, such as poorly engineered artificial fill. Differential settlement can damage structures, pipelines, and other subsurface entities. Earthquakes and seismic activity can accelerate and accentuate settlement.

Subsidence involves a sudden sinking or gradual settling and compaction of soil and other surface material with little or no horizontal motion.

The project site is mapped as containing soils susceptible to expansion or subsidence. However, the *Preliminary Geotechnical Investigation Report* determined that, because the “soils above the groundwater table primarily consist of interbedded layers of clays and silts,” which are usually not susceptible to cyclic densification, the likelihood of earthquake-related settlement is low (H&A 2020a).

### 3.6.1.9 Erosion

The project site is within a Mediterranean climate, which is exemplified by moist winters and dry summers. Therefore, during the winter the project area is more prone to water erosion, while in the summer the project area is more prone to wind erosion.

Erosion is the detachment and movement of soil materials through natural processes or human activities.

The project site is essentially flat and would not be particularly susceptible to erosion. The site, including the three open, channelized, earthen stormwater drainage ditches that are located within the Warehouse Development Area, do not exhibit evidence of current erosion.

### 3.6.1.10 Paleontology

The proposed project is located in an already disturbed area south of the San Joaquin River, north of Burns Cutoff, and south of the confluence with the Stockton DWSC. Prior to historic land modifications, the region was characterized by extensive wetlands, with dry land available only on small hills and natural levees (Wagner et al. 1981). The area was a slightly elevated stream terrace with the low-lying Delta to the west and the higher ground of the Central Valley to the east.

The Bureau of Land Management developed a classification system based on the potential for the occurrence of significant paleontological resources in a geologic unit and the associated risk for

impacts to the resource (BLM 2007, 2008). The system is summarized here. Any rock material that contains fossils has the potential to yield fossils that are unique or significant to science. However, paleontologists consider that geological formations having the potential to contain vertebrate fossils are more sensitive than those likely to contain only invertebrate fossils. Invertebrate fossils found in marine sediments are usually not considered by paleontologists to be unique resources, because the geological contexts in which they are encountered are widespread and fairly predictable. Invertebrate fossil species are usually abundant and well-preserved. In contrast, vertebrate fossils are much rarer than invertebrate fossils, and are often poorly preserved. Therefore, when found in a complete state, vertebrate fossils are more likely to be a significant resource than are invertebrate fossils. Thus, geologic formations having the potential to contain vertebrate fossils are considered the most sensitive. Vertebrate fossil sites are usually found in non-marine upland deposits (BLM 2007). The project site is situated on fill materials, atop Holocene alluvium. Alluvial deposits typically contain only invertebrate fossils (if any), and those are out of original depositional context (BLM 2007). Vertebrate fossils are considerably more likely to be significant or unique, as are fossils in their original context (BLM 2008).

## **3.6.2** *Applicable Regulations*

### **3.6.2.1** **Federal**

#### **3.6.2.1.1** *International Building Code*

The International Building Code (IBC) addresses the design and installation of building systems through requirements that safeguard public health and safety. The code establishes minimum regulations for building systems, using prescriptive and performance-related provisions. The IBC is available for adoption and use by jurisdictions internationally, and the California Building Code is based on the IBC.

### **3.6.2.2** **State**

#### **3.6.2.2.1** *Alquist-Priolo Earthquake Fault Zoning Act*

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. According to the act, buildings for human occupancy cannot be constructed in regulatory earthquake fault zones established and mapped around the surface traces of active faults. This typically includes areas within approximately 200 to 500 feet of major fault lines. The construction of habitable structures is not proposed as part of the proposed project, and the project area is not in an earthquake fault zone as defined by the act; therefore, the act would not apply to the proposed project.

### 3.6.2.2.2 *Seismic Hazards Mapping Act*

The Seismic Hazards Mapping Act of 1990 was developed to reduce threats to public health and safety and to minimize property damage caused by earthquakes, including the effects of ground shaking, liquefaction, landslides, other ground failure, and other hazards. The act directs CGS to identify and map seismic hazard zones for the purpose of assisting cities, counties, and other local permitting agencies to regulate certain development projects in these zones. Before a development permit may be granted for a site in a seismic hazard zone, a geotechnical investigation of the site must be conducted, and appropriate mitigation measures must be incorporated into the proposed project's design.

### 3.6.2.2.3 *California Building Code*

The California Building Code contains the minimum standards for design and construction in California. The standards provide requirements for general structural design and include means for determining earthquake loads, as well as other loads (e.g., flood, snow, and wind), for inclusion into building codes. The provisions of the California Building Code apply to the construction, alteration, movement, replacement, and demolition of every building or structure, or any appurtenances connected or attached to such buildings or structures throughout California. This code would apply to construction of the proposed project.

## 3.6.2.3 **Local**

### 3.6.2.3.1 *Stockton Municipal Code*

City Municipal Code Section 15.48.050, "Construction and Application," includes a requirement that seeks to mitigate hazards associated with erosion: "During construction, construction activities shall be designed and conducted to minimize runoff of sediment and all other pollutants onto public properties, other private properties and into the waters of the United States." Section 15.48.110, "Erosion Control Requirements," contains specific provisions for erosion control for those construction projects where a grading permit is not required. Section 15.48.070 includes requirements for a grading permit that apply to most construction projects. Such permits require implementation of erosion control measures, often referred to as BMPs.

### 3.6.2.3.2 *2040 General Plan*

The City's 2040 General Plan (City 2018a) contains a safety element that addresses environmental hazards, including but not limited to seismic hazards. Relevant safety element policies include the following:

- **Policy SAF-2.1:** Ensure that community members are adequately prepared for natural disasters and emergencies through education and training.
- **Policy SAF-2.2:** Prepare sufficiently for major events to enable quick and effective response.

The 2040 General Plan is considered a policy document rather than a formal regulation, though many elements are based on existing regulations.

### 3.6.3 *Environmental Impacts and Mitigation Measures*

#### 3.6.3.1 **Baseline**

At the time of publication of the NOP for the proposed project, the site consisted of largely vacant disturbed land with five operational warehouses in the northwest corner. The area surrounding the project site is characterized by the presence of large warehouse buildings, maritime terminals, railroad facilities, large storage buildings, and stockpiles of various commodities on the Port's West Complex.

#### 3.6.3.2 **Thresholds**

For purposes of this DEIR, the following thresholds, which are based on Appendix G of the CEQA Guidelines (Environmental Checklist), were used to determine whether the proposed project would result in impacts related to geology and soils. The proposed project would have an impact related to this topic if:

- **GEO-1:** The project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.
  - Strong seismic ground shaking.
  - Seismic-related ground failure, including liquefaction.
  - Landslides.
- **GEO-2:** The project would result in substantial soil erosion or the loss of topsoil.
- **GEO-3:** The project would be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
- **GEO-4:** The project would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
- **GEO-5:** The project would have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.
- **GEO-6:** The project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

### 3.6.3.3 Methodology for Determining Impacts

Impacts to or associated with geological conditions were qualitatively evaluated based on the potential for the alternatives to temporarily or permanently alter the geology of the project area. In addition, because geological hazards such as earthquakes happen independently of the proposed project, the potential for damage to proposed structures or increased risk of injury due to geologic and seismic hazards were also qualitatively evaluated.

The measurement index for evaluating impacts associated with geology, soils, or seismicity is risk to the public or the environment from geologic processes. A project would be considered to have a major impact if it would result in substantial changes in risks to the public and the environment throughout the project area.

### 3.6.3.4 Impact Analysis

*3.6.3.4.1 GEO-1: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: 1) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42); 2) strong seismic ground shaking; 3) seismic-related ground failure, including liquefaction; or 4) landslides?*

The project area is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, and no known surface expression of active faults is believed to cross the project site; therefore, fault rupture through the site is not anticipated.

The project area is considered subject to relatively low seismicity and ground shaking. Maximum Considered Earthquake peak ground acceleration for similar nearby facilities at the Port has been estimated at 0.393g. Damage to existing structures and on-site improvements would be possible in the event of a large earthquake. Proposed improvements would be constructed in adherence with applicable seismic design parameters and would not increase the potential for human injury or loss of life. This includes adherence to seismic design parameters from the 2019 California Building Code and American Society of Civil Engineers. In addition, during facility operation, TC NO. CAL. Development would prepare and keep on site an emergency response plan to be implemented in case of emergencies such as large earthquakes.

The soils mapped as occurring at the project site include soils susceptible to liquefaction, and the preliminary geotechnical investigation indicates a moderate potential for liquefaction in the top portion of project site soils (H&A 2020a; NRCS 2021). Site preparation for the proposed project would include compaction of subgrade soils, installation of drilled displacement columns, and placement and compaction of aggregate base under the warehouse and other structures (described

in detail in Section 2.5.1). These measures would reduce the susceptibility of site soils to liquefaction as compared to existing conditions. In addition, the proposed improvements would be constructed or installed in adherence with applicable seismic standards. Therefore, the proposed project would result in less-than-significant impacts related to liquefaction.

The project site does not contain any steep slopes or other features suggesting susceptibility to slope failure or landslides. The proposed project would not result in changes that would increase the potential for slope failure or landslides, and the site preparation measures described previously would reduce the potential for slope failure or landslides.

NRCS maps identify the site as within an area with expansive soils, and site-specific investigations identified potential susceptibility to liquefaction and lateral spreading. All grading activities would be performed in accordance with the recommended grading specifications contained in the City Grading Regulations, and the proposed warehouse would be constructed in adherence with applicable seismic standards.

While existing regional and local regulations sufficiently reduce the potential for seismic hazards to a less-than-significant level, additional protection from seismic hazards would be provided through project operation and construction, including remediation activities, and as-needed implementation of applicable hazard response plans and geotechnical recommendations would be made specific to new warehouse. No changes to the existing geology and soils at the site and immediate adjacent areas would occur as a result of implementing ICs in the Western Warehouse Area, because ICs would not result in any physical changes to this project area.

**Impact Determination:** Based on the analysis presented above, the proposed project would result in no impacts related to fault rupture, slope failures, or landslides and less than significant impacts related to seismic lateral spreading, liquefaction, and ground shaking.

**Mitigation Measures:** While impacts would be less than significant, the significance and potential for these impacts would be further reduced through implementation of the mitigation measures detailed below:

- **MM-GEO-1: Maintain, Update, and Implement Emergency Response Plans.** TC NO. CAL. Development will implement and update as frequently as needed an emergency response plan, Contingency Plan, and Emergency Action Plan. The Plan will identify response procedures for chemical spills, fires, and earthquakes involving hazardous materials and hazardous wastes and will establish requirements and procedures needed to protect employees from serious injury, property loss, or loss of life in the event of fires, other emergencies, or major disasters.

- **MM-GEO-2: As-Needed Implementation of Geotechnical Recommendations.**

Recommendations from the *Preliminary Geotechnical Investigation* (H&A 2020a) will be implemented as needed, including use of materials and construction techniques specifically addressing potential seismic and geologic hazards.

**Residual Impact:** Implementation of MM-GEO-1 and MM-GEO-2 would include emergency response plans and as-needed adherence to geotechnical recommendations, which would reduce the significance of impacts related to seismic liquefaction and ground shaking. With implementation of these mitigation measures, impacts related to seismic liquefaction and ground shaking would remain less than significant.

#### 3.6.3.4.2 *GEO-2: Would the project result in substantial soil erosion or the loss of topsoil?*

The site, including the open, channelized, earthen stormwater drainage ditches, does not exhibit evidence of current erosion. The proposed project includes filling an existing drainage ditch, creating a replacement drainage ditch alignment, and constructing two detention basins. The replacement drainage ditch would provide stormwater filtration and conveyance to the existing Port drainage system. The detention basins would limit discharge of post-construction stormwater runoff, which would further reduce any potential for erosion on the site. Because the project site is generally flat and stormwater would be controlled, the potential for substantial soil erosion during operations is considered minimal.

**Impact Determination:** Based on the conditions described above, potential impacts associated with soil erosion and loss of topsoil from the proposed project during construction are not expected. Despite the site's relatively low susceptibility to erosion, construction and remediation activities would require surface excavation which could erode soils if improperly managed. Topsoil that would be removed during grading or other surface preparation does not serve agricultural purposes or other valuable functions. This could be a potentially significant impact.

**Mitigation Measures:** To reduce potential impacts, the following mitigation measure would be implemented:

- **MM-GEO-3: Implement Construction Best Management Practices.** Standard construction BMPs—including but not limited to use of storm drain inlet filters, erosion control (e.g., straw wattles), and maintenance of spill control kits—will be implemented during construction to control or respond to spills or other potential sources of construction-related pollution.

**Residual Impact:** Implementation of MM-GEO-3 would include erosion control measures such as use of netting, sandbags, or other barriers, which would reduce the significance of erosion impacts. With implementation of this mitigation measure, impacts would be reduced to less than significant.

3.6.3.4.3 *GEO-3: Would the project be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

The *Preliminary Geotechnical Investigation Report* (H&A 2020a) identified the site as potentially susceptible to liquefaction and settlement. The soils mapped as occurring at the project site include soils susceptible to liquefaction or subsidence, and the *Preliminary Geotechnical Investigation Report* indicates a moderate potential for liquefaction in the top portion of project site soils (H&A 2020a; NRCS 2021). Fill soils potentially susceptible to subsidence are also common in the area. However, the project site is located in an area considered subject to relatively low seismicity and ground shaking; exposure to unstable geologic hazards would be typical to the region. In addition, susceptibility to geologic hazards is addressed through established design standards. During construction and remediation activities, adherence to Occupational Safety and Health Administration (OSHA) excavation safety guidelines would minimize the potential for worker injury associated with unstable soils. There are no additional hazards pertaining to unstable geologic units or soil on site or off site.

As previously discussed, the proposed project would not increase the potential for slope failures or landslides, and risk from lateral spreading is minimal due to the project site's flat topography. Proposed improvements would be constructed or installed in adherence with applicable seismic standards, which would reduce the potential for slope failure or landslides. No changes to the existing geology and soils at the site and immediate adjacent areas would occur as a result of implementing ICs in the Western Warehouse Area, because ICs would not result in any physical changes to this project area.

**Impact Determination:** Based on the analysis presented above, the proposed project would result in less-than-significant impacts related to geologic unit or soils instability.

**Mitigation Measures:** While impacts would be less than significant, implementation of the following mitigation measures would further reduce the potential or impacts.

- **MM-GEO-1: Maintain, Update, and Implement Emergency Response Plans** (see GEO-1 for more information).
- **MM-GEO-2: As-Needed Implementation of Geotechnical Recommendations** (see GEO-1 for more information).

**Residual Impact:** Implementation of MM-GEO-1 and MM-GEO-2 would include emergency response plans and as-needed adherence to geotechnical recommendations, which would reduce the significance of impacts related to geologic unit or soils instability, including seismic liquefaction

and ground shaking. With implementation of these mitigation measures, impacts related to seismic liquefaction and ground shaking would remain less than significant.

*3.6.3.4.4 GEO-4: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

NRCS maps identify the site as within an area with expansive soils, and site-specific investigations identified potential susceptibility to liquefaction and lateral spreading. All grading completed during project construction and remediation activities would be performed in accordance with the recommended grading specifications contained in the City Grading Regulations, and the proposed warehouse would be constructed in adherence with applicable seismic standards. ICs would not result in any physical changes to the project area.

**Impact Determination:** Based on the analysis presented above, the proposed project would result in less-than-significant impacts related to siting on expansive soils.

**Mitigation Measures:** While impacts would be less than significant, implementation of the following mitigation measures would further reduce the potential or impacts.

- **MM-GEO-1: Maintain, Update, and Implement Emergency Response Plans** (see GEO-1 for more information).
- **MM-GEO-2: As-Needed Implementation of Geotechnical Recommendations** (see GEO-1 for more information).

**Residual Impact:** Implementation of MM-GEO-1 and MM-GEO-2 would include emergency response plans and as-needed adherence to geotechnical recommendations, which would reduce the significance of impacts related to expansive soils. With implementation of these mitigation measures, impacts related to expansive soils remain less than significant.

*3.6.3.4.5 GEO-5: Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

Wastewater demand would be limited to plumbing fixture waste from employee use; no process or industrial wastewater would be generated. The wastewater generated from plumbing fixtures would be disposed of through connection to existing Port wastewater systems; the proposed project would not require the use of septic tanks or alternative wastewater disposal systems or affect any such systems.

**Impact Determination:** Based on the analysis presented above, the proposed project would result in no impact related to septic tanks or alternative wastewater disposal systems.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

*3.6.3.4.6 GEO-6: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

There are no known unique geological or paleontological resources in the project area. Construction of the proposed project would include excavation and consolidation of soils on site, fill, and compaction of soils. However, because of its geomorphological history, the project area is not likely to contain any fossils other than invertebrate fossils that are in a re-deposited context (see Section 3.4 for additional information).

**Impact Determination:** Based on the analysis presented above, the proposed project would result in a less-than-significant impact related to unique paleontological or geologic resources.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

## 3.7 Greenhouse Gas Emissions

This section describes the GHG impacts of the proposed project and analyzes how the proposed project may affect global climate change. It also describes applicable rules and regulations pertaining to GHG emissions. Because GHG emissions are global and the state includes a comprehensive GHG reduction program required to be implemented at state, regional, and local levels, the study area is defined as California.

### 3.7.1 *Environmental Setting*

Global climate change results from GHG emissions caused by several activities, including fossil fuel combustion, deforestation, and land use change. GHGs play a critical role in the Earth's radiation budget by trapping infrared radiation emitted from the Earth's surface, which otherwise escapes to space. The most prominent GHGs contributing to this process include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Certain refrigerants, including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs), also contribute to climate change. The greenhouse effect keeps the Earth's atmosphere near the surface warmer than it would be otherwise and allows for successful habitation by humans and other forms of life.

Global warming potential (GWP) is a measure of how much a given mass of GHG contributes to global warming. A relative scale is used to compare the gas in question to carbon dioxide (whose GWP is defined as 1). In this analysis, CH<sub>4</sub> is assumed to have a GWP of 21 and N<sub>2</sub>O is assumed to have a GWP of 310. Refrigerants have GWPs ranging from 76 to 12,240. Consequently, using each pollutant's GWP, emissions of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, CFCs, HCFCs, and HFCs can be converted into CO<sub>2</sub> equivalents, also denoted as CO<sub>2</sub>e.

Fossil fuel combustion removes carbon stored underground and releases it into the atmosphere. Emissions of GHGs are responsible for the enhancement of the greenhouse effect and contribute to what is termed "global warming," a trend of unnatural warming of the Earth's natural climate. Global warming is the increase in average global temperatures of the Earth's surface and atmosphere. The natural balance of GHGs in the atmosphere regulates the Earth's temperature; without this natural greenhouse effect, the Earth's surface would be approximately 60°F cooler (USGCRP 2018).

Increased concentrations of GHGs in the Earth's atmosphere increase the absorption of radiation and further warm the lower atmosphere. This process increases evaporation rates and temperatures near the surface. Climate change is a global problem, and GHGs are global pollutants, unlike criteria pollutants (such as O<sub>3</sub>, CO, and PM) and TACs, which are pollutants of regional and local concern.

Recent environmental changes linked to global warming include rising temperatures, shrinking glaciers, thawing permafrost, a lengthened growing season, and shifts in plant and animal ranges (CCCC 2018; USGCRP 2018; IPCC 2021). In California, an assessment of climate change impacts

predicts that temperatures will increase between 5.6°F to 8.8°F by 2100, based on low and high global GHG emission scenarios (CCCC 2018). Predictions of long-term negative environmental impacts in California include worsening of air quality problems; an increase in the frequency of heat waves; a reduction in municipal water supply from the Sierra snowpack; sea level rise; an increase in wildfires; damage to marine and terrestrial ecosystems; and an increase in the incidence of infectious diseases, asthma, and other human health problems (CCCC 2018).

## 3.7.2 *Applicable Regulations*

### 3.7.2.1 **Federal**

#### 3.7.2.1.1 *Greenhouse Gas Endangerment Finding (December 7, 2009)*

In the 2007 *Massachusetts v. Environmental Protection Agency* case, the U.S. Supreme Court gave USEPA the authority to regulate GHGs as air pollutants under the CAA. The endangerment finding was published by USEPA on December 15, 2009 (74 Federal Register 239).

#### 3.7.2.1.2 *Heavy-Duty Vehicle National Program*

In September 2011, USEPA and the National Highway Traffic Safety Administration (NHTSA) developed a program designed to reduce fuel consumption (and GHG emissions by association) from medium- and heavy-duty vehicles. The program was directed at model year 2014 to 2018 vehicles and is projected to reduce GHG emissions by approximately 270 million metric tons.

#### 3.7.2.1.3 *Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards*

In May 2010, USEPA and NHTSA developed a program designed to reduce fuel consumption (and GHG emissions by association) from light-duty vehicles. The program was directed at model year 2012 to 2016 vehicles and is projected to reduce GHG emissions by approximately 960 million metric tons. In October 2012, USEPA and NHTSA expanded the program to vehicle model years 2017 through 2025. The requirements of this program apply to light-duty vehicles, such as worker vehicles, used during proposed closure activities.

#### 3.7.2.1.4 *Renewable Fuel Standard*

In 2005, USEPA's Renewable Fuel Standard established the first renewable fuel volume mandate in the United States. The original Renewable Fuel Standard program required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. The program was expanded in 2007 and currently requires that 36 billion gallons of renewable fuel be blended into gasoline by 2022. This program, although not directly relevant to proposed project activities, serves to highlight the developing GHG regulatory framework.

## 3.7.2.2 State

### 3.7.2.2.1 *Assembly Bill 1493: State Standards Addressing Vehicle Emissions*

The California Greenhouse Gas Vehicle Emission Standards (AB 1493), enacted on July 22, 2002, required ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. ARB estimated that the regulation will reduce climate change emissions from the light-duty passenger vehicle fleet by an estimated 18% in 2020 and by 27% in 2030.

### 3.7.2.2.2 *California Executive Order S-3-05*

EO S-3-05, signed by then-Governor Schwarzenegger on June 1, 2005, established the following GHG reduction targets for California: 1) by 2010, reduce GHG emissions to 2000 levels; 2) by 2020, reduce GHG emissions to 1990 levels; and 3) by 2050, reduce GHG emissions to 80% below 1990 levels. EO S-3-05 also called for CalEPA to prepare biennial reports on 1) progress made towards achieving these goals; 2) impacts to California from global warming; and 3) mitigation and adaptation plans to combat these impacts. The most recent of these Climate Action Team reports was completed in December 2010 (CAT 2010).

### 3.7.2.2.3 *California's Renewables Portfolio Standard*

Established in 2002 under SB 1078, accelerated in 2006 under SB 107, and expanded in 2011 under SB 2, California's Renewables Portfolio Standard is an ambitious renewable energy standard. The Renewables Portfolio Standard requires that 33% of total retail sales of electricity be procured from eligible renewable sources by the end of 2020. Renewables Portfolio Standard requirements were conservatively excluded from emission calculations associated with electricity use. On April 12, 2011, then-Governor Brown signed SB 2, which requires one-third of the state's electricity to come from renewable sources by 2020. The legislation increases California's former 20% renewable portfolio standard target for 2010 to a 33% renewable portfolio standard by December 31, 2020 (SBX1-2, 2011). Resolution 10-23 adopted by ARB found that the proposed regulation to adopt the 33% renewable standard was expected to reduce GHG emissions from California's utility sector by at least 12 MMTCO<sub>2e</sub> per year by 2020 (ARB 2010). In October 2015, SB 350 was signed into law. SB 350 requires a 50% increase in California's renewable portfolio standard and a doubling of energy efficiency by 2030.

### 3.7.2.2.4 *Assembly Bill 32: California Global Warming Solutions Act of 2006, Scoping Plan (2008), Scoping Plan Update (2014), and Scoping Plan 2030 (2017)*

The California Global Warming Solutions Act of 2006, widely known as AB 32, required ARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. ARB was directed to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and

economically feasible manner. AB 32 also required ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

On December 11, 2008, ARB adopted the AB 32 Scoping Plan, which set forth the framework for meeting the state's GHG reduction goal set by EO S-3-05. On October 20, 2011, ARB adopted the final cap-and-trade regulation. ARB also approved an adaptive management plan that monitors the progress of reductions and recommends corrective actions if progress is not as planned or there are unintended consequences in other environmental areas (e.g., concentration of local criteria pollutants).

In 2014, ARB adopted an update to the 2008 Scoping Plan, which builds upon the initial scoping plan with new strategies and recommendations. The 2008 Scoping Plan and 2014 Scoping Plan Update require that reductions in GHG emissions come from virtually all sectors of the economy and be accomplished from a combination of policies, regulations, market approaches, incentives, and voluntary efforts. These efforts target GHG emission reductions from cars and trucks, electricity production, fuels, and other sources.

The ARB prepared an update to the 2014 Scoping Plan Update designed to reduce GHG emissions 40% below 1990 inventory levels by 2030 (ARB 2017). The 2030 Plan is slated to be updated in 2022.

#### *3.7.2.2.5 Senate Bill 32: California Global Warming Solutions Act of 2006*

Approved in 2016, SB 32 extends the climate targets adopted by California under AB 32, which required California to reduce GHG emissions to 1990 levels by 2020. The California Global Warming Solutions Act of 2006 designates ARB as the state agency charged with monitoring and regulating sources of emissions of GHG. ARB is required to approve a statewide GHG emissions limit equivalent to the statewide GHG emissions level in 1990 to be achieved by 2020 and to adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG emissions reductions. This bill would require ARB to ensure that statewide GHG emissions are reduced to 40% below the 1990 level by 2030.

#### *3.7.2.2.6 Assembly Bill 197: State Air Resources Board*

AB 197, enacted in 2016, is a companion law to SB 32 and requires ARB to report regularly to the state legislature on its progress in implementing the state's climate and air pollution-related policies. The laws also require California officials to create a committee to oversee the state's climate programs and require regulators to take stronger action to cut pollution from refineries and other facilities, especially in low-income and minority communities.

*3.7.2.2.7 Senate Bill 1368: Greenhouse Gas Emissions Standard for Baseload Generation*  
SB 1368 was signed into law in September 2006. The law prohibits retail sellers of electricity in California from entering into a long-term financial commitment for baseload generation if the GHG emissions are higher than those from a combined-cycle natural gas power plant.

*3.7.2.2.8 Senate Bill 97 and Amendments: CEQA Greenhouse Gas Emissions*  
SB 97, enacted in 2007, directed OPR to develop CEQA Guidelines “for the mitigation of GHG emissions or the effects of GHG emissions.” In December 2009, OPR adopted amendments to Appendix G of the CEQA Guidelines (Environmental Checklist), which created a new resource section for GHG emissions and indicated criteria that may be used to establish the significance of GHG emissions.

*3.7.2.2.9 Senate Bill 375: Transportation Planning*  
SB 375 enacted in 2008, requires metropolitan planning organizations (MPOs) to incorporate a “sustainable communities strategy” in their regional transportation plans that will achieve GHG emission reduction targets set by ARB. Current targets for the state’s largest MPOs call for a 19% reduction in GHG emissions from cars and light trucks from 2005 emissions levels by 2035. SJCOG has adopted a Sustainable Communities Strategy that would reduce on-road GHG emissions by 24.4% by 2020 (compared to the 2005 baseline) and by 23.7% by 2035 (compared to the 2005 baseline; SJCOG 2014).

*3.7.2.2.10 Governor’s Executive Order S-01-07 (January 2007) and Low Carbon Fuel Standards (approved April 2009, effective April 2010)*  
EO S-01-07 was enacted by then-Governor Schwarzenegger on January 18, 2007. The executive order mandated that a statewide goal be established to reduce the carbon intensity of California’s transportation fuels by at least 10% by 2020, and that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California.

*3.7.2.2.11 ARB Cap-and-Trade Program*  
California’s Cap-and-Trade Program, established in 2012 and administered by ARB, is a key element of California’s strategy to reduce GHG emissions associated with entities identified by ARB through the establishment, administration, and enforcement of the California GHG Cap-and-Trade Program by applying an aggregate GHG allowance budget on covered entities and providing a trading mechanism for compliance instruments.

*3.7.2.2.12 Senate Bill 350: Clean Energy and Pollution Reduction Act*  
The Clean Energy and Pollution Reduction Act (SB 350), enacted in 2015, established clean energy, clean air, and greenhouse gas (GHG) reduction goals, including reducing GHG to 40% below 1990 levels by 2030 and to 80% below 1990 levels by 2050. The California Energy Commission is working

with other state agencies to implement the bill. This law established clean energy, clean air, and GHG reduction goals. The bill increases California's renewable electricity procurement goal from 33% by 2020 to 50% by 2030. In addition, SB 350 requires California to double statewide energy efficiency savings in electricity and natural gas end use by 2030.

#### *3.7.2.2.13 Senate Bill 100: California Renewables Portfolio Standard Program*

California Renewables Portfolio Standard Program (SB 100) enacted in 2018 sets a goal of powering all retail electricity sold in California and state agency electricity needs with renewable and zero-carbon resources (such as solar and wind energy) that do not emit climate-altering GHG by 2045. SB 100 updates the state's Renewables Portfolio Standard to ensure that by 2030 at least 60% of California's electricity is renewable. It requires the California Energy Commission, California Public Utilities Commission, and ARB to use programs under existing laws to achieve 100% clean electricity and issue a joint policy report on SB 100 by 2021 and every 4 years thereafter.

#### *3.7.2.2.14 Executive Order B-30-15*

In April 2015, EO B-30-15 established an interim, statewide GHG emissions reduction target of 40% below 1990 levels by 2030 and directed the legislature to develop legislation to address that target. This interim target was established in order to ensure the state meets the EO S-3-05 target of reducing GHG emissions to 8% below 1990 levels by 2050. To facilitate achievement of this goal, EO B-30-15 called for an update to ARB's Scoping Plan. ARB approved the 2017 Climate Change Scoping Plan, which sets the state on an aggressive course to reduce GHG emissions an additional 40% below 1990 levels by 2030 and is currently working on the 2022 update (expected to be released and approved in 2022).

#### *3.7.2.2.15 California Sustainable Freight Action Plan*

In response to EO B-32-15, the California State Transportation Agency, CalEPA, the Natural Resources Agency, and other state departments developed the *California Sustainable Freight Action Plan* in July 2016 (Brown 2016). The plan established targets to improve freight efficiency, transition to zero-emission technologies, and make California's freight system more competitive. The targets are not mandates but rather are aspirational measures of progress. Plan measures are conceptual and rely on the future development of regulations to implement the strategies. Plan strategies include on-dock and near-dock strategies to shift goods movement from truck to rail (Brown 2016).

#### *3.7.2.2.16 Executive Order B-55-18*

Signed in September 2018 by Governor Brown, EO B-55-18 requires the state to achieve statewide carbon neutrality by 2045 and to achieve and maintain net negative GHG emissions thereafter. The EO calls on ARB to address this goal in future scoping plans, which affect other major sectors of California's economy, including transportation, agriculture, development, industrial, and others.

### 3.7.2.2.17 *California Green Building Standards Code*

CALGreen (24 CCR Part 11) is a state-mandated green building code. Its purpose is to improve public health, safety, and general welfare through enhanced design and construction of buildings using concepts that reduce negative impacts and promote those principles that have a positive environmental impact and encourage sustainable construction practices. CALGreen was adopted to address planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality.

## 3.7.2.3 **Regional**

### 3.7.2.3.1 *San Joaquin Valley Air Pollution Control District*

SJVAPCD adopted the Climate Change Action Plan (CCAP) in August 2008 to assist lead agencies in assessing and reducing the impacts of project-specific GHG emissions on global climate change. The CCAP relies on the use of performance-based standards, otherwise known as Best Performance Standards (BPS), to assess the significance of project-specific GHG emissions on global climate change. Projects implementing BPS are determined to have a less-than-significant impact. Otherwise, demonstration of a 29% reduction in GHG emissions from BAU is required to classify a project's impact as less than significant. In 2009, SJVAPCD adopted its Final Staff Report, *Climate Change Action Plan: Addressing GHG Emissions Impacts under CEQA*. SJVAPCD was not able to determine a specific quantitative level of GHG emissions increase above which a project would have a significant impact on the environment, and below which it would have an insignificant impact. SJVAPCD staff concluded that impacts of project-specific emissions on global climatic change are cumulative in nature, and the significance thereof should be examined in that context. SJVAPCD requires all projects to reduce their GHG emissions, whether through project design elements or mitigation. Projects achieving performance-based standards that have been demonstrated to be BPS would be considered to have a less-than-significant cumulative impact on global climate change (SJVAPCD 2009).

## 3.7.2.4 **Local**

### 3.7.2.4.1 *San Joaquin County General Plan*

San Joaquin County released its *San Joaquin County General Plan: Policy Document* in December 2016, which included climate planning and promoting sustainable development patterns (San Joaquin County 2016).

### 3.7.2.4.2 *City of Stockton General Plan*

The City updated and adopted its 2040 General Plan on December 4, 2018, with new GHG measures, including measures to comply with a 2008 Settlement Agreement with the state and the Sierra Club that requires the City to address GHG reductions, including through specific provisions in the 2040

General Plan (City 2018a). The 2040 General Plan represents a substantial change in the policy framework for future development in Stockton compared to the prior 2035 General Plan. The fundamental shift is from emphasizing growth in "outfill" areas at the periphery of the City to focusing new construction and redevelopment in existing "infill" neighborhoods. This change is reflected in the land use map and the associated map depicting the transportation network required to serve future development and in the goals, policies, and actions throughout the 2040 General Plan. In addition, the 2040 General Plan includes the following policies regarding GHG and climate change and are applicable to the proposed project:

- **Policy TR-3.2:** Require new development and transportation projects to reduce travel demand and GHG emissions, support electric vehicle charging, and accommodate multi-passenger autonomous vehicle travel as much as feasible.
- **Policy CH-5:** Accommodate a changing climate through adaptation, mitigation, and resiliency planning and projects.
  - **Action CH-5.1B:** Maintain and implement the City CAP and update the CAP to include the following:
    - Updated communitywide GHG emissions inventory
    - 2030 GHG emissions reduction target, consistent with SB 32
    - Estimated 2030 GHG emissions reduction benefits of state programs
    - Summary of the City's progress toward the 2020 local GHG emissions reduction target
    - New and/or revised GHG reduction strategies that, when quantified, achieve the 2030 reduction target and continue emission reductions beyond 2030
    - New or updated implementation plan for the CAP
- **Policy CH-5.2:** Expand opportunities for recycling, reuse of materials, and waste reduction.
  - **Action CH-5.2A:** Use recycled materials and products for City projects and operations where economically feasible, and work with recycling contractors to encourage businesses to use recycled products in their manufacturing processes and encourage consumers to purchase recycled products.
  - **Action CH-5.2B:** Continue to require recycling in private and public operations, including construction/demolition debris.

#### 3.7.2.4.3 *City of Stockton Climate Action Plan*

In 2014, the City approved the CAP, which outlines a program to reduce GHG emissions from both existing and new development within the financial limitations of both the City government and the Stockton community. Consistent with SJVAPCD, the CAP relies on a goal for new development to reduce emissions by 29% compared to BAU conditions, which is consistent with the recommendations of the SJVAPCD. However, the CAP seeks to avoid placing undue burdens on existing or new development that might otherwise impede economic recovery in Stockton and thus

balances the need for economic growth and the need for GHG emissions reductions. As described in the CAP, the City will revisit this plan in the future to examine whether there exist additional options to further reduce GHG emissions, and whether such options might be feasible in improved economic conditions. The CAP relies on numerous voluntary measures for both existing and new development, but also includes several mandatory measures where required by other state or local existing mandates and other City initiatives (City 2014).

### *3.7.3 Environmental Impacts and Mitigation Measures*

#### **3.7.3.1 Baseline**

At the time of publication of the NOP for the proposed project, there were no operational activities at the project site, and therefore no GHG emissions being generated. The five warehouses were in operation under baseline conditions and would continue to operate at existing levels post-project. Therefore, these operations are not considered as part of the GHG assessment because there would be no change to these operations as a result of the proposed project.

#### **3.7.3.2 Thresholds**

For purposes of this DEIR, the following thresholds, which are based on Appendix G of the CEQA Guidelines (Environmental Checklist) and SJVAPCD guidance, were used to determine if the proposed project would result in GHG impacts. The proposed project would have a GHG impact if:

- **GHG-1:** The project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- **GHG-2:** The project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

SB 97 identifies the need to analyze GHG emissions as a part of the CEQA process. In determining the significance of a project's impacts, the lead agency may consider a project's consistency with the state's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is consistent with those plans, goals, or strategies (CEQA Guidelines Section 15064.4[b][3]).

In December 2018, the California Natural Resources Agency clarified several points regarding the method for determining GHG impacts in CEQA documents. CEQA Guidelines, Section 15064.4, includes the following provisions:

- Lead agencies must analyze the GHG emissions of proposed projects (CEQA Guidelines Section 15064.4[a]).

- The focus of the lead agency's analysis should be on the project's effect on climate change, rather than simply focusing on the quantity of emissions and how that quantity of emissions compares to statewide or global emissions (CEQA Guidelines Section 15064.4[b]).
- The impacts analysis of greenhouse gas emissions is global in nature and thus should be considered in a broader context. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions (CEQA Guidelines Section 15064.4[b]).
- A lead agency's analysis must reasonably reflect evolving scientific knowledge and state regulatory schemes (CEQA Guidelines Section 15064.4[b]). Lead agencies may rely on plans prepared pursuant to Section 15183.5 (Plans for the Reduction of Greenhouse Gases) in evaluating a project's GHG emissions (CEQA Guidelines Section 15064.4[b][3]).
- The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision-makers to intelligently take into account the project's incremental contribution to climate change. (See CEQA Guidelines, § 15064.4, subd. (c).)

Per developing a numerical threshold, ARB provides the following:

A lead agency may establish a numerical threshold of significance for greenhouse gas emissions expressed as an absolute number or use an existing threshold that another agency has developed that it deems applies to a project, such as a local air district. (CEQA Guidelines, §15064.4, subd. (b)(2); *Center for Biological Diversity v. Department of Fish & Wildlife*, supra, 62 Cal.4th at p. 230 ["a lead agency may rely on existing numerical thresholds of significance for greenhouse gas emissions, though... use of such thresholds is not required."].) The numerical threshold would be the emissions level below which a project's incremental contribution to global climate change would be less than "cumulatively considerable". A lead agency may establish a threshold on a case-by- case basis, or apply a general use threshold for different land use types and projects that the lead agency adopted the agency and projects that the lead agency adopted pursuant to Guidelines section 15064.7, subdivision (b). (See CARB, 2017 Scoping Plan, p. 102 ["[l]ead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the State's long-term greenhouse gas goals, and climate change science."].) A quantitative threshold should be based on compliance with statewide emission reductions targets, and the lead agency would need to ensure that the quantitative project-level threshold was properly correlated to statewide targets. (OPR 2018a)

The Port generally adopts SJVAPCD thresholds related to emission sources as most GHG sources at the Port also result in CAP emissions. As discussed in Section 3.7.2.3.1, SJVAPCD has established GHG thresholds for projects subject to CEQA based on achieving performance-based standards that have been demonstrated to be BPS. For projects implementing SJVAPCD's BPS, quantification of project-specific GHGs is not required (SJVAPCD 2009). SJVAPCD's BPS generally apply to projects with stationary industrial emission sources and land use and development projects. For development projects, BPS includes project design elements, land use decisions, and technologies that reduce GHG emissions. Project proponents can reduce GHG emissions from energy consumption through building designs that increase energy efficiency, conserve water, and use energy-efficient appliances. For other projects, including commercial facilities like port terminals and projects not implementing BPS, SJVAPCD requires that project-specific GHG emissions be quantified and compared to a 29% reduction in GHG emissions as compared to the BAU standard to determine significance (SJVAPCD 2009). The City's CAP also relies on a 29% reduction from 2020 levels as compared with the BAU goal. However, the BAU approach has been effectively rendered unusable after the California Supreme Court's 2015 ruling in *Center for Biological Diversity v. California Department of Fish and Wildlife*. In addition, the City's CAP is not consistent with larger state goals, namely the latest adopted ARB Scoping Plan 2030 (ARB 2017), which is currently being updated with adoption expected in 2022.

Several California Air Districts have established a GHG threshold of 1,100 MT of CO<sub>2</sub>e per year for land use plans and 10,000 MT per year for stationary sources. However, the proposed project is neither a land use plan nor a stationary source. The South Coast Air Quality Management District (SCAQMD) has established thresholds specific to residential, commercial, and industrial development as recommended by a 2008 work group effort to identify potential GHG emissions thresholds that achieve broader ARB goals to reduce GHG emissions. The work group's findings are detailed in the *Interim Greenhouse Gas Emissions Significance Thresholds* guidance document, which outlines an approach to developing a quantitative threshold and includes substantial evidence supporting the approaches (SCAQMD 2008). The interim guidance has not been updated.

The current interim thresholds comprise the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the proposed project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are

below one of the following screening thresholds, then the proposed project is less than significant:

- All land use types: 3,000 MT of CO<sub>2</sub>e per year
- Based on land use type (per year): residential: 3,500 MTCO<sub>2</sub>e; commercial: 1,400 MTCO<sub>2</sub>e; or mixed use: 3,000 MTCO<sub>2</sub>e
- Industrial (stationary) projects: 10,000 MTCO<sub>2</sub>e per year
- Tier 4 has the following options:
  - Option 1: Reduce BAU emissions by a certain percentage (this percentage is currently undefined)
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
  - Option 3: 2020 target: 3.0 MTCO<sub>2</sub>e per service population per year for projects and 4.1 MTCO<sub>2</sub>e per service population per year for plans
- Tier 5 involves mitigation offsets to achieve the target significance threshold.

The SCAQMD's draft thresholds use the EO S-3-05 Year 2050 goal as the basis for the Tier 3 screening level. Achieving the EO objective would contribute to worldwide efforts to cap CO<sub>2</sub> concentrations at 450 ppm, thus stabilizing the global climate (SCAQMD 2008).

For the purposes of CEQA, and until statewide guidance is adopted, the Port will use the Tier 3 quantitative thresholds recommended in the SCAQMD's Interim Thresholds document as follows:

- Industrial Projects: 10,000 MTCO<sub>2</sub>e per year
  - Consistent with SCAQMD, projects are considered "Industrial Projects" if the facility includes stationary sources of GHG emissions requiring a permit from an air district.
- Residential, Commercial (may also include industrial) building structures that attract or generate mobile source emissions, and Mixed-Use Projects (including industrial parks and warehouses):
  - Residential: 3,500 MTCO<sub>2</sub>e per year;
  - Commercial: 1,400 MTCO<sub>2</sub>e per year;
  - Mixed use: 3,000 MTCO<sub>2</sub>e per year
- Construction GHG emissions, amortized over the life of a project, are required to be included in a project's annual GHG emissions totals for both categories (SCAQMD 2008).

This analysis also considers the proposed project's consistency with applicable provisions of the plans, goals, or strategies identified in Section 3.7.2 and the proposed project's broader impact on climate change.

### 3.7.3.3 Methodology for Determining Impacts

A summary of assumptions related to the GHG analysis is provided in the following subsections. Complete details, as well as modeling results related to the air quality analysis, can be found in Appendix D.

#### 3.7.3.3.1 Construction

Construction emissions from the proposed project include on-site off-road heavy equipment, off-site on-road vehicle travel, architectural coating, paving, and fugitive dust. Where project-specific data were not available, CalEEMod defaults were used. As shown in Table 3, full build-out operations are expected to begin in June 2024. For the purposes of this analysis, however, operations are conservatively assumed to begin in January 2024, while remediation continues into 2025. Construction emissions are also generated for paving and architectural coating.

#### 3.7.3.3.2 Operations

Project operational emissions were evaluated for calendar year 2024. Operational emissions from the proposed project include on-road mobile sources, rail sources, cargo handling equipment, an emergency generator, building energy use, wastewater, solid waste handling, architectural coating, and consumer products usage.

- Architectural coating and consumer product emissions were quantified using CalEEMod default emission factors and project-specific land uses details.
- Energy emissions were quantified using electricity emission factors derived from historical PG&E and CalEEMod data and natural gas emission factors from CalEEMod and project-specific energy use rates.
- Water supply and wastewater treatment emissions were quantified using CalEEMod default emission factors and project-specific water use rates.
- Waste handling emissions were quantified using CalEEMod default emission factors and default waste rates for the land uses.
- On-road mobile emissions were quantified for passenger (employee) vehicles, delivery trucks, and yard hostlers (vehicles that move and position delivery truck semi-trailers within the project site). Trip rates and distances were provided by TC NO. CAL. Development. Emission factors were obtained from EMFAC2021. The unmitigated scenario utilizes EMFAC2021 emission factors aggregated over the default range of vehicle model years, while the mitigated scenario assumes the proposed project will commit to cleaner engines for delivery trucks and yard hostlers, specifically model year 2017 or newer. For quantification purposes, engines are assumed to be model year 2017 in the mitigated scenario.
- Emergency generator emissions were quantified using the manufacturer-specified engine rating and the assumption that the emergency generator may operate up to 100 hours per

year. The CO<sub>2</sub> and CH<sub>4</sub> emission factors come from Appendix D to the CalEEMod User's Guide (CalEEMod.com 2021).

- Cargo handling equipment, such as forklifts and power saws, will be used in the warehouse. Emissions from the propane-fueled forklifts were calculated using information from TC NO. CAL. Development and CalEEMod default engine parameters. Emission factors for CO<sub>2</sub> were obtained from AP-42 Chapter 1.5 Liquefied Petroleum Gas Combustion (USEPA 2008). The power saws are electric, and the electricity use and associated emissions are assumed to be accounted for in the building energy emissions. The unmitigated scenario assumes all 47 forklifts are propane-fueled, while the mitigated scenario assumes 20 forklifts are propane-fueled and 27 forklifts are electric. Similar to the power saws, the electricity consumption and associated emissions for the electric forklifts are assumed to be accounted for in the building energy usage.
- Class I and Class III rail lines will be used for the import and export of materials from the warehouse. Class I rail lines are used to transport rail cars off-site. Class III rail engines, also known as switchers, are used to transport rail cars on site. Emissions were calculated using information from the Port and TC NO. CAL. Development, and fuel consumption index calculated from the ARB 2016 Line Haul Locomotive Model and Update. GHG emission factors were obtained from The Climate Registry (2020). The unmitigated and mitigated scenarios are equivalent for Class I and Class III rail emissions.

### 3.7.3.4 Impact Analysis

#### 3.7.3.4.1 *GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision-makers to intelligently consider a project's incremental contribution to climate change (CEQA Guidelines Section 15064.4[c]). As discussed above, the Port will use SCAQMD's Tier 3 quantitative thresholds to determine whether GHG emissions generated either directly or indirectly may have a significant impact. As discussed above, construction emissions are added to the operational emissions. The proposed project is considered Residential, Commercial, and Mixed-Use Projects (including industrial parks, warehouses), with a threshold of 3,000 MTCO<sub>2e</sub> per year.

Table 17 presents the proposed project's construction and operational emissions.

**Table 17  
Proposed Project Greenhouse Gas Emissions (MT per Year) in CO<sub>2</sub>e, Unmitigated**

Emissions Source	GHG Emissions
	CO <sub>2</sub> e (MT/yr)
<b>Construction</b>	
2022	<b>977</b>
2023	<b>979</b>
2024	<b>3</b>
2025	<b>210</b>
<b>Operations</b>	
Electricity Use	304
Natural Gas Use	74
Water Use	7.4
Waste Disposed	314
On-Road Mobile	357
Trucks	5,310
Yard Hostler	125
Rail	208
Warehouse Equipment	25
Emergency Generator	78
<b>Total Proposed Project Emissions</b>	8,971
<b>Threshold</b>	3,000
<b>Exceeds Thresholds</b>	Yes

**Impact Determination:** As shown in Table 17, the proposed project would result in increase of 5,971 metric tons of GHG emissions over the threshold; therefore, impacts would be considered significant.

**Mitigation Measures:** The following mitigation measures would be implemented to reduce GHG:

- **MM-GHG-1: Energy Audit.** Within 9 months of the effective date of the new lease, TC NO. CAL. Development will conduct an energy audit and develop a plan for reducing overall terminal energy from 2021 levels by within 5 years of the effective date of the lease. The plan must be submitted to the Port for review and approval. The plan will incorporate the following measures at a minimum:
  - Evaluate the level of solar panels that are required to meet the facility's electrical needs, both on buildings and for high mast lighting. Based on the evaluation, TC NO. CAL. Development will install solar unless a technical feasibility issue is identified.

- Replace less-efficient bulbs with energy-efficient light bulbs, where applicable and safe. Lighting within the interior of buildings on the premises and outdoor high mast terminal lighting will be replaced with LED lighting or a technology with similar energy-saving capabilities within 2 years after the effective date of a new lease.
- **MM-GHG-2: Waste Reduction.** Within 9 months of the effective date of the new lease, TC NO. CAL. Development will perform an audit of its waste stream to identify areas for total waste reduction, including reductions of single use products and details for transitioning to a procurement process that prioritizes recycled goods and products. For resultant waste, TC NO. CAL. Development will develop a plan to ensure waste is recycled where available.
- **MM-AQ-1: Construction Truck Idling** (see “Impact AQ-2” in Section 3.2.3.4.2 for more information).
- TC NO. CAL. Development and the Port will require construction contractors to minimize heavy-duty construction idling time to 2 minutes where feasible. Exceptions include vehicles that need to idle to perform work (such as a crane providing hydraulic power to the boom), vehicles being serviced, or vehicles in a queue waiting for work.
- **MM-AQ-3: Truck Idling Reductions** (see “Impact AQ-2” in Section 3.2.3.4.2 for more information). TC NO. CAL. Development will require trucks to minimize idling time to 2 minutes while on terminal.
- **MM-AQ-4: Use of Clean Trucks** (see “Impact AQ-2” in Section 3.2.3.4.2 for more information). TC NO. CAL. Development will encourage its customers to use clean trucks (defined as model year 2017 or newer) to transport cargo. TC NO. CAL. Development will also educate customers about the SJVAPCD Truck Replacement Program via direct or electronic mailings. In addition, TC NO. CAL. Development will require all trucks be in compliance with ARB air quality regulations for on-road trucks, including ARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program (PSIP), and the Statewide Truck and Bus Regulation. TC NO. CAL. Development will post a copy of the SJVAPCD Truck Replacement Program information currently available at <http://valleyair.org/grants/truck-replacement.htm> and applicable ARB regulations at the terminal.
- **MM-AQ-5: Use of Clean Yard Equipment** (see AQ-2 in Section 3.2.3.4.2 for more information). TC NO. CAL. Development will require terminal and yard equipment, including yard hostlers, yard equipment, forklifts, and pallet jacks to be the cleanest available equipment (for future purchases). Considerations for clean equipment will include a first preference for zero-emission equipment, a second preference for near-zero equipment, and then for the cleanest available equipment if neither zero nor near-zero equipment are available or feasible. TC NO. CAL. Development will ensure the proper infrastructure to support such equipment is available.

**Residual Impact:** Table 18 presents the results mitigation on GHG emissions.

**Table 18  
Proposed Project Greenhouse Gas Emissions (MT per Year) in CO<sub>2</sub>e, Mitigated**

Emissions Source	GHG Emissions
	CO <sub>2</sub> e (MT/yr)
<b>Construction</b>	
2022	<b>977</b>
2023	<b>979</b>
2024	<b>3</b>
2025	<b>210</b>
<b>Operations</b>	
Electricity Use	304
Natural Gas Use	74
Water Use	7.4
Waste Disposed	314
On-Road Mobile	357
Trucks	5,680
Yard Hostler	129
Rail	208
Warehouse Equipment	12
Emergency Generator	78
<b>Total Proposed Project Emissions</b>	9,332
<b>Threshold</b>	3,000
<b>Exceeds Thresholds</b>	Yes

As shown in Table 18, the majority of the proposed project’s GHG emissions are from trucks. Implementation of MM-AQ-4 MM-AQ-5 would help to reduce mobile source criteria pollutant emissions by requiring use of newer trucks. While truck idling restrictions would reduce emissions slightly, truck emissions are being generated mainly through transit and therefore would not reduce emissions below significance. As discussed in Section 3.7.2, the state has several programs aimed at reducing GHG from mobile sources, including the *California Sustainable Freight Action Plan* (Brown 2016) and the Low Carbon Fuel Standards. The proposed project’s emission sources are mobile sources that would be captured under state initiatives such as low carbon energy and fuel standards.

Indirect emissions from electricity production also produce a large percentage of emissions. Through state initiatives, these emissions will likely decrease over the life of the proposed project as the grid is powered by a greater percentage of renewable energy sources and potentially on terminal and/or on Port renewable sources, such as solar. MM-GHG-1 and MM-GHG-2 are designed to address direct energy use and off-site indirect sources like product and electricity production. Implementation of

MM-GHG-1 would result in identifying direct energy savings and opportunities for use of renewable energy. Solar energy is a viable option for the distribution facility and would require one-quarter of the warehouse roof space to be dedicated to solar panels to supply 100% of electrical needs, thereby reducing the GHG identified to zero. The Port is currently working with TC NO. CAL. Development on determining whether the electrical grid in the project area is designed to accommodate the variable load. Implementation of MM-GHG-2 would reduce emissions from production and waste generation and emphasize a total reduction in waste generation, as well as purchasing recycled goods. Waste deposited in landfills are a source of methane, a potent GHG. While not a large source of emissions at the terminal, procurement decisions can drive emission reductions over supply chains. For example, recent studies have found that GHG emissions from virgin pulp used to make paper products are about 30% higher than production of recycled paper products.

Emissions would continue to be considered significant and unavoidable.

*3.7.3.4.2 GHG-2: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

As discussed above, there are numerous statewide regulations and initiatives related to overall GHG reductions.

The proposed project is subject to future state and local requirements imposed by ARB's 2017 Climate Change Scoping Plan Update (ARB 2017). The Climate Change Scoping Plan Update describes how California will reduce its GHG emissions by 40% below 1990 levels by 2030. The 2022 Update is currently under development and will also be applicable to the proposed project. The proposed project would comply with all required provisions of the California Green Building Standards Code, which requires green building practices. In addition to the California Green Building Standards Code, the City's 2040 General Plan (City 2018a) requires that new developments incorporate energy conservation and green building practices. While the proposed project would use high-efficiency lighting, the building does not include solar or other green building practices.

The City's 2040 General Plan (City 2018a) includes several policies that are applicable to the proposed project, specifically Policy TR-3.2, which requires new development and transportation projects to reduce GHG emissions, and Policy CH-5.2, which expands opportunities for recycling, reuse of materials, and waste reduction.

**Impact Determination:** The proposed project would not include measures specifically aimed at reducing GHG emissions, including opportunities for recycling, reuse of materials, and waste reduction; therefore, proposed project impacts would be considered potentially significant.

**Mitigation Measures:** The following mitigation measures would be implemented to reduce potential impacts:

- **MM-GHG-1: Energy Audit** (see GHG-1 for more information).
- **MM-GHG-2: Waste Reduction** (see GHG-1 for more information).
- **MM-GHG-3: Construction Recycling.** TC NO. CAL. Development will require construction contractors to recycle construction and demolition debris where feasible.
- **MM-AQ-1: Construction Truck Idling** (see GHG-1 and "Impact AQ-2" for more information).
- **MM-AQ-3: Truck Idling Reductions** (see GHG-1 and "Impact AQ-2" AQ-2 for more information).
- **MM-BIO-3: Tree Planting** (see "Impact BIO-1" in Section 3.3.3.4 for more information) TC NO. CAL. Development will plant a minimum of 30 trees, including Patmore ash (*Fraxinus p. 'Patmore'*), Chinese pistache (*Pistachia chinensis*), coast redwood (*Sequoia sempervirens*), and multi-trunk chaste tree (*Vitex agnus-castus*), on the project Warehouse Development Area in locations where future removal is not likely to be required. TC NO. CAL. Development is required to prepare a planting plan that must be reviewed and approved by the Port prior to planting.

**Residual Impact:** Implementation of MM-GHG-1 through MM-GHG-3, MM-AQ-1, and MM-AQ-3 would reduce GHG emissions consistent with the City's 2040 General Plan policies. MM-GHG-1 and MM-GHG-2 are designed to address direct energy use and off-site indirect sources like product and electricity production consistent with state climate plans and the City's 2040 General Plan.

Implementation of MM-GHG-1 would result in identifying direct energy savings and opportunities for use of renewable energy. Solar energy is a viable option for the distribution facility and would require one-quarter of the warehouse roof space to be dedicated to solar panels to supply 100% of electrical needs, thereby reducing the GHG identified to zero.

The Port is currently working with TC NO. CAL. Development on determining whether the electrical grid in the project area is designed to accommodate the variable load. Implementation of MM-GHG-2 would reduce emissions from production and waste generation and emphasize a total reduction in waste generation, as well as purchasing recycled goods.

With MM-BIO-3, TC NO. CAL. Development would plant at least 30 trees to replace the trees removed for construction. While not specifically identified as part of the City's 2040 General Plan policies, recent studies have shown that trees and evergreens can help reduce local heat indexes during the day, reduce nighttime heating through the reduction of impervious surfaces, and sequester carbon during growth.

Tree planting would help reduce localized impacts related to climate change and sequester carbon, which is consistent with the larger goals of the Plan. In addition, while not a climate change plan, planting trees is a measure in the Stockton CERP to mitigate urban heat island effects, which are exacerbated by global warming. Residual impacts would be less than significant.

## **3.8 Hazards and Hazardous Materials**

This section describes the known hazards and hazardous material conditions in the project area. The analysis of hazardous materials in this section focuses on soils and sediments, but does not include groundwater, even if the drainage ditches ultimately connect to groundwater. The analysis in this section is based in part on information and data presented in the ASTM Phase 1 Environmental Site Assessment (Phase 1 ESA) conducted for the project (H&A 2020b), the Revised Draft Site 47 RI/FFS (Geosyntec 2021a), the regional emergency response plans; federal, state, and local regulations; fire hazard maps; public records for school and airfields; and Safety Data Sheets (SDSs). For the purposes of the hazards and hazardous materials analysis, the study area is defined as the 102-acre project site and immediate surroundings.

### **3.8.1 Environmental Setting**

The project site is a largely vacant 102-acre parcel on the Port's West Complex, except for five existing operational warehouses in the northwestern corner of the site. The project site is located within a highly developed and industrialized area surrounded by existing industrial developments characterized by storage tanks, industrial buildings, concrete surface storage or staging areas, stockpiles of various commodities, roadways, and rail lines.

As discussed in Section 2, the project site is part of remedial activities. Contaminants detected within various portions of Site 47 include arsenic, PAHs, and OCPs, including DDT. The contaminants in soil and sediment were determined to pose a risk to human health and wildlife, and therefore require remediation. Based upon an assessment of human health and ecological risk, the primary drivers of risk at Site 47 are the presence of arsenic in soil and OCPs in sediment. The remedial boundary does not include groundwater.

#### **3.8.1.1 Surrounding Hazardous Material Sites**

Surrounding sites potentially containing hazardous materials were identified through searches of environmental database records as part of the ASTM Phase 1 ESA conducted for the project (H&A 2020b) and a search of the DTSC EnviroStor database (DTSC 2019) and SWRCB GeoTracker database (SWRCB 2019) websites. Ten nearby sites were identified that were within the ASTM Phase 1 ESA search radii and which were "sites adjacent to the subject site and sites with a potential to have impacted the subject site" (H&A 2020b).

Within a 1.5-mile radius of the proposed project footprint, the EnviroStor database lists 11 cleanup sites, and the GeoTracker database identifies 37 cleanup sites with active, open, or unidentified statuses (with some sites occurring in both databases). The GeoTracker database additionally identifies 10 DTSC hazardous waste sites and three land disposal sites within the 1.5-mile radius.

### 3.8.1.2 On-Site Hazardous Materials

The project site occurs within the former NCTS, San Diego Detachment Stockton site. Existing soil contamination poses a risk to human health and wildlife. The primary drivers of risk at Site 47 are the presence of arsenic in soil and OCPs in sediment (Geosyntec 2021a). The remedial boundary extends beyond the Site 47 boundary consistent with the 2003 Consent Agreement. To the west of Site 47, the remedial boundary extends to the perimeter of the paved warehouse area where arsenic concentrations in soil exceed background levels. To the south of Site 47, the remedial boundary encompasses an existing drainage channel with elevated OCP concentrations and an adjacent area with elevated arsenic concentrations.

#### 3.8.1.2.1 Arsenic

Arsenic is a naturally occurring element widely distributed in the Earth's crust. In the environment, arsenic is combined with oxygen, chlorine, and sulfur to form inorganic arsenic compounds. Arsenic in animals and plants combines with carbon and hydrogen to form organic arsenic compounds. Inorganic arsenic compounds are mainly used to preserve wood. Several studies have shown that ingestion of inorganic arsenic can increase the risk of skin cancer and cancer in the liver, bladder, and lungs. Inhalation of inorganic arsenic can cause increased risk of lung cancer. The Department of Health and Human Services and the USEPA have determined that inorganic arsenic is a known human carcinogen. The International Agency for Research on Cancer has determined that inorganic arsenic is carcinogenic to humans. Organic arsenic compounds are used as pesticides, primarily on cotton fields and orchards (ATSDR 2007).

#### 3.8.1.2.2 Polycyclic Aromatic Hydrocarbons

PAHs are a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat. PAHs are usually found as a mixture containing two or more of these compounds, such as soot. Some PAHs are manufactured. These pure PAHs usually exist as colorless, white, or pale yellow-green solids. PAHs are found in coal tar, crude oil, creosote, and roofing tar, but a few are used in medicines or to make dyes, plastics, and pesticides. Animal studies have also shown that PAHs can cause harmful effects on the skin, body fluids, and ability to fight disease after both short- and long-term exposure; however, these effects have not been seen in people. The Department of Health and Human Services has determined that some PAHs may reasonably be expected to be carcinogens. Some people who have breathed or touched mixtures of PAHs and other chemicals for long periods of time have developed cancer. Some PAHs have caused cancer in laboratory animals when the animals breathed air containing them (lung cancer), ingested them in food (stomach cancer), or had them applied to their skin (skin cancer) (ATSDR 1996).

### 3.8.1.2.3 *Organochlorine Pesticides*

OCPs are a class of chlorinated hydrocarbon pesticide used extensively in the early and mid-1900s in agriculture and for mosquito control. OCPs accumulate and persist in the environment, causing widespread damage to wildlife. Representative OCPs include DDT, methoxychlor, dieldrin, and chlordane. DDT is the most prevalent OCP identified within the project area. DDT was developed in the late 1800s and began being used as an insecticide in the 1940s to target insects that caused human diseases, including malaria, typhus, body lice, and bubonic plague. The chemical compound's effectiveness and low cost spurred widespread use and application, from insect control in crops and livestock production to home gardens for pest control. Its broad use led to the development of resistance by many insect species. DDT began to be publicly known to contribute to adverse environmental effects to wildlife in the 1950s, and in 1972, USEPA cancelled its use.

OCP exposure can occur by eating, breathing, or touching products contaminated with OCPs. In the body, OCP converts into several breakdown products called metabolites and persists over time. Human health effects from OCPs at low environmental doses are unknown. Following exposure to high doses, human symptoms can include vomiting, tremors or shakiness, and seizures. DDT is known to be very persistent in the environment, accumulate in fatty tissues, and travel long distances in the upper atmosphere. Studies have found a relationship between DDT exposure and reproductive effects in animals and humans, and DDT is currently classified as a probable human carcinogen by national and international authorities. After the use of DDT was discontinued in the United States, its concentration in the environment and animals has decreased, but because of its persistence, residues remain a concern from historical use (USEPA 2022).

### 3.8.1.2.4 *Land Use Restrictions*

Portions of the former NCTS site is under a LUC which restricts certain uses of the site (Navy et al. 2003). Per the LUC, the property may not be put to any of the following uses:

- (1) A residence, including any mobile home or factory-built housing, used as residential human habitation.
- (2) A hospital for humans.
- (3) A public or private school for persons under 18 years of age.
- (4) A day care center for children.
- (5) Any use of the Property in a manner that causes the covering or disturbing of groundwater monitoring wells, or any use of the Property in a manner that restricts access to groundwater monitoring wells.

(6) There shall be no alteration of groundwater conditions within the Property, through activities such as construction of any well, extraction, use or consumption of groundwater from wells within the boundary of the Property, use of any groundwater within the boundary of the property, construction or creation of any groundwater recharge area, unlined surface impoundments or disposal trenches, unless specifically approved by the State.

(7) Any use that would restrict investigation activities, remedial actions, or long-term maintenance and operations. (Navy et al. 2003)

The LUC also restricted soil management activities, as follows:

(1) No activities that will disturb the soil (e.g., excavation, grading, removal, trenching, filling, earth movement or mining) shall be allowed on the Property without a prior written plan approved by the State.

(2) Any contaminated soils brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of state and federal law.

(3) The Owner or Occupant shall provide the State written notice at least fourteen (14) days prior to any building, filling, grading, mining, or excavating in the Property. (Navy et al. 2003)

### **3.8.1.3 Emergency Plans**

#### *3.8.1.3.1 Regional Municipal Plans*

The San Joaquin County Office of Emergency Services (SJCOES) authored the 2019 San Joaquin County Emergency Operations Plan (EOP; SJCOES 2019), which addresses the County's response to all hazards, including incident management structure, compliance with relevant legal statutes, other relevant guidelines, whole community engagement, continuity of government focus, and critical components of the incident management structure. The EOP includes response protocol specific to hazards and hazardous materials.

#### *3.8.1.3.2 Port of Stockton Utility Wildfire Mitigation Plan*

The Port has developed a plan to prevent and respond to the increasing risk of wildfires (Port 2021). This plan also includes a standardized emergency management system pursuant to the California Office of Emergency Services Standardized Emergency Management System Regulations.

### **3.8.1.4 Schools and Airports**

There are no schools, airstrips, airports, or other sites potentially sensitive to hazards or hazardous materials within the proposed project vicinity. The nearest schools are George Washington Elementary School, located approximately 2 miles to the east of the project site, and Madison Elementary School, located approximately 2.1 miles to the northeast of the project site. The nearest airport is the Stockton Municipal Airport, located approximately 6.5 miles to the southeast.

### **3.8.1.5 Wildfire Hazards**

The project site is not within any fire hazard severity zones (CAL FIRE 2021). There are no wildlands within the project area, and wildland fires do not pose a risk to the project site.

## **3.8.2 *Applicable Regulations***

### **3.8.2.1 Federal**

#### **3.8.2.1.1 *Resource Conservation and Recovery Act***

The RCRA established a regulatory system to track hazardous wastes from the time of generation to final disposal, frequently described as “cradle-to-grave.” The law requires safe and secure procedures to be used in treating, transporting, storing, and disposing of hazardous wastes. RCRA’s provisions give state regulatory agencies authority to regulate solid and hazardous wastes. In California, DTSC is authorized to implement RCRA in lieu of USEPA.

#### **3.8.2.1.2 *U.S. Department of Transportation Hazardous Materials Regulations (49 CFR 100–185)***

The U.S. Department of Transportation (DOT) Hazardous Materials Regulations cover all aspects of hazardous materials packaging, handling, and transportation. Under DOT regulations, a hazardous material is “a substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and has designated as hazardous under Section 5103 of Federal hazardous materials transportation law (49 USC 5103).” Parts 173 (“Packaging Requirements”), 177 (“Highway Transportation”), 178 (“Packaging Specifications”), and 180 (“Packaging Maintenance”) would apply to the proposed project activities. Additional potentially applicable parts include Part 171 (“General Information, Regulations and Definitions”) and Part 172 (“Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans”).

### *3.8.2.1.3 Emergency Planning and Community Right-to-Know Act (42 USC 11001 et seq.)*

Also known as Title III of the Superfund Amendments and Reauthorization Act, the Emergency Planning and Community Right-to-Know Act (EPCRA) was enacted by Congress as the national legislation on community safety. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. To implement EPCRA, Congress required each state to appoint a State Emergency Response Commission. These commissions were required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee for each district. EPCRA provides requirements for emergency release notification, chemical inventory reporting, and toxic release inventories for facilities that handle chemicals.

### *3.8.2.1.4 National Oil and Hazardous Substances Pollution Contingency Plan*

More commonly called the National Contingency Plan (NPC), the National Oil and Hazardous Substances Pollution Contingency Plan establishes principles to respond to both oil spills and hazardous substance releases. Among others, the NPC establishes the National Response Team, the Regional Response Teams, and general responsibilities of On-Scene Coordinators; requires notification of any discharge or release to the National Response Center; and identifies the responsibilities for federal agencies that may be called upon during response planning.

## **3.8.2.2 State**

### *3.8.2.2.1 Hazardous Waste Control Law*

The Hazardous Waste Control Law (HSC, Division 20, Chapter 6.5) is the basic hazardous waste law for California. The Hazardous Waste Control Law implements the federal RCRA cradle-to-grave waste management system in California, although this program regulates more materials as hazardous wastes than the federal program. California hazardous waste regulations can be found in 22 CCR 4.5, "Environmental Health Standards for the Management of Hazardous Wastes." The program is administered by DTSC.

### *3.8.2.2.2 Porter-Cologne Water Quality Control Act*

The Porter-Cologne Act (Division 7 of the California Water Code) is the primary state regulation that addresses water quality standards. Under the act, SWRCB has the ultimate authority over water rights and water quality policy. The act also established nine RWQCBs to oversee water quality on a day-to-day basis at the regional level. The state and regional boards regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. Jurisdictional resources in the project area are expected to be under the jurisdiction of the CVRWQCB. Under oversight by USEPA, SWRCB and CVRWQCB have the responsibility for establishing regulatory standards and objectives for water quality; developing TMDLs for impaired waterbodies; and issuing NPDES permits.

The proposed project may require waste discharge requirements (WDR) if waters on site are considered jurisdictional and is expected to require a NPDES permit to regulate construction-related stormwater at the project site.

#### *3.8.2.2.3 Hazardous Material Release Response Plans and Inventory Law*

The Hazardous Material Release Response Plans and Inventory Law (HSC Division 20, Chapter 6.95) is a right-to-know law requiring businesses to develop a Hazardous Materials Management Plan (HMMP) or a business plan for hazardous materials emergencies if they handle more than 500 pounds, 55 gallons, or 200 cubic feet of hazardous materials. In addition, the business plan must include an inventory of all hazardous materials stored or handled at the facility above these thresholds. This law is designed to reduce the occurrence and severity of hazardous materials releases. The HMMP or business plan must be submitted to the Certified Unified Program Agency (CUPA)—in this case, the San Joaquin County Public Health Services, Environmental Health Division (SJCEHD). The state has integrated the federal EPCRA reporting requirements into this law, and once a facility is in compliance with the local administering agency requirements, submittals to other agencies are not required.

#### *3.8.2.2.4 Standards Applicable to Transporters of Hazardous Waste*

Standards Applicable to Transporters of Hazardous Waste (HSC Chapter 13; 22 CCR-66263.10-66263.50) establishes standards that apply to persons transporting hazardous waste within, into, out of, or through the state if the transportation requires a manifest under Section 25160 of the HSC. “Transporter” means a person engaged in the off-site transportation (or movement) of hazardous waste by air, rail, highway, or water. This hazardous waste regulation applies to carriers transporting hazardous waste when that waste is subject to the manifesting requirements of Chapter 12. In general, transporters of hazardous waste must comply with these requirements and statutory requirements in HSC, Division 20, Chapter 6.5, Articles 6 and 6.5, as well as the specific U.S. Department of Transportation (DOT) requirements referenced throughout the transporter regulations.

#### *3.8.2.2.5 Occupational Health and Safety, Including 29 Code of Federal Regulations*

The California Division of Occupational Safety and Health (Cal/OSHA) and OSHA are the agencies responsible for assuring worker safety in the handling and use of chemicals in the workplace. Pursuant to the Occupational Safety and Health Act of 1970, OSHA has adopted numerous regulations pertaining to worker safety, contained in 29 CFR. These regulations set standards for safe workplaces and work practices, including standards relating to hazardous material handling. Cal/OSHA assumes primary responsibility for developing and enforcing state workplace safety regulations. Because California has a federally approved OSHA program, it is required to adopt

regulations that are at least as stringent as those found in 29 CFR. Cal/OSHA standards are generally more stringent than federal regulations.

Cal/OSHA regulations concerning the use of hazardous materials in the workplace, as detailed in 8 CCR, include requirements for safety training, availability of safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces hazard communication program regulations that contain training and information requirements, including procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans (HASPs) to protect workers and employees at hazardous waste sites. The hazard communication program requires that Material Safety Data Sheets be available to employees and that employee information and training programs be documented.

### 3.8.2.3 Local

#### 3.8.2.3.1 *City of Stockton General Plan*

The City updated and adopted its 2040 General Plan (City 2018a) on December 4, 2018, which includes the following policies specific to hazardous materials:

- **Policy SAF-2.6.** Minimize the risk to City residents and property associated with the transport, distribution, use, and storage of hazardous materials.
  - **Action SAF-2.6A.** Restrict transport of hazardous materials within the City to routes that have been designated for such transport.
  - **Action SAF-2.6B.** When appropriate, require new development to prepare a hazardous materials inventory and/or prepare Phase I or Phase II hazardous materials studies, including any required cleanup measures.
  - **Action SAF-2.6C.** Educate the public regarding the types of household hazardous wastes and the proper methods of disposal.

#### 3.8.2.3.2 *Unified Hazardous Waste and Hazardous Management Regulatory Program (SB 1082, 1993) and San Joaquin County Public Health Services*

The Unified Hazardous Waste and Hazardous Management Regulatory Program (SB 1082, 1993) is a state and local effort to consolidate, coordinate, and make consistent existing programs regulating hazardous waste and hazardous materials management. CalEPA adopted implementing regulations for the Unified Hazardous Waste and Hazardous Management Regulatory Program (27 CCR, Division 1, Subdivision 4, Chapter 1) in January 1996. The program is implemented at the local level by CUPAs.

SJCEHD is the CUPA for all cities and unincorporated areas within San Joaquin County. The concept of a CUPA was created by the California legislature to minimize the number of inspections and

different fees for businesses. SJCEHD provides the management and recordkeeping of hazardous materials and underground storage tank sites for San Joaquin County, including the City. Through the Unified Hazardous Waste and Hazardous Management Regulatory Program, SJCEHD inspects businesses for compliance with the Hazardous Waste Control Act. Hazardous waste is subject to storage time limits, disposal requirements, and container labeling requirements.

#### *3.8.2.3.3 California Health and Safety Code Section 25500 and San Joaquin County Office of Emergency Services*

The responsibilities of SJCOES include effective planning for emergencies, including those related to hazardous material incidents. SJCOES coordinates planning, response to emergencies, improves procedures for incident notification, and provides training and equipment to safety personnel. SJCOES is required by HSC Section 25500 to: 1) prepare an inventory and information system for the storage and location of hazardous materials in San Joaquin County; 2) oversee the preparation and collection of plans for those businesses that use hazardous substances; 3) prepare area response plans that will incorporate inventory data, training for emergency responses, and evacuation plans; and 4) present an inspection plan and data management plan to the state for approval.

#### *3.8.2.3.4 City of Stockton Fire Department*

The City Fire Department provides limited oversight of hazardous materials. The Fire Department is responsible for conducting inspections for code compliance and fire-safe practices, and for the investigation of fire and hazardous materials incidents. The Fire Department regulates explosive and hazardous materials under the Uniform Fire Code, and permits the handling, storage, and use of any explosive or other hazardous material.

### *3.8.3 Environmental Impacts and Mitigation Measures*

#### **3.8.3.1 Baseline**

At the time of publication of the NOP for the proposed project, the site consisted of largely vacant disturbed land with five operational warehouses in the northwest corner. The area surrounding the project site is characterized by the presence of large warehouse buildings, maritime terminals, railroad facilities, large storage buildings, and stockpiles of various commodities on the Port's West Complex. The project site includes a remedial site, referred to as Site 47, that is known to contain contaminated soil from past U.S. Navy activities. Site 47's contaminants of concern are primarily arsenic, PAHs, and OCPs, including DDT. While there may be asbestos in the existing warehouses, no other hazardous materials are currently used or stored on-site.

### 3.8.3.2 Thresholds

For purposes of this DEIR, the following thresholds, which are based on Appendix G of the CEQA Guidelines (Environmental Checklist), were used to determine if the proposed project would result in impacts related to hazards and hazardous materials. The proposed project would have an impact if:

- **HAZ-1:** The project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- **HAZ-2:** The project would 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.
- **HAZ-3:** The project would emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.
- **HAZ-4:** The project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- **HAZ-5:** The project would be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport, and would result in a safety hazard or excessive noise for people residing or working in the project area.
- **HAZ-6:** The project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- **HAZ-7:** The project would expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

### 3.8.3.3 Methodology for Determining Impacts

Analysis of impacts pertaining to hazards and hazardous materials was based on existing hazardous material conditions recorded on- and off-site; planned emergency action plans; and siting relative to schools, residents, airports, or other sensitive receptors. The analysis also considers information from the Revised Draft Site 47 RI/FFS under preparation with DTSC and CVRWQCB to support the selection of a final remedy for soil and sediment that will be documented in the RAP. The Site 47 RI/FFS presents the current understanding of potential human health and ecological risks posed by soil and sediment contamination within Site 47 and develops and evaluates remedial alternatives (Geosyntec 2020).

As discussed in Section 2.4, a focused set of alternative remedial activities was developed and evaluated using criteria established in the NCP. NCP criteria are used to screen remedial technologies and evaluate remedial activities. The Port determined that Alternative Remedial Activity 5 is the recommended remedy because it exceeds NCP requirements and will support the proposed project, providing economic benefit to the region.

Under Alternative Remedial Activity 5, all excavated contaminated sediment and soil, including the approximately 57,000 cubic yards excavated as part of the Warehouse Development Area, would be consolidated on site. Material would then be capped by a durable cover that is integrated with, and supports, the proposed project. The durable cover includes a combination of asphalt-concrete pavement, building foundations, concrete slabs-on-grade, and a 2-foot soil cover. Areas within the remedial boundary but outside the project site would be addressed through a combination of soil covers and repairing existing covers (i.e., building foundations and paved areas), as needed, to serve as a physical barrier. Unpaved areas with elevated arsenic concentrations in soil (e.g., between Port of Stockton Expressway, Daggett Road, and McCloy Avenue) would be covered with 2 feet of clean soil. Existing covers in other areas (i.e., building foundations and paved areas) would be repaired, as needed, to serve as a physical barrier. The covered areas would be inspected and maintained regularly, and ICs would also be implemented to protect human health by restricting land uses and activities that are incompatible with the selected remedy through a new LUC developed as part of the RAP.

### 3.8.3.4 Impact Analysis

#### 3.8.3.4.1 *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?*

The proposed project includes remediation of existing sediment and soil contamination and construction to develop and operate a commercial distribution facility on a portion of the site. Please see HAZ-4 regarding the potential transport of contaminated material during remediation. Routine transport, use, or disposal of hazardous materials would be limited as part of the proposed project. Operation of the proposed project is expected to be restricted to consumer goods and building supplies which would be transported per applicable regulations. Some transport of hazardous material products such as paints is expected, and operations may use or generate hazardous material products such as paints and cleaners during operations. Potential adverse impacts associated with management of such materials would be avoided through adherence with federal, state, and local regulations, including but not limited to maintaining hazardous waste inventories, complying with building and fire codes, and providing storage and shipment of potentially hazardous materials per regulatory requirements. Operations would also follow City and County provisions for emergency response for accidental release of hazardous materials.

**Impact Determination:** Remediation and construction of the proposed project are designed to minimize potential hazardous material impacts to workers and the environment. However, the proposed project involves handling of limited hazardous materials, which is considered potentially significant.

**Mitigation Measures:** The following mitigation measures would be implemented to reduce potential impacts:

- **MM-HAZ-1 Maintain and Implement Facility-Wide Site Management Program:** To address potential impacts to persons and the environment from management of common industrial materials, TC NO. CAL. Development will develop, implement, and update as needed a Facility-Wide Site Management Program.
- **MM-GEO-1 Maintain, Update, and Implement Emergency Response Plans:** (see “Impact GEO-1” in Section 3.6.3.4.1 for more information). TC NO. CAL. Development will implement and update as frequently as needed an emergency response plan, Contingency Plan, and Emergency Action Plan. The Plan will identify response procedures for chemical spills, fires, and earthquakes involving hazardous materials and hazardous wastes and will establish requirements and procedures needed to protect employees from serious injury, property loss, or loss of life in the event of fires, other emergencies, or major disasters

**Residual Impact:** Implementation of MM-HAZ-2 and MM-GEO-1 would address potential impacts from operations including accidents by establishing appropriate material management and emergency response procedures. Implementation of these mitigation measures would reduce potential impacts to less than significant.

*3.8.3.4.2 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?*

The proposed project includes excavation and consolidation of contaminated sediment and soils, which could result in the release of arsenic, PAHs, and/or OCPs, including DDT into the environment. In addition, the proposed project would use small quantities of potentially hazardous common industrial materials for site construction and operations, and the commercial operator of the warehouse facility may store small consumer quantities of hazardous materials in appropriate containers.

As discussed, remedial activities will be overseen by regulatory agencies and include the development of several plans to ensure contaminated materials will be handled to prevent exposure to workers, the public, and the environment. While some limited construction material may be hauled off site, the majority of contaminated material will be handled, consolidated, and capped on-site, limiting exposure to the public. Any transport of material would be per applicable regulations. The use of other hazardous materials, such as paint and cleaners, will be handled using BMPs to prevent accidental spills and release of contaminants into the environment.

**Impact Determination:** Remediation and construction of the proposed project are designed to minimize potential hazardous material impacts to persons and the environment. However, the

proposed project involves remediation and handling of hazardous materials, which is considered potentially significant.

**Mitigation Measures:** The following mitigation measures would be implemented to reduce potential impacts:

- **MM-HAZ-1 Maintain and Implement Facility-Wide Site Management Program:** (see HAZ-1 for more information).
- **MM-HAZ-2 Minimize Human and Environmental Exposure to Potentially Hazardous Materials During Construction:** Prior to remedial activities, the Port and TC NO. CAL. Development will develop a plan that ensures worker training and develop contingencies for responding to hazardous material conditions that may be encountered on site consistent with the DTSC-approved RAP.
- **MM-GEO-1 Maintain, Update, and Implement Emergency Response Plans:** (see HAZ-1 for more information).

**Residual Impact:** Implementation of MM-HAZ-1 and MM-GEO-1 would address potential impacts from operations, including accidents, by establishing appropriate material management and emergency response procedures. Implementation of MM-HAZ-2 would ensure any necessary training or practices as dictated by the RAP are included as part of construction. Implementation of these mitigation measures would reduce potential impacts to less than significant.

*3.8.3.4.3 HAZ-3: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The nearest schools are George Washington Elementary School, located approximately 2 miles to the east of the project site, and Madison Elementary School, located approximately 2.1 miles to the northeast of the project site. No school is proposed within the 0.25-mile radius of the project site. Because of the area's zoning (Port Area), it is unlikely that a school would be constructed within this radius.

Although operational rail or truck transport may occur in proximity to schools, products that would be transported to or from the warehouse facility would be primarily non-hazardous, and any hazardous materials would be common consumer and industrial hazardous materials in small quantities, transported per applicable regulations.

**Impact Determination:** Based on the analysis presented above, the proposed project would result in no impacts related to hazardous material emissions or handling in the vicinity of a school.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

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

Rough and Ready Island, which encompasses the project site, is listed on the DTSC's Hazardous Waste and Substances Sites (Cortese) List. The project site occurs within the Site 47 Construction Storage Area portion of the former NCTS military base. Site 47 has a currently open site assessment per DTSC, and soil at the site is known to be contaminated with arsenic, PAHs, and OCPs, including DDT. The proposed project includes actions to remediate the site, which will provide a benefit to the environment, and the proposed project, including remediation activities and construction and operation of the distribution facility, is designed to minimize the risk of contamination-related hazards to the public or environment. Ground disturbance as part of the proposed project would be conducted in coordination with DTSC and as outlined in the RAP and RDIP (including an SMP and a HASP). Potential hazards from construction in these types of areas are typically addressed through adherence with OSHA and federal and state regulations developed to protect workers and other receptors from exposure to hazardous materials. In consideration of this and the project's incorporation of remediation and of BMPs to minimize hazards there would be a less-than-significant impact related to the project site's location.

Remediation would provide a long-term benefit by reducing the potential for exposure to hazardous materials. Project-related remediation activities would include excavation and consolidation of contaminated sediment and soils. As discussed in Section 2, a DTSC- and CVRWQCB-approved RI/FFS is under development to document the regulatory framework and technical basis for the selected remedy. The RI/FFS also includes a schedule for remedy implementation (including preparation, review, and approval of documents), construction activities, and an initial schedule of post-remedy maintenance. Among other documents, a HASP would be developed and implemented to address potential hazards associated with the remedy implementation. As part of remedial activities, all contaminated sediment and soil, including the approximately 57,000 cubic yards excavated as part of the Warehouse Development Area, would be consolidated on site and then capped by a durable cover. While some limited construction material may be hauled off site, the majority of contaminated material will be handled, consolidated, and capped on-site, limiting exposure to the public. Any transport of hazardous material would be per applicable regulations.

Remedial activities have the potential to expose construction workers to hazards associated with arsenic, PAHs, and OCPs. Excavation and handling of contaminated soils would be conducted in compliance with the safety plans, including the SMP and HASP, as well as standard BMPs for remediation which include OSHA and CAL/OSHA regulations pertaining to hazardous materials.

These plans and BMPs detail how contaminated materials will be handled to prevent secondary release and exposure to workers. They will also require environmental safety training, hazardous substance warnings, emergency action plans, and HAZWOPER training. All construction plans will be subject to approval by DTSC, CVRWQCB, and others, as relevant.

The portions of construction that do not involve excavation and consolidation of contaminated sediment and soils would be conducted consistent with normal construction practices. Site construction and operations would require small quantities of common industrial materials, some of which may be hazardous if improperly managed. Hazardous materials would be stored as specified by the manufacturer and relevant regulations. The City Fire Department is equipped to provide response in the unlikely event of a site accident, and response plans have been developed for the region.

Operation of the proposed project is expected to be restricted to consumer goods and building supplies, which would be transported per applicable regulations. Some transport of hazardous material products such as paints is expected, and operations may use or generate hazardous material products such as paints and cleaners during operations. Potential adverse impacts associated with management of such materials would be avoided through adherence with federal, state, and local regulations, including but not limited to maintaining hazardous waste inventories, complying with building and fire codes, and providing storage and shipment of potentially hazardous materials per regulatory requirements. Operations would also follow City and County provisions for emergency response for accidental release of hazardous materials.

**Impact Determination:** Remediation and construction of the proposed project are designed to minimize potential hazardous material impacts to workers and the environment. However, the proposed project involves the removal of contaminated soils, which could expose workers and the environment to hazardous materials, and handling of limited hazardous materials, which is considered potentially significant.

**Mitigation Measures:** The following mitigation measures would be implemented to reduce potential impacts:

- **MM-HAZ-1 Maintain and Implement Facility-Wide Site Management Program:** (see HAZ-1 for more information).
- **MM-HAZ-2 Minimize Human and Environmental Exposure to Potentially Hazardous Materials During Construction:** (see HAZ-2 for more information).
- **MM-GEO-1 Maintain, Update, and Implement Emergency Response Plans:** (see HAZ-1 for more information).

**Residual Impact:** Implementation of MM-HAZ-1 and MM-GEO-1 would address potential impacts from operations, including accidents by establishing appropriate material management and emergency response procedures. Implementation of MM-HAZ-2 would ensure any necessary training or practices as dictated by the RAP are included as part of construction. Implementation of these mitigation measures would reduce potential impacts to less than significant.

*3.8.3.4.5 HAZ-5: Would the project be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area?*

The project site is not located within an airport land use plan area, and the nearest airport or airstrip is located approximately 6.5 miles to the southeast. Although rail or truck transport may occur in proximity to airports, products that would be transported to or from the warehouse facility would be primarily non-hazardous, and any potentially hazardous materials handled by warehouse operations would be common consumer and industrial hazardous materials in small quantities, transported per applicable regulations.

**Impact Determination:** Based on the analyses presented above, the proposed project would result in no impacts related to aviation, airports, or public use of airports.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

*3.8.3.4.6 HAZ-6: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Regional emergency response plans are detailed in the 2008 San Joaquin County Office of Emergency Services' *Hazardous Materials Area Plan* (SJCOES 2008). The plan discusses topics such as natural hazards, emergency management, mitigation programs, emergency preparedness, and state roles and responsibilities. Under the plan, considerations have been made for the area, including for hazardous materials. Additionally, Appendix 5 of the plan addresses non-routine emergency responses, including responses to industrial chemical hazards and terrorist chemical release (SJCOES 2009). Other hazard plans for the region and throughout California would also apply to the proposed project.

**Impact Determination:** The proposed project would not interfere with implementation of any regional response or hazardous material plans. The proposed project would not interfere with implementation of emergency response or emergency evacuation plans for adjacent sites or the Port as a whole. Regional emergency response plans, including but not limited to the San Joaquin County *Hazardous Materials Area Plan* (SJCOES 2008) and the San Joaquin *Emergency Operations Plan*

(SJCOES 2019), were developed in consideration of activities occurring within industrial areas of the City. Impacts would be less than significant.

**Mitigation Measures:** While impacts would be less than significant, the following mitigation measure would be implemented to further reduce potential impacts:

- **MM-GEO-1 Maintain, Update, and Implement Emergency Response Plans:** (see HAZ-1 for more information).

**Residual Impact:** Less-than-significant impact.

*3.8.3.4.7 HAZ-7: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

The project site is not located within any designated fire hazard severity zones, and the site is not susceptible to wildland fire hazards. The facility is located within a heavily industrialized area of the City, and there is no surrounding vegetation that would be susceptible to wildland fires. Construction and operation of the proposed facility would not expose individuals or structures to any wildland fire risks. While not a high-risk area, the Port has developed a plan to prevent and respond to the increasing risk of wildfires (Port 2021). This plan also includes a standardized emergency management system pursuant to the California Office of Emergency Services Standardized Emergency Management System Regulations.

**Impact Determination:** As the proposed project is not within any designated fire hazard severity zones and the site is not susceptible to wildland fire hazards, the proposed project would result in no impacts related to wildland fires.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

## 3.9 Hydrology and Water Quality

This section describes the known hydrology and water quality conditions in the project area. This analysis is based in part on publicly available flood hazard data from FEMA and local government agencies; hydrology conditions identified in regional and site-specific investigations; and Port regulations and approvals pertaining to stormwater systems. For the purposes of the hydrology and water quality analysis, the study area is defined as the 102-acre project site, the Port's West Complex drainage system, the stormwater retention basin on the western end of the West Complex, and adjoining Burns Cutoff and San Joaquin River waters. The remedial boundary was developed based on the estimated extent of arsenic in soil and OCPs in sediment that pose a potential risk to human health or wildlife. The remedial boundary extends beyond the Site 47 boundary from the 2003 Consent Agreement to include a paved warehouse area to the west and a portion of the vacant lot to the south. Arsenic concentrations in soil exceed the background level to the west of the Site 47 boundary, and the remedial boundary extends to the perimeter of the paved warehouse area. To the south, the remedial boundary encompasses an existing drainage channel with elevated OCP concentrations and an adjacent area with elevated arsenic concentrations. The remedial boundary does not include groundwater.

### 3.9.1 *Environmental Setting*

#### 3.9.1.1 Hydrology

The natural hydrology of the project area has been highly modified, influenced, and altered by adjacent land use practices. The local watershed is Burns Cutoff – San Joaquin River (HUC 12: 180400030501), and the regional watershed is the San Joaquin Delta (HUC 8: 18040003). The project area is located in the central portion of the Burns Cutoff – San Joaquin River watershed. Annual rainfall within this watershed averages 13.34 inches, with the majority of rain falling between December and March.

The San Joaquin Delta was originally a marsh that received annual floods from the Sacramento and San Joaquin rivers. As development occurred in the Central Valley, the marshes in the Delta were drained and levees were constructed to use the Delta for agricultural and other purposes. The groundwater gradients in the Delta are generally low, and rainfall, irrigation, and seepage from surface water are the main sources of recharge to Delta groundwater. On Delta islands, shallow groundwater typically discharges into drainage channels and then is pumped into one of the surface water channels in the Delta surrounding Rough and Ready Island.

Rough and Ready Island is bounded by the Burns Cutoff to the south and west, the Stockton Deep Water Ship Channel to the north, and the San Joaquin River to the east. The island is protected from the higher elevation water in the rivers and channels by levees that surround its perimeter. Surface

water elevations in the surrounding rivers and channels are tidally influenced and range from approximately 1 to 10 feet above mean sea level (msl). The levees have average crest elevations ranging between 12 and 18 feet above msl (Geosyntec 2021b).

The project area occurs within the San Joaquin Valley Groundwater Basin, which is a subsection of the Greater Central Valley Basin. The ground surface elevations in the interior of Rough and Ready Island range from approximately 5 feet below msl to 8 feet above msl, with an average elevation approximately 1 foot below msl (Geosyntec 2021b).

Groundwater in the project area is recharged by local precipitation and through percolation from the surrounding surface waters. Groundwater overdraft conditions have existed in the San Joaquin County Basin since the 1920s, although elevations have recovered and stayed relatively constant since 1999 (Stockton Port District 2012)

### 3.9.1.2 Surface Water, Stormwater, and Groundwater

Due to the protection of surrounding levees, the ground surfaces of many islands in the Delta are several feet below mean seal level while the San Joaquin River is several feet above msl. This differential causes the river to exert hydrostatic pressure on groundwater systems in the Delta islands. Likewise, some parts of the West Complex, including in the project area, have elevations below the surrounding water bodies, which cause the surface percolation of groundwater in these areas. To control groundwater, a network of drainage channels is used funnel groundwater to the pump house located in the southwestern corner of Rough and Ready Island, where it is pumped into Burns Cutoff under CVRWQCB Order R5-2011-005, NPDES permit CAS0084077. These drainage channels also collect stormwater runoff. Stormwater that reaches this discharge point is held in a stormwater retention basin on the western end of the West Complex. Stormwater and intercepted groundwater are pumped to the San Joaquin River, located approximately 0.5 mile southeast of the project site consistent with the NPDES permit.

The project site is covered with surfaces with low permeability, which limits stormwater recharge. Surfaces include compacted dirt and ruderal vegetation, remnant asphalt, concrete paving, derelict abandoned structures, and degraded tennis and basketball courts. There are three stormwater drainage ditches (shown on Figure 2) within the project area that tie into the larger network:

- **Drainage Ditch 1:** An open, channelized, earthen stormwater drainage ditch bisects the center of the Warehouse Development Area from east to west (WRA 2021). This approximately 0.80-acre and 2,139 linear-foot-long ditch has been present on the project site since 1954, as indicated by a line on a topographic map (NETR 2021). Water flows from east to west in this central semi-permanently inundated ditch. DDT and arsenic have been identified in the sediment.

- **Drainage Ditch 2:** A second open, channelized, earthen stormwater drainage ditch, which is a branch of and connects to the central ditch, is located on the western edge of the Warehouse Development Area. The approximately 0.17-acre and 529-foot-long drainage ditch is a linear feature confined to a distinct channel with OHWM that flows for a portion of the year, generally drying out in sections during the most arid time of the year. Water within this western ditch flows from north to south. At the southern end of this western ditch is a large culvert and concrete catch basin where water flows into the project area from the Port's larger storm drain system.
- **Drainage Ditch 3:** An open, approximately 0.61-acre and 1,732-foot-long linear drainage ditch also extends east to west on the southern edge of the project site, immediately north of the existing Ferguson Building warehouse at 530 Port of Stockton Expressway. This ditch was excavated in 2006 to route water around the Ferguson Building warehouse (WRA 2021). The southern drainage ditch connects to the western ditch with no obstructions or culverts. The semi-permanently inundated ditch is a linear feature confined to a distinct channel with OHWM which flows for a portion of the year, generally drying out in sections during the most arid time of the year. It is almost entirely vegetated, with only a few sections of unvegetated channel. Unvegetated portions were presumed to be caused by long-term inundation. Water within the southern ditch flows from east to west.

These ditches are part of the Port's West Complex drainage system, which conveys stormwater and surfacing groundwater to a single pump-controlled discharge point on the west side of the West Complex. Stormwater that reaches this discharge point is held in a stormwater retention basin on the western end of the West Complex. During years when the retention basin reaches a high level, stormwater is pumped to the San Joaquin River.

#### *3.9.1.2.1 Hazardous Materials in Groundwater*

As part of a groundwater monitoring plan for the West Complex, the Port evaluated elevated arsenic concentrations in shallow groundwater and detected concentrations above acceptable drinking water standards in most of Rough and Ready Island's monitoring wells. The evaluation concluded that natural processes, including biogeochemical processes occurring due to the island's location within the Delta, were responsible for the elevated arsenic concentrations in groundwater at Rough and Ready Island (ERS 2016). The CVRWQCB and DTSC have agreed with the conclusion that arsenic is naturally occurring at Rough and Ready Island, indicating that observed arsenic in its groundwater, and specifically at Site 47, reflects background concentrations. The Port is currently conducting an island-wide assessment of background concentrations of additional metals in groundwater.

### 3.9.1.3 Flood Hazards

San Joaquin County maintains Flood Insurance Rate Maps (FIRMs), as required by the Federal Emergency Management Agency (FEMA). These FIRMs indicate the potential of flooding for various locations. The project site is located in a "Zone X Other Flood Area," which indicates an area with 0.2% annual chance of flood or an area with 1% annual chance of flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, as well as areas protected by levees from a 1% annual chance of flood (FEMA 2009).

California SB 92 requires emergency action plans for all dams, except those classified as "low hazard." Upstream dam failures could cause flooding in the project area, which is within the dam inundation zone of the New Malones, San Luis, Lake McClure, Camanche, and New Hogan dams (SJCOES 2019). Failure of any of these dams would give residents about 7 hours to evacuate. Other major regional dams could also affect Stockton but would have longer evacuation lead times (City 2018a). California SB 92 requires emergency action plans for all dams, except those classified as "low hazard."

The project area is protected by a levee system along the San Joaquin River and Burns Cutoff. The Port is responsible for the levee system and has established an annual levee monitoring and inspection program intended to determine whether reinforcement of the structural integrity of the perimeter levee is required (Stockton Port District 2012). FEMA has certified and accepted most of the levees within the City as meeting minimum standards (City 2007). Tsunamis and seiches are not considered to be significant threats in the Stockton area (City 2007).

Tsunamis and seiches are not considered to be significant threats in the Stockton area due to the levee system (City 2007). Similar to tsunamis and seiches, levees along the river limit the effects of sea level rise within the project area. Geosyntec prepared an *Evaluation of Sea Level Rise Rough and Ready Island Port of Stockton* to evaluate the impact of sea level rise on the water table (Geosyntec 2021b). The evaluation modeled future increases to the water table. The worst-case sea level rise model, which corresponds to the year 2100, showed a negligible increase in simulated water table elevations (generally less than 1.2 inches) for areas like Site 47 in the vicinity of the drain network on Rough and Ready Island. The average present-day land surface elevation at Site 47 ranges from approximately 1.0 foot below msl to 3.3 feet above msl. The present-day water table beneath Site 47 ranges from 3 to 5 feet below msl.

## 3.9.2 *Applicable Regulations*

### 3.9.2.1 **Federal**

#### 3.9.2.1.1 *Clean Water Act*

The Clean Water Act (CWA) is the principal statute governing water quality on a national level. The CWA sets water quality standards that states use to regulate discharge of pollutants into the nation's waters. The statute employs a variety of regulatory and non-regulatory tools to reduce pollutant discharges into waterways. It mandates permits for wastewater and stormwater discharges, regulates publicly owned works that treat municipal and industrial wastewater, requires states to establish site-specific water quality standards for navigable bodies of water, and regulates other activities that affect water quality. USEPA has delegated responsibility for implementation of portions of the CWA in California, including water quality control planning and programs, to SWRCB and nine RWQCBs.

Important applicable sections of the CWA are as follows:

- Sections 303 and 304 provide for water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for any federal permit that proposes an activity which may result in a discharge to waters of the United States to obtain certification from the state that the discharge will comply with other provisions of the Act. Certification is provided by the RWQCB.
- Section 402 establishes the NPDES, a permitting system for the discharge of any pollutant (except for dredge or fill material) into waters of the United States. This permit program is administered by the RWQCB.
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by USACE.

#### 3.9.2.1.2 *National Flood Insurance Program*

The National Flood Insurance Program, administered by FEMA, requires that local governments covered by federal flood insurance pass and enforce a floodplain management ordinance that specifies minimum requirements for any construction within the 100-year flood zone. FEMA is responsible for preparing maps delineating these areas.

### 3.9.2.2 **State**

#### 3.9.2.2.1 *California Fish and Game Code*

Section 5650 of the FGC prohibits discharge of harmful materials to waters of the state. It is unlawful to deposit in, permit to pass into, or place where it can pass into California waters, any petroleum, acid, coal or oil tar, lampblack, aniline, asphalt, bitumen, or residuary product of petroleum; any carbonaceous material or substance; any refuse, liquid or solid, from a refinery, gas house, tannery,

distillery, chemical works, mill, or factory of any kind; any sawdust, shavings, slabs, or edgings; any factory refuse, lime, or slag; any *cocculus indicus*<sup>2</sup>; or any substance or material deleterious to fish, plant, mammal, or bird life. FGC 5655 requires that parties responsible for polluting waters of the state pay for removal costs and environmental damages.

FGC 1600–1607 require CDFW notification for any activity that could affect the bank or bed of any stream that has value to fish and wildlife. After notification, the CDFW has the responsibility for preparation of a Streambed Alteration Agreement, in consultation with the project proponent. The CDFW does not currently employ a formal definition of watercourses under its jurisdiction. CDFW has jurisdiction over alterations to any channel with a definable bank and bed that is capable of accommodating water flow. Wetlands need not be present to establish CDFW jurisdiction. CDFW jurisdiction generally extends to work conducted within the 100-year floodplain.

#### 3.9.2.2.2 *Porter-Cologne Water Quality Control Act*

The Porter-Cologne Act (Division 7 of the California Water Code) is the primary state regulation that addresses water quality standards. Under the act, SWRCB has the ultimate authority over water rights and water quality policy. The act also established nine RWQCBs to oversee water quality on a day-to-day basis at the regional level. The state and regional boards regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. Jurisdictional resources in the project area are expected to be under the jurisdiction of the CVRWQCB. Under oversight by USEPA, SWRCB and CVRWQCB have the responsibility for establishing regulatory standards and objectives for water quality; developing TMDLs for impaired waterbodies; and issuing NPDES permits.

The proposed project may require WDR if waters on site are considered jurisdictional and is expected to require a NPDES permit to regulate construction-related stormwater at the project site.

### 3.9.2.3 **Local**

#### 3.9.2.3.1 *Port of Stockton Storm Water Development Standards Plan*

The Port's Storm Water Development Standards Plan (DSP) establishes stormwater development standards and review process for Port tenants. The DSP covers new and substantial redevelopments of properties within three subareas to ensure compatibility with the SWRCB-issued MS4 NPDES Permit. The Port's review process under the DSP includes assessment of technical stormwater submittals from project proponents. DSP objectives also include protecting the quality of stormwater runoff and the receiving waters that surround the Port.

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<sup>2</sup>*Cocculus indicus* is prohibited based on the practice of grinding up the roots of certain *Cocculus* plants (most commonly Yucca plants) and spread them in the water to "stun" fish for collection.

### 3.9.2.3.2 *City of Stockton General Plan*

The City's 2040 General Plan (City 2018a), adopted on December 4, 2018, includes the following policies specific to flood hazards that would apply to the proposed project:

- **Policy SAF-2.3.** Protect the community from potential flood events.
  - **Action SAF-2.3D.** Prepare and maintain a map of evacuation routes for major flood events.
- **Policy SAF-2.4.** Minimize risks to the community from flooding through appropriate siting and protection of structures and occupants.
  - **Action SAF-2.4D.** Consider the best available flood hazard information and mapping from regional, State, and federal agencies to inform land use and public facilities investment decisions.

## 3.9.3 *Environmental Impacts and Mitigation Measures*

### 3.9.3.1 **Baseline**

At the time of publication of the NOP for the proposed project, the majority of the surfaces within the project area includes compacted dirt and ruderal vegetation with soils that have low permeability, as well as remnant asphalt, concrete paving, compacted dirt, derelict abandoned structures, and degraded tennis and basketball courts that are mostly impermeable. The terrain is primarily flat throughout the entire project site. Site soil is known to have elevated concentrations of arsenic and PAHs from historic use. Three ditches, located on the project site, are part of the Port's West Complex drainage system and drain into a stormwater retention basin on the western end of the West Complex. Arsenic has been identified as naturally occurring in groundwater in a portion of the project area, more specifically in Site 47. The project site is located in a "Zone X Other Flood Area" (FEMA 2009).

### 3.9.3.2 **Thresholds**

For purposes of this DEIR, the following thresholds, which are based on Appendix G of the CEQA Guidelines (Environmental Checklist), were used to determine if the proposed project would result in impacts related to hydrology and water quality. The proposed project would have an impact if:

- **HYD-1:** The project would violate water quality standards or WDRs or otherwise substantially degrade surface or groundwater quality.
- **HYD-2:** The project would substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- **HYD-3:** The project would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i) result in substantial erosion or siltation on-

or off site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off site; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) impede or redirect flood flows.

- **HYD-4:** In flood hazard, tsunami, or seiche zones, the project would risk release of pollutants due to project inundation.
- **HYD-5:** The project would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

### 3.9.3.3 Impact Analysis

#### 3.9.3.3.1 *HYD-1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

Construction activities associated with the proposed project would directly disturb soils within the existing project area, including excavation or ground disturbance required for remediation and construction of the warehouse described in Section 2. Soils in the project area are known to be contaminated with arsenic, PAHs, and OCPs, including DDT, which have the potential to be released to stormwater or groundwater. However, remediation would be conducted in compliance with the RAP and SMP to ensure material is excavated and consolidated in a safe manner to ensure contaminants are contained. Placement of durable covers site-wide would eliminate the possibility of contaminated soil leeching into groundwater in the long-term.

The existing central drainage ditch (Drainage Ditch 1) bisecting the project area would be backfilled with clean fill and a replacement drainage ditch would be constructed along the northern edge of the Warehouse Development Area. These activities could pose the potential for water quality impacts during construction. In order to minimize these risks, erosion control measures would be put in place before any ground disturbance, to minimize any erosion of contaminated soil or runoff.

Site construction and operations would require use of small quantities of common industrial materials (e.g., lubricating oils, cleaners, equipment fuel), which could enter waterbodies through the existing drainage system and impact water quality if improperly managed. During operation of the proposed project, similar impacts related to use of common industrial materials could also occur; the commercial operator of the facility may also store small consumer quantities of common industrial materials. Although the risk for these hazards is low because the use of these industrial materials would be limited and any storage of such materials would be in manufacturer-provided containers compliant with relevant regulations, the use of industrial materials could affect water quality. These impacts to water quality are commonly addressed through adherence to construction BMPs such as designating appropriate staging and fueling areas and requiring equipment inspections and

maintenance, which are often required through the NPDES, RWQCB, and CDFW permitting processes.

Finally, there is no potential for any water quality standards or waste discharge that would substantially degrade surface or groundwater quality from the ICs proposed in the Western Warehouse Area.

**Impact Determination:** While the proposed project includes remediation of soils contaminated from historic use and placement of a clean soil cap, which would improve water quality in the longer term, construction activities associated with the proposed project, and more specifically remediation activities could result in the exposure and release of contaminants into surface and groundwater and alter water quality. Additionally, soils disturbance and use of small quantities of common industrial materials during construction and operations could also potentially alter water quality. There remains the potential for impacts to water quality from improper management of potentially hazardous materials during proposed construction and operations. These would constitute potentially significant impacts.

**Mitigation Measures:** The following mitigation measures would be implemented to reduce potential impacts:

- **MM-HAZ-1: Minimize Human and Environmental Exposure to Potentially Hazardous Materials During Construction** (see HAZ-1 in Section 3.8.3.4.1 for more information). To address potential impacts to persons and the environment from management of common industrial materials, TC NO. CAL. Development will develop, implement, and update as needed a Facility-Wide Site Management Program.
- **MM-HAZ-2: Maintain and Implement Facility-wide Site Management Program** (see HAZ-2 in Section 3.8.3.4.2 for more information). Prior to remedial activities, the Port and TC NO. CAL. Development will develop a plan that ensures worker training and develop contingencies for responding to hazardous material conditions that may be encountered on site consistent with the DTSC-approved RAP.
- **MM-GEO-1: Maintain, Update, and Implement Emergency Response Plans** (see GEO-1 in Section 3.6.3.4.1 for more information). TC NO. CAL. Development will implement and update as frequently as needed an emergency response plan, Contingency Plan, and Emergency Action Plan. The Plan will identify response procedures for chemical spills, fires, and earthquakes involving hazardous materials and hazardous wastes and will establish requirements and procedures needed to protect employees from serious injury, property loss, or loss of life in the event of fires, other emergencies, or major disasters.
- **MM-GEO-2: As-Needed Implementation of Geotechnical Recommendations** (see GEO-1 in Section 3.6.3.4.1 for more information). Recommendations from the *Preliminary Geotechnical Investigation* (H&A 2020a) will be implemented as needed, including use of

materials and construction techniques specifically addressing potential seismic and geologic hazards.

**Residual Impact:** Implementation of MM-HAZ-1 and GEO-1 would address potential water quality impacts from operations including accidents by establishing appropriate material management and emergency response procedures. Potential construction impacts to water quality associated with project construction would be addressed through implementation of MM-HAZ-2 and MM-GEO-2, which include BMPs such as erosion and spill controls. With implementation of these mitigation measures, impacts would be less than significant.

3.9.3.3.2 *HYD-2: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the*

The project site is currently largely vacant (outside of the Western Warehouse Area) and includes compacted dirt and ruderal vegetation with soils that have low permeability, as well as remnant asphalt, concrete paving, compacted dirt, derelict abandoned structures, and degraded tennis and basketball courts that are mostly impermeable. The proposed project would install a number of concrete slabs on-grade in the footprint of the proposed warehouse and outdoor storage area, as well as compacted earth layers throughout the project site, resulting in an estimated increase of 46.1 acres of low-permeability or impermeable surface. Because the existing site conditions are generally low-permeability, these improvements would have only a minor impact on groundwater recharge. Under the proposed project, stormwater runoff would be conveyed to the newly constructed drainage ditch along the northern edge of the Warehouse Development Area and ultimately to the existing stormwater retention basin, where percolation into the groundwater table would continue to occur. In addition, the remediation portions of proposed project construction would minimize the possibility of arsenic and PAHs contamination of groundwater.

**Impact Determination:** Because the proposed project would not result in a major change in soil permeability and remediation is proposed as part of this project, there would be a less-than-significant impact pertaining to groundwater recharge.

**Mitigation Measures:** None required.

**Residual Impact:** Less-than-significant impact.

3.9.3.3.3 *HYD-3: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i) result in substantial erosion or siltation on- or off site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off site; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) impede or redirect flood flows?*

The project site is generally flat and the potential for substantial soil erosion or siltation during operations is considered minimal. Despite the site's relatively low susceptibility to erosion, construction would require surface excavation which could erode soils if improperly managed. Topsoil that would be removed during grading or other surface preparation does not serve agricultural purposes or other valuable functions. During construction of the proposed project, erosion control measures and BMPs would be implemented prior to ground disturbance, such that erosion impacts are unlikely to occur.

The proposed project would include alterations to the drainage pattern of the project site; stormwater currently drains into a drainage ditch which bisects the site laterally. This ditch would be filled with clean fill to accommodate the proposed improvements, and a new drainage ditch would be constructed along the northern edge of the Warehouse Development Area. The project also involves constructing two detention basins that outfall to the Port's stormwater conveyance system. As the existing ditch does, the new ditch would drain to the Port's West Complex drainage system and retention basin. The new impermeable surfaces (primarily concrete pads) which would be built as part of construction of the proposed project would be designed to drain into the new ditch, such that runoff is minimized. The new channel would have sufficient capacity to handle all site stormwater and would be designed to resist erosion. The proposed project would not result in any alteration to the course of any stream, river, or other waterbodies.

As noted previously, site construction and operations would require use of small quantities of common industrial materials, which could contribute polluted runoff if improperly managed. Although the risk for these hazards is low because the use of these industrial materials would be limited and any storage of such materials would be in manufacturer-provided containers compliant with relevant regulations, the use of industrial materials could affect water quality and contribute to pollution runoff. These impacts to water quality are commonly addressed through adherence to construction BMPs such as designating appropriate staging and fueling areas and requiring equipment inspections and maintenance, which are often required through the NPDES, RWQCB, and CDFW permitting processes.

**Impact Determination:** The proposed project would not result in any alteration to the course of any natural stream, river, or other waterbodies. The new stormwater ditches would drain to the Port's West Complex drainage system and retention basin consistent with the existing drainage pattern. The new impermeable surfaces (primarily concrete pads) which would be built as part of construction of the proposed project would be designed to drain into the new ditch, such that runoff is minimized. The new channel would have sufficient capacity to handle all site stormwater and would be designed to resist erosion. Therefore, impacts would be considered less than significant.

**Mitigation Measures:** None required.

**Residual Impact:** Less-than-significant impact.

*3.9.3.3.4 HYD-4: Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

Although the project site is within a dam failure zone, dam failure is unlikely, and all California dams with flood potential above low hazard are required to maintain emergency action plans. The proposed project would have no effect on existing dam failure inundation hazards and would not result in increased exposure to these hazards. The proposed project would have no effect on the potential for tsunamis, seiches, or mudflows on or off site. The likelihood of a seismic-induced landslide or mudflow is very low.

The project site is not within a FEMA-designated flood hazard area. The proposed project would not exacerbate risks related to flood hazards, and the detention ponds included in the site design would minimize risk of stormwater contamination during flooding.

**Impact Determination:** Proposed grading and drainage improvements would not substantially affect runoff and would not affect flood risk. Therefore, the proposed project would have a less-than-significant impact related to flood risk.

**Mitigation Measures:** To further minimize potential release of pollutants due to project inundation, the following mitigation measure would be implemented:

- **MM-HAZ-1: Maintain and Implement Facility-wide Site Management Program** (see HYD-1 and HAZ-1 for more information).

**Residual Impact:** Less-than-significant impact.

*3.9.3.3.5 HYD-5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

As noted in the preceding responses, the proposed project would have little or no effect on groundwater recharge, and proposed operations would not extract or otherwise use groundwater. Remediation and construction are not expected to impair water quality.

**Impact Determination:** The proposed project would have no effect on groundwater and therefore would not obstruct any applicable sustainable groundwater management plans. Remediation and construction are not expected to impair water quality and therefore would not obstruct implementation of a water quality control plan. Impacts would be less than significant.

**Mitigation Measures:** None required.

**Residual Impact:** Less-than-significant impact.

## 3.10 Noise

This section describes the existing noise and vibration environment of the proposed project and surrounding area and analyzes how the proposed project may affect these characteristics. This section also describes applicable rules and regulations pertaining to noise and vibration. For the purposes of the noise and vibration analysis, the study area is defined as the project site and the surrounding area. The closest residential receptors are located approximately 3,300 feet to the south and 3,500 feet to the north, off of Rough and Ready Island.

### 3.10.1 Environmental Setting

#### 3.10.1.1 Fundamentals of Sound and Noise

Sound is what we hear and is defined as the energy of a vibrating object transmitted by pressure waves through a medium, such as air or water, to the

A given noise may be more or less tolerable depending on the duration exposure, as well as the time of day that the noise occurs.

human ear. Noise is most simply defined as unwanted sound. The difference between sound and noise depends upon the listener and the circumstances. A given noise may be more or less tolerable depending on the duration exposure, as well as the time of day which the noise occurs. For example, the sound of a distant train horn during the day may be considered background noise but could disrupt sleep at night.

Sound is measured in decibels (dB) and accounts for variations such as frequency and amplitude, using a relative scale adjusted to the human range for hearing (referred to as the A-weighted decibel [dBA]). More specifically, the dBA measures sound reflective of how the average human ear responds to sound; the range of human hearing typically ranges from 0 dBA (the threshold of hearing) to about 140 dBA (the threshold for pain). Acceptable noise levels during the day are higher than during the night, and industrial land use in urban areas will have a higher limit than residential land use in rural areas.

Noise can be generated by both mobile (i.e., cars) and stationary (i.e., operational machinery) sources. Mobile sources typically attenuate at a rate of 3.0 to 4.5 dBA per doubling of distance, depending on the ground surface and obstructions between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, typically have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, typically have an attenuation rate of 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate of 6.0 to 7.5 dBA per doubling of distance.

The community noise equivalent level (CNEL) measures the cumulative 24-hour noise exposure, considering not only the variation of the A-weighted

Community noise equivalent level (CNEL) measures the cumulative 24-hour noise exposure, considering not only the variation of the A-weighted noise level but also the duration and time of day of the noise.

noise level but also the duration and the time of day of the noise. Various state and local agencies have adopted CNEL as the measure of community noise, including the State Department of Aeronautics and the California Commission on Housing and Community Development.

Noise is measured through the use of several measurements, including the following:

- **Equivalent Sound Level ( $L_{eq}$ )** is the constant noise level that would result in the same total sound energy being produced over a given period. It is useful for representing a varying sound source over time as a single number.
- **Maximum Sound Level ( $L_{max}$ )** is the maximum sound level.
- **Statistical Sound Levels ( $L_n$ , e.g.,  $L_{min}$ ,  $L_{90}$ ,  $L_{50}$ ,  $L_{10}$ )** The percentile-exceeded noise level, designated as  $L_n$ , describes the noise level that is met or exceeded by a fluctuating sound level n-percent of a stated time period. For example, the  $L_{50}$  is the sound level that is equaled or exceeded for 50% of the time period (equivalent to 30 minutes in an hour) and the  $L_{10}$  is the sound level that is equaled or exceeded for 10% of the time period (equivalent to 6 minutes in an hour).
- **Day/Night Average Sound Level ( $L_{dn}$  or  $DNL$ )** is the average noise level over a 24-hour period. The noise level measurements between the hours of 10:00 p.m. and 7:00 a.m. are artificially increased by 10 dB before averaging.

### 3.10.1.2 Fundamentals of Groundborne Vibration

Groundborne vibration is an oscillatory motion that can be described in terms of displacement, velocity, or acceleration. Each of these measures can be further described in terms of frequency and amplitude. Displacement is the easiest descriptor to understand; it is simply the distance that a vibrating point moves from its static position (i.e., its resting position when the vibration is not present). The velocity describes the instantaneous speed of the movement, and acceleration is the instantaneous rate of change of the speed. Vibrating objects can radiate their energy through the ground upon contact; if the object is large or close enough to an observer, ground vibrations can be perceived. As such, environmental impact analyses typically study vibration as it relates to building damage and human annoyance. However, since ground vibration generated by human activities typically attenuates rapidly from the source of vibration, human vibration issues are usually confined to short distances, such as 500 feet or less from the source (FHWA 2006a)

Although displacement is fundamentally easier to understand than velocity or acceleration, it is rarely used for describing groundborne vibration, because: 1) human response to groundborne vibration correlates more accurately with velocity or acceleration; 2) the effect on buildings and sensitive equipment is more accurately described using velocity or acceleration; and 3) most transducers used in the measurement of groundborne vibration actually measure either velocity or acceleration. For

this study, velocity was the fundamental measure used to evaluate the effects of groundborne vibration.

Vibration consists of rapidly fluctuating motions with an average motion of zero. The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak amplitude of the vibration velocity. The accepted unit for measuring PPV in the United States is inches per second.

### **3.10.1.3 Study Area Setting**

Existing noise in the project area can be attributed to various stationary and mobile sources, including tractor-trailer truck traffic, rail activity, and adjacent warehouses equipment (Port 2004). Other sources that contribute to the existing noise environment in the general site vicinity include landscaping activities (e.g., leaf blowing and lawn mowing) and local and regional roadway traffic on nearby local roads and highways (i.e., I-5 and State Routes 4 [SR-4] and 99 [SR-99]). Noise monitoring previously conducted for the WCDP concluded that the equivalent continuous noise level ( $L_{eq}$ ) on Rough and Ready Island generally ranges between 60 and 84 dBA, with higher levels from short-term increases in noise levels 85 dBA or higher.

Noise-sensitive land uses are generally considered to be uses in which noise exposure could result in health-related risks to individuals or places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Other land uses, such as parks, historic sites, cemeteries, and other recreation areas, are also considered sensitive to increases in exterior noise levels. Schools, places of worship, hotels, libraries, nursing homes, retirement residences, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

## **3.10.2 Regulatory Setting**

### **3.10.2.1 Federal**

OSHA has established acceptable occupational noise exposure levels (29 CFR 1910.95). These regulations state that employees shall not be exposed to occupational noise levels greater than 90 dB without adequate hearing protection. If occupational noise levels exceed 85 dB, the employer must establish a hearing conservation program as described under 29 CFR 1910.95(c-o). For occupational noise exposure levels greater than 90 dB, the daily period of noise exposure must be decreased from 8 hours, as described under 29 CFR 1910.95(b).

The USEPA Office of Noise Abatement and Control was established to coordinate federal noise control activities and issued the Noise Control Act of 1972 (42 USC 4901 et seq.), establishing programs and guidelines to identify and address the effects of noise on public health and welfare

and the environment. USEPA determined in 1981 that subjective issues such as noise would be better addressed at lower levels of government, and responsibilities for regulating noise control policies were transferred to state and local governments in 1982.

### 3.10.2.2 State

The State of California General Plan Guidelines, published by OPR, provide guidance for the acceptability of projects within areas that are exposed to specific noise levels. For areas zoned for industrial, manufacturing, utilities, and agricultural land uses, the normally acceptable level of community noise exposure is less than 75 CNEL with 70 to 80 CNEL considered conditionally acceptable (OPR 2017). The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

For the protection of fragile, historic, and residential structures from groundborne vibration, Caltrans recommends a threshold of 0.2 inch per second PPV for normal residential buildings and 0.08 inch per second PPV for old or historically significant structures (Caltrans 2020).

### 3.10.2.3 Local

The City has developed community noise control regulations and standards which are consistent with or exceed the guidelines of the State Office of Noise Control and the standards adopted by the Federal Highway Administration (FHWA), Caltrans, and other government and regulatory agencies (City Municipal Code Title 16, Division 3, Chapter 16.60). Regarding construction, the City prohibits "operating or causing the operation of tools or equipment on private property used in alteration, construction, demolition, drilling, or repair work between the hours of 10:00 p.m. and 7:00 a.m., so that the sound creates a noise disturbance across a residential property line, except for emergency work of public service utilities." State law requires general plans to use the CNEL or the day/night average sound level ( $L_{dn}$ ) to describe the community noise environment (in dBA) and its effects on the population.

The City's 2040 General Plan (City 2018a) establishes goals, policies, and criteria for determining land use compatibility with major noise sources within the community. The 2040 General Plan includes Policy SAF-2.5, which protects the community from health hazards and annoyance associated with excessive noise levels.

Policy SAF-2.5 includes the following standards:

- **Action SAF-2.5A:** Prohibit new commercial, industrial, or other noise-generating land uses adjacent to existing sensitive noise receptors, such as residential uses, schools, health care

facilities, libraries, and churches, if noise levels are expected to exceed 70 dBA CNEL when measured at the property line of the noise-sensitive land use.

- **Action SAF-2.5B:** Require projects that would locate noise-sensitive land uses where the projected ambient noise level is greater than the "normally acceptable" noise levels listed in Table 5-1 (included below as Table 19) to conduct an acoustical analysis. (As noted in Table 5-1 of the 2040 General Plan, if existing noise standards are exceeded, a proposed project shall not incrementally increase noise levels by more than 3 dBA.)
- **Action SAF-2.5C:** Require noise produced by commercial uses to not exceed 75 dBA  $L_{dn}$ /CNEL at the nearest property line.
- **Action SAF-2.5D:** Grant exceptions to the noise standards for commercial and industrial uses only if a recorded noise easement is conveyed by the affected property owners.
- **Action SAF-2.5E:** Require all new habitable structures to be set back from railroad tracks to protect residents from noise, vibration, and safety impacts.

**Table 19**  
**Maximum Allowable Noise Exposure by Land Use Per City of Stockton 2040 General Plan ( $L_{dn}$ )**

Land Use	Noise Level, $L_{dn}$ (dBA)						
	0-55	56-60	61-65	66-70	71-75	75-80	>81
Residential							
Urban Residential Infill							
Hotels, Motels							
Schools, Libraries, Churches, Hospitals, Extended Care Facility							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arenas, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Mining, Industrial, Manufacturing, Utilities, Agriculture							

Notes:

Source: City 2018a

- Normally Acceptable
- Conditionally Acceptable
- Unacceptable

### 3.10.3 Environmental Impacts and Mitigation Measures

#### 3.10.3.1 Baseline

At the time of the NOP for the proposed project, the project site was vacant (outside of the Western Warehouse Area). As discussed in Section 3.10.1.3, the surrounding equivalent continuous noise level ( $L_{eq}$ ) on Rough and Ready Island generally ranges between 60 and 84 dBA, with higher levels from short-term increases in noise levels 85 dBA or higher.

#### 3.10.3.2 Thresholds

For purposes of this DEIR, the following thresholds, which are based on Appendix G of the CEQA Guidelines (Environmental Checklist), were used to determine if the proposed project would result in impacts related to noise and vibration. The proposed project would have an impact if:

- **NV-1:** The project would result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- **NV-2:** The project would result in generation of excessive groundborne vibration or groundborne noise levels.
- **NV-3:** For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, the project would expose people residing or working in the project area to excessive noise levels.

#### 3.10.3.3 Methodology for Determining Impacts

A noise and vibration analysis was performed to determine whether the proposed project would affect existing noise and vibration levels in the vicinity of the project site. Specifically, the proposed project was evaluated to determine if noise and vibration levels would exceed pertinent thresholds for residential and commercial structures and if an acoustical analysis was required.

#### 3.10.3.4 Impact Analysis

##### *3.10.3.4.1 NV-1: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

The City's noise regulations and standards apply to operations of the proposed project. Specifically, the City's 2040 General Plan regulates industrial uses with  $L_{dn}$  of 70 dBA and below as "normally acceptable," and between 71 and 80 dBA as "conditionally acceptable" following the incorporation of noise reduction features. Noise levels above 80 dBA are considered unacceptable. The City's noise ordinance also requires that the maximum sound level generated by industrial land uses, or other

permitted noise-generating activities within any industrial zoning district, remain below 80 dBA. Previous noise monitoring conducted determined that the existing  $L_{dn}$  nearby the project site ranges between 60 to 84 dBA, with higher levels from short-term increases in noise levels 85 dBA or higher. As shown, existing ambient standards exceed the City's guidance levels.

Noise attenuates with distance from the source. Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, and senior care facilities would each be considered noise- and vibration-sensitive and may warrant unique measures for protection from intruding noise. The closest sensitive receptor is the Burns Cutoff, to the west and south, located approximately 1,500 feet south of the project site and used for recreation (Stockton Port District 2013). Other sensitive receptors in the vicinity of the project site include the San Joaquin River, located approximately 1,900 feet from the project site and also used for recreation; Louis Park and Atherton Island, approximately 2,700 feet northeast of the project site across the San Joaquin River; the Lindley house, an event venue located at 1 Fyffe Road on Rough and Ready Island approximately 2,800 feet of the project site; and residential receptors, approximately 3,300 feet south and 3,500 feet north of the project site, off of Rough and Ready Island.

Construction activities typically require the use of numerous pieces of noise-generating equipment. These activities would temporarily increase ambient noise levels on an intermittent basis. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. Table 20 presents the typical noise level of proposed construction equipment for the proposed project and the reference noise levels that each equipment type would generate.

**Table 20**  
**Proposed Project Construction Equipment by Phase**

Major Equipment	Reference Sound Level at 50 feet (dBA)
<b>Phase 1: Site Preparation and Remediation in Warehouse Development Area</b>	
Sweeper/Tractor	84 <sup>1</sup>
Excavator	81
Crane	81
Grader	85 <sup>1</sup>
Loader	80
Dozer	82
Haul/Dump Truck	76
Compactor	83
Backhoe	88

<b>Major Equipment</b>	<b>Reference Sound Level at 50 feet (dBA)</b>
Welder	74
Generator	81
Scrapper	84
Roller/Paver	80
Flat Bed Truck	74
<b>Phase 2: Construction of Warehouse and Improvements in Warehouse Development Area</b>	
Dozer	82
Flat Bed Truck	74
Welder	74
Crane	81
Excavator	81
Crane	81
Haul/ Dump Truck	76
Generator	81
<b>Phase 3: Remediation of Western and Eastern Remediation Areas and Western Warehouse Area</b>	
Sweeper/Tractor	84 <sup>1</sup>
Excavator	81
Crane	81
Grader	85 <sup>1</sup>
Loader	80
Dozer	82
Haul/ Dump Truck	76
Compactor	83
Backhoe	88
Welder	74
Generator	81
Scrapper	84
Roller/Paver	80
Flat Bed Truck	74

Notes:

1. The actual measurement for tractor and grader were not sampled; therefore, the specification data was used.

Source: *FHWA Roadway Construction Noise Model Users Guide* (FHWA 2006b)

To calculate proposed project construction noise impacts to sensitive receptors in the recreational area west and south of the project area, major construction equipment types/numbers characteristic of each construction phase were input into the FHWA Roadway Construction Noise Model (FHWA 2006b). This model estimates construction noise levels at selected locations around the

construction site based on a database of measured equipment noise generation for each equipment type and the application of source-receptor distance acoustical propagation formulas. As a conservative approach, no shielding was assumed. As shown in Table 20, the proposed project's construction noise levels would be within the existing range for ambient noise levels in the area and below the City's maximum noise level for industrial uses. Table 21 shows that the model indicates the maximum sound level ( $L_{max}$ ) of combined noise equipment would be 55.5 dBA at 1,500 feet from the project site (the closest distance that recreational users of the Burns Cutoff could be to the project site), and the equivalent continuous sound level ( $L_{eq}$ ) would be 58.7 dBA, which is below both the existing range for ambient noise levels in the area (60 to 84 dBA) and the City's maximum noise level for industrial uses (80 dBA).

**Table 21  
Construction Daytime Noise Limits and Exceedances**

Equipment	Calculated (dBA)		Noise Limits (dBA)		Noise Limit Exceedance (dBA)	
	$L_{max}$	$L_{eq}$	$L_{max}$	$L_{eq}$	$L_{max}$	$L_{eq}$
Sweeper/ Tractor	55.5	58.7	80	60	None	None
Excavator	54.5	50.5	80	60	None	None
Crane	51.2	47.2	80	60	None	None
Grader	55.5	51.5	80	60	None	None
Loader	49.6	45.6	80	60	None	None
Dozer	52.1	48.1	80	60	None	None
Haul/Dump Truck	46.9	42.9	80	60	None	None
Compactor	53.7	46.7	80	60	None	None
Backhoe	48.0	44.0	80	60	None	None
Welder	44.5	40.5	80	60	None	None
Generator	51.1	48.1	80	60	None	None
Scraper	54.0	50.1	80	60	None	None
Roller/ Paver	50.5	43.5	80	60	None	None
Flat Bed Truck	44.7	40.7	80	60	None	None
<b>Total</b>	<b>55.5</b>	<b>58.7</b>	<b>80</b>	<b>60</b>	<b>None</b>	<b>None</b>

Notes:

The  $L_{max}$  noise limit is representative of the maximum volume permitted by the City for industrial uses.

Per previous noise analyses conducted, the existing day-night noise level (CNEL) near the project site on Rough and Ready Island ranges between 60 to 84 dBA (Port 2004). To analyze noise increases conservatively, a baseline of 60 dBA was used as the hourly  $L_{eq}$  limit. Evening and night noise has not been analyzed because construction would not occur during evening hours (7:00 p.m. to 10:00 p.m.) or nighttime hours (10:00 p.m. to 7:00 a.m.).

The City's noise regulations and standards also apply to operations of the proposed project. The 2040 General Plan further defines noise standards for industrial uses located adjacent to noise-sensitive land uses such as residential and zoning districts (City 2018a). In this case, the project site does not occur adjacent to noise-sensitive land uses. Operational sources include trucks, rail, and warehouse equipment, such as forklifts and power saws. As previously noted, operations would occur at least approximately 1,500 feet from the closest possible sensitive receptor (recreational users of the Burns Cutoff). While the proposed project would result in new operations at the project site, proposed operations would be consistent with the types of existing nearby activities (truck and rail trips). In addition, the project site is surrounded by fences, stockpiles, staged equipment, buildings, and structures that would help shield noise and would not likely be heard at the closest recreational and residential receptors.

**Impact Determination:** Because the construction-related noise levels would not exceed the City's 2040 General Plan thresholds, the proposed project would result in a less-than-significant impact related to construction noise. Due to the industrial nature of the area, it is expected that the proposed project-related operational noise levels would also result in a less-than-significant impact.

**Mitigation Measures:** None required.

**Residual Impact:** Less-than-significant impact.

*3.10.3.4.2 NV-2: Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Unless heavy construction activities are conducted extremely close (within a few feet) to neighboring structures, vibrations from construction activities rarely reach levels that damage structures. Typical vibration levels associated with construction equipment are provided in Table 22. Heavy equipment (e.g., a large bulldozer) generates vibrations levels of 0.089 inch per second PPV at a distance of 25 feet.

**Table 22**  
**Vibration Velocities for Construction Equipment**

<b>Equipment</b>	<b>PPV at 25 feet (inches/second)</b>
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer/Backhoe	0.003
Heavy equipment (e.g., a large bulldozer)	0.089

Note:  
Source: FHWA 2006a

The construction vibration damage criterion for buildings that are extremely susceptible to vibration damage is 0.12 inch per second PPV. This is the strictest PPV vibration threshold established by the Federal Transit Administration (FTA). The nearest building to the construction area would be approximately 50 feet to the northwest, and the nearest residential sensitive receptors are approximately 3,300 feet to the south across Burns Cutoff or 3,500 feet to the north across the San Joaquin River. The typical vibration level from heavy equipment at this distance would be less than 0.035 inch per second PPV, which would not exceed the FTA damage criteria.

Proposed project operations would create some groundborne vibrations due to truck and rail movements. However, the project area is industrial, and any vibrations produced as a result of proposed project operations would be low and infrequent.

**Impact Determination:** Because the construction-related vibration would not exceed FTA thresholds, the proposed project would result in a less-than-significant impact related to construction vibration. Due to the industrial nature of the area and the anticipated low and infrequent emissions of vibrations, it is expected that the proposed project-related operational vibration would result in a less-than-significant impact.

**Mitigation Measures:** None required.

**Residual Impact:** Less-than-significant impact.

*3.10.3.4.3 NV-3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

There are no public airports located within 2 miles of the project area. The nearest public airport is the Stockton Municipal Airport, located nearly 6.5 miles southeast from the project site. The project site is not located in the vicinity of a private airstrip.

**Impact Determination:** Because of the distance of the project site from the nearest public airport or private airstrip, the proposed project would not expose people residing or working in the project area to excessive noise levels. There would be no impact.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

## 3.11 Transportation

This section describes the existing transportation resources in the project area surrounding the project site and analyzes how the proposed project may affect transportation. This section also describes applicable rules and regulations pertaining to transportation resources. For the purposes of the transportation analysis, the study area is defined as the project site and the surrounding area including roadways and railways. During construction, trucks would be used to transport construction equipment to and haul construction waste from the sites. Construction workers and facility personnel would access the project site almost exclusively by personal vehicles. During operation, personal worker vehicles, trucks and railcars would enter and exit the facility. Public transportation, bicycle use, and pedestrian access to the facility is extremely limited and therefore not addressed.

### 3.11.1 Environmental Setting

This section discusses the transportation-related context in which the proposed project would be constructed and would operate, including the street and rail network that serves the area; existing transit service, bicycle, and pedestrian facilities near the project site; and a summary of current conditions.

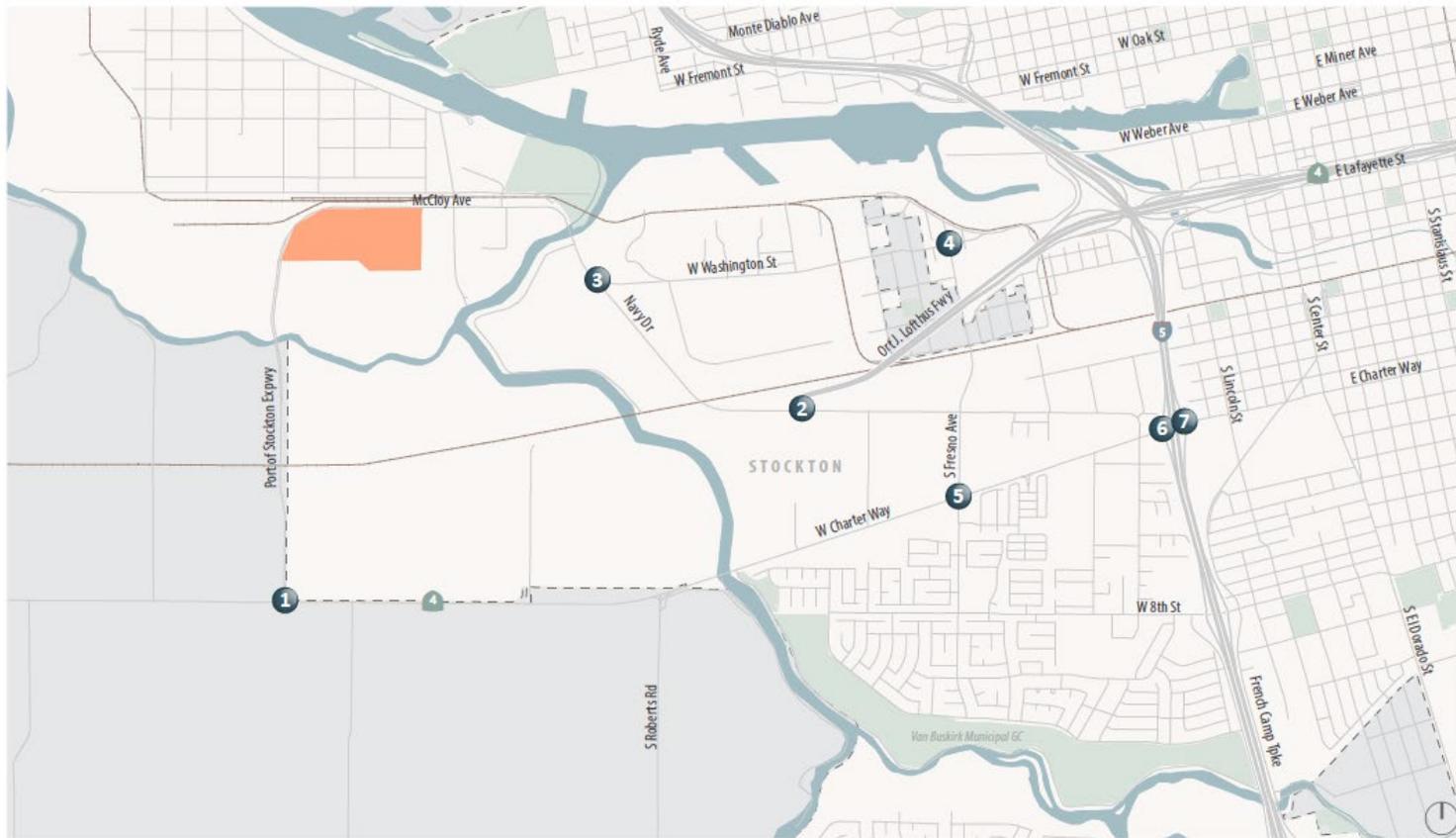
#### 3.11.1.1 Regional and Local Roadway Network

The Port is served by a number of regional freeways and highways, namely I-5, SR-4, and SR-99, with local roads serving the terminals and wharves. I-5, Fresno Avenue, and Center Street, serve the major north-south movements of traffic in the proposed project vicinity, and Washington Street, Navy Drive, and Charter Way serve the east-west flow of traffic in the area (Figure 4). Existing roadways are discussed as follows:

- **State Route 4 (SR-4)** is a major east-west roadway that traverses Northern California. SR-4 branches off from I-80 in the City of Hercules, and continues east, terminating at SR-89 near the border of Nevada. Within the study area SR-4 is discontinuous. The western segment (Charter Way) is a two-lane highway that continues east of I-5 as Doctor Martin Luther King Junior Boulevard. The eastern segment is a six-lane freeway that begins north of Navy Drive and continues east to SR-99. Caltrans opened the Crosstown Freeway Extension project in 2016, which extended the Crosstown Freeway west from Fresno Avenue to Navy Drive. The extension is elevated and crosses over Fresno Avenue, creating a grade separation that now prohibits highway traffic from entering the Boggs Tract neighborhood at Fresno Avenue.
- **Interstate 5 (I-5)** is a major north-south freeway that traverses through the states of California, Oregon, and Washington. Within the study area, I-5 is a six- to eight-lane freeway. North of Charter Way, I-5 has three general-purpose lanes and one high occupancy (HOV)

lane in each direction. South of Charter Way I-5 has three general-purpose lanes in each direction.

- **McCloy Avenue** is a two-lane east-west collector located in the Port of Stockton. McCloy Avenue begins at Humphreys Street and continues east as Navy Drive in the City of Stockton. There are no sidewalks or bicycle facilities on McCloy Avenue.
- **Port of Stockton Expressway** is a two-lane north-south arterial located between McCloy Avenue and SR-4/Charter Way in The Port of Stockton. There are no sidewalks or bicycle facilities on Port of Stockton Expressway.
- **Navy Drive** is an east-west arterial that extends from McCloy Avenue and continues east before terminating at Charter Way. Navy Drive is four lanes between McCloy Avenue and Tille Lewis Drive and two lanes between Tille Lewis Drive and Charter Way. Navy Drive is classified as a truck route by the City of Stockton. There are no sidewalks or bicycle facilities on Navy Drive.
- **Fresno Avenue** is a two-lane north-south collector located between Harbor Street in the north to Houston Avenue in the south. Fresno Avenue is classified as a truck route north of SR-4/Charter Way. Between Hazelton Avenue and Charter Way, Fresno Avenue is surrounded by mainly industrial land uses. There are very few sidewalks and no bicycle facilities on Fresno Avenue north of Charter Way.
- **Washington Street** is a two-lane east-west arterial that is located between Navy Drive and Weber Avenue. Washington Street is classified as a truck route and used to serve as a primary truck route before the SR-4/Navy Drive connector was constructed. There are very few sidewalks and no bicycle facilities on Washington Street.



Project Site
 # Study Intersection



OC21-0807\_Figures

Figure 4

Project Site Vicinity and Study Intersection Locations

Source: Fehr & Peers



**Figure 4**  
**Local and Regional Roadways**

Draft Environmental Impact Report  
TC NO. CAL. Development Warehousing and Distribution Facility Project

### 3.11.1.2 Rail Network

California's freight railroad system consists of Class I railroads (BNSF Railway [BNSF] and UP), which transport freight to and from the state over state lines and Class III railroads, referred to as shortline railroads, which provide local rail movements. Both UP and BNSF lines serve the Port. In Northern California, the Martinez Subdivision, Feather River Canyon, and Donner Pass routes serve the ports of Oakland and Stockton; these routes are owned and dispatched by UP but serve BNSF through trackage right agreements. BNSF operates the Stockton Intermodal Facility on the southeast edge of the City and UP operates a major intermodal facility and other terminal operations in Lathrop, California. Several shortline railroads also operate in Stockton (Figure 4). CCT, jointly owned by BNSF and UP, operates 52 miles of freight service between Stockton and Lodi and is the shortline operator for the Port. CCT connections are made with BNSF, UP, and the Stockton Terminal and Eastern Railroads, which run from Stockton to Linden (City 2018a). The Port provides its own internal railway system. CCT provides all switching and local movements within the Port.

### 3.11.1.3 Public Transit

Transit in the study area is provided by San Joaquin Regional Transit District (RTD), which is the regional transit provider for San Joaquin County and the Stockton Metropolitan Area. Access to the project site is very limited via transit, with the closest transit stops being located approximately 2 miles away. The closest transit routes serving the Boggs Tract community are as follows:

- **Route 515** operates weekdays between 5:30 a.m. and 7:00 p.m. and provides service between Boggs Tract and Downtown Stockton. The route operates with headways of approximately 60 minutes.
- **Route 715** operates weekends between 9:00 a.m. and 6:00 p.m. and provides service between Boggs Tract and Downtown Stockton. The route operates with headways of approximately 60 minutes.

### 3.11.1.4 Bike and Pedestrian Facilities

Bike and pedestrian facilities are extremely limited within the Port. There are no bike lanes, and most roads are private and do not include sidewalks.

## 3.11.2 Applicable Regulations

### 3.11.2.1 State

#### 3.11.2.1.1 Caltrans

Traffic analyses in the state of California are guided by policies and standards set at the state level by Caltrans and local jurisdictions. Caltrans policies are applicable to the proposed project and are summarized in Caltrans's *Guide for the Preparation of Traffic Impact Studies*, which provides a

summary of goals and policies (Caltrans 2002). Per the Caltrans guidebook, the appropriate level of traffic analysis is determined by the nature of a project, highway conditions, and forecasted traffic. If a project meets the following criteria, this provides a starting point for determining whether a TIS is needed:

- The project would generate over 100 peak-hour trips assigned to a state highway facility.
- The project would generate 50 to 100 peak-hour trips assigned to a state highway facility and affected state highway facilities are experiencing noticeable delay, approaching unstable traffic flow conditions (Level of Service [LOS] C or D).
- The project would generate one to 49 peak-hour trips assigned to a state highway facility, and: 1) affected state highway facilities are experiencing significant delay with unstable or forced traffic flow conditions (LOS E or F); 2) the potential risk for a traffic incident is significantly increased (e.g., congestion related collisions, non-standard sight distance considerations, increase in traffic conflict points); or 3) the project would cause changes in local circulation networks that impact a state highway facility (e.g., direct access to state highway facility, a non-standard highway geometric design).

#### 3.11.2.1.2 *Senate Bill 743*

SB 743, signed by Governor Brown in 2013, is intended to better align congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of GHG emissions. SB 743 has set the stage for moving away from LOS, which measures delay to motorists, to VMT as the metric to evaluate transportation network performance and land use and transportation planning decisions through CEQA. Specifically, SB 743 required OPR to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts.

In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package, including the CEQA Guidelines Section implementing SB 743. Under the updated CEQA Guidelines, the CEQA analysis must consider the amount and distance of automobile travel attributable to a project. OPR issued a *Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR Technical Advisory; OPR 2018b)*, which provides general guidance on VMT analyses in the absence of regional guidance and defines automobiles as on-road passenger vehicles, specifically cars and light trucks. Other relevant considerations may include the effects of the project on transit and non-motorized travel. SB 743 also amended congestion management law to allow cities and counties to opt out of LOS standards within certain infill areas. Transportation impacts related to air quality, noise, and safety must still be analyzed under CEQA where appropriate (PRC 21099[b][3]). Under PRC 21099, automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment (*Citizens for Positive Growth & Preservation v. City of Sacramento*).

### 3.11.2.1.3 *California Public Utilities Commission*

The California Public Utilities Commission has legal regulatory authority over rail safety within California, including operations and grade crossings throughout the state. However, rail operations under the proposed project not subject to approval or modification by the commission because no grade crossings would be added or modified.

### 3.11.2.2 **Regional and Local**

#### 3.11.2.2.1 *San Joaquin Council of Governments*

SJCOG has developed a Regional Transportation Plan (RTP), which guides the region's transportation development over a 20-year period and covers all modes of transportation. The RTP is updated every 3 years to reflect changes in available funding, economic activity, and population, and to incorporate findings from corridor studies and major infrastructure investments. The projects included in the RTP are also assessed as to their effect on air quality because the RTP is used in the SIP to ensure states are meeting federal conformity standards. If a project is included in the RTP, its effect on regional conformity goals has been accounted for. The current 2018 RTP was adopted by the SJCOG Board in June 2018. The City is responsible for coordination with regional transportation plans.

SJCOG has formed a SB 743 Technical Working Group to address shifting from LOS to VMT in local agency and SJCOG CEQA analysis, and adapting related SJCOG programs such as the RTP, if necessary. No draft guidance is available at this time.

#### 3.11.2.2.2 *City of Stockton*

The City's 2040 General Plan (City 2018a) guides the maintenance, design, and operation of transportation, including streets and highways, within the project area. The following goals and policies applicable to the Port and proposed project are provided for transportation:

- **Policy TR-1.1:** Ensure that roadways safely and efficiently accommodate all modes and users, including private, commercial, and transit vehicles, as well as bicycles and pedestrians and vehicles for disabled travelers.
  - **Action TR-1.1A:** Direct truck traffic to designated truck routes that facilitate efficient goods movement and minimize risk to areas with concentrations of sensitive receptors, such as schools, for example by disallowing any new truck routes to pass directly on streets where schools are located, and vulnerable road users, like pedestrians and bicyclists.
  - **Action TR-1.1B:** Maintain and periodically update a schedule for synchronizing traffic signals along arterial streets and freeway interchanges to facilitate the safe and efficient movement of people and goods and to provide signal priority for transit vehicles at intersections.

- **Action TR-1.1C:** Require roadways in new development areas to be designed with multiple points of access and to address barriers, including waterways and railroads, in order to maximize connectivity for all modes of transportation.
- **Action TR-1.1D:** Update existing Precise Road Plans to reflect the 2040 General Plan, including changes in land use and LOS requirements, and a shift in priority from vehicular travel to travel by all modes through complete streets.
- **Policy TR-1.2:** Enhance the use and convenience of rail service for both passenger and freight movement.
  - **Action TR-1.2C:** Provide grade separations at railroad crossings on arterial streets where feasible to ensure public safety and minimize traffic delay.
- **Policy TR-1.3:** Facilitate expanded port and airport operations, service, and development as travel and goods movement assets to the community and sources of employment growth.

As noted above, SB 743 requires moving from LOS to VMT as the metric to evaluate transportation network performance and land use and transportation planning decisions, with investments oriented toward reducing VMT. The 2040 General Plan (City 2018a) includes the following policies related to integrating SB 743 into future planning:

- **Policy TR-4.1:** Utilize LOS information to aid understanding of potential major increases to vehicle delay at key signalized intersections.
  - **Action TR-4.1A:** Strive for LOS D or better for both daily roadway segment and peak-hour intersection operations, except when doing so would conflict with other land use, environmental, or economic development priorities, and with the following additional exceptions:
    - In the Greater Downtown, strive for LOS E or better, but LOS F may be acceptable after consideration of physical or environmental constraints and other City goals and policies.
    - Roadway segments determined to be operating at deficient LOS by SJCOG in the Regional Congestion Management Program (RCMP)
    - Accept worse than adopted-standard LOS at intersections where widening the intersection would reduce bicycle and pedestrian safety and/or increase pedestrian crossing times such that they would create longer traffic delays due to signal timing.
  - **Action TR-4.1B:** Amend the City’s Transportation Impact Analysis Guidelines to reflect the updated LOS goals under Action TR-4.1.A and to refine the threshold at which a project needs to evaluate LOS impacts.
- **Policy TR-4.2:** Replace LOS with 1) VMT per capita; and 2) impacts to non-automobile travel modes, as the metrics to analyze impacts related to land use proposals under CEQA, in accordance with SB 743.

- **Action TR-4.2A:** To evaluate the effects of new development and determine mitigation measures and impact fees, require projects to evaluate per capita VMT and impacts to transit, bicycle, and pedestrian modes.
- **Action TR-4.2B:** Amend the City’s Transportation Impact Analysis Guidelines to include alternative travel metrics and screening criteria.
- **Policy TR-4.3:** Use the threshold recommended by OPR for determining whether VMT impacts associated with land uses are considered significant under state environmental analysis requirements.
  - **Action TR-4.3A:** Amend the City’s Transportation Impact Analysis Guidelines to 1) establish a threshold of 15% below baseline VMT per capita to determine a significant transportation impact under CEQA; and 2) identify screening criteria that will streamline certain types of development and/or development in certain areas by not requiring a VMT analysis.

Consistent with Policy TR-4.3, the City is updating its Transportation Impact Analysis Guidelines (expected to be finalized by the end of 2021) based on guidance from the OPR, as documented in the OPR Technical Advisory (December 2018). The Draft Transportation Impact Analysis Guidelines established the following VMT thresholds for the most common land uses:

- **Residential:** 15% below the Citywide average for home-based VMT per resident
- **Office:** 15% below the Citywide average for home-based work VMT per employee
- **Retail and Other Land Uses:** To be established on a case-by-case basis, reflecting the City’s commitment to achieving VMT reductions while also being sensitive to the characteristics of the project being evaluated. For a retail project, the threshold is no net increase in total VMT.

### 3.11.3 *Environmental Impacts and Mitigation Measures*

#### 3.11.3.1 **Baseline**

At the time of publication of the NOP for the proposed project, the site consisted of largely vacant disturbed land with five operational warehouses in the northwest corner and no transportation-related activities at the project site. The area surrounding the project site is characterized by the presence of large warehouse buildings, maritime terminals, railroad facilities, large storage buildings, and stockpiles of various commodities on the Port’s West Complex. Vehicular access to the project site is provided by two driveways along Port of Stockton Expressway and McCloy Avenue. A rail spur extends northeast to southwest across the area’s northern portion, which connects to the Port’s internal rail network. There are no existing bicycle lanes or public transit stops within the immediate project area.

### 3.11.3.2 Thresholds

For purposes of this DEIR, the following thresholds, which are based on Appendix G of the CEQA Guidelines (Environmental Checklist), were used to determine whether the proposed project would result in impacts to transportation resources. The proposed project would have an impact if:

- **TRA-1:** The project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
- **TRA-2:** The project would conflict or be inconsistent with CEQA Guidelines Section 15064.3(b).
- **TRA-3:** The project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- **TRA-4:** The project would result in inadequate emergency access.

### 3.11.3.3 Methodology for Determining Impacts

As of July 1, 2020, the provisions of SB 743 Section 15064.3 became effective statewide. This legislation changed the CEQA requirements for assessing transportation impacts whereby delay and congestion is no longer considered an environmental impact. The new metric, VMT, correlates directly with air quality and climate change impacts. VMT impacts require mitigation measures that reduce miles traveled per employee or resident populations. For this reason, OPR guidance focuses on automobile traffic and does not mention freight (commercial trucks). CEQA Section 15064.3 defines VMT as the amount and distance of automobile travel attributable to a project. The OPR Technical Advisory defines automobile as on-road passenger vehicles, specifically cars and light trucks. The OPR Technical Advisory does not provide specific guidance for industrial projects but focuses on VMT generated by project employees for commercial land uses. Accordingly, proposed project-generated truck trips do not need to be evaluated for transportation impacts. However, commercial truck trips and associated VMT are disclosed in the transportation section of this report to provide consistency with VMT used for analyzing other resource areas, notably air quality. Regarding employee trips, per the OPR Technical Advisory, "projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact."

The transportation analysis follows the City's Draft Transportation Impact Analysis Guidelines dated September 2021, which are expected to be finalized by the end of the year. The City's VMT analysis requirements in the Draft Transportation Impact Analysis Guidelines follow OPR guidance, including application of the following VMT thresholds for the most common land uses:

- **Residential:** 15% below the Citywide average for home-based VMT per resident
- **Office:** 15% below the Citywide average for home-based work VMT per employee

- **Retail and Other Land Uses:** To be established on a case-by-case basis, reflecting the City's commitment to achieving VMT reductions while also being sensitive to the characteristics of the project being evaluated. For a retail project, the threshold is no net increase in total VMT.

Consistent with OPR Technical Advisory, the City's Draft Transportation Impact Analysis Guidelines screen out projects that generate fewer than 110 trips per day and do not require analysis of VMT associated with project-generated commercial truck activity.

Although automobile delay is no longer considered an environmental impact in CEQA Section 15064.3 or a finding of significance in Appendix G of the 2019 CEQA guidance, vehicle levels and queuing impacts are still relevant to CEQA impact analyses where a project has the potential to cause safety hazards. Caltrans significance thresholds associated with traffic safety are discussed in Section 3.11.2.1.1. In addition, traffic delay is still important to the City, so the Draft Transportation Impact Analysis Guidelines retain intersection analysis requirements for projects that generate more than 2,000 daily trips, and this information may also be required for projects that generate 110 to 2,000 daily trips based on a set of variables contained in the City's Draft Transportation Impact Analysis Guidelines.

The study area for this assessment includes the area immediately adjacent to the project site, along with roadways that provide primary access to the regional transportation network. The following seven signalized intersections were selected for evaluation in consultation with Port, City, and San Joaquin County staff:

1. State Route 4 (SR-4)/Port of Stockton Expressway
2. Navy Drive/Crosstown SR-4 (Ort J. Loftus Freeway)
3. Washington Street/Navy Drive
4. Washington Street/Fresno Avenue
5. SR-4 (Charter Way)/Fresno Avenue
6. SR-4 (Charter Way)/Interstate 5 (I-5) southbound ramps
7. SR-4 (Charter Way)/I-5 northbound (NB) ramps

#### **3.11.3.4 Project Assumptions**

Vehicular access to the project site is provided by two driveways along Port of Stockton Expressway and McCloy Avenue. Passenger car and truck conflicts are limited since employees must utilize the northern driveway located on McCloy Avenue and trucks must utilize the southern driveway located on Port of Stockton Expressway.

Truck trips would be a mixture of local and regional travel deliveries. The average truck trip was assumed to be 22 miles. The warehouse would operate 365 days a year from 6:30 a.m. to 10:30 p.m. between Monday and Friday with inbound-only operations occurring on Saturday (6:30 a.m. to

2:30 p.m.) and outbound-only operations occurring on Sunday (2:00 p.m. to 10:30 p.m.). The facility would require 100 daily employees working two shifts with a 30-minute overlap (6:30 a.m. to 2:30 p.m. and 2:00 p.m. to 10:30 p.m.).

Rail deliveries would be made by manifest cars. The Roseville Yard would be the collection and staging point for manifest trains to and from the Port.

### **3.11.3.5 Impact Analysis**

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

No transit services are provided to the Port or to the project site. The nearest transit service is located approximately 2 miles from the project site. There are very few pedestrian and bicycle facilities within the Port. The project site does not propose any pedestrian or bicycle facilities on McCloy Avenue or the Port of Stockton Expressway. On-site pedestrian circulation is facilitated by ADA-accessible sidewalks between the parking lot and main office entrance. Therefore, there is no conflict with any roadway, bicycle, and pedestrian plans.

As discussed above, while the automobile delay is no longer considered an environmental impact as per the 2019 CEQA guidance, vehicle levels and queuing impacts are still relevant to CEQA impact analyses where a project has the potential to cause safety hazards or localized traffic delays requiring new signaling or infrastructure upgrades. The City's Draft Transportation Analysis Guidelines retain intersection analysis requirements for projects that generate more than 2,000 daily trips and may also require this information for projects that generate 110 to 2,000 daily trips based on a set of variables contained in the City's Draft Transportation Impact Analysis Guidelines. Specific to the proposed project, the City's TIA Guidelines require the preparation of a transportation impact analysis (TIA) for any project estimated to generate more than 100 new morning or afternoon peak-hour trips. Peak morning periods in the City are 7:00 a.m. to 9:00 a.m. and the peak afternoon periods are 4:00 p.m. to 6:00 p.m. Consistent with the City's TIA guidance, trip generation rates were determined to estimate the amount of vehicular traffic a project will add to the surrounding roadway system during construction and operations. As noted in Section 3.11.2.1, Caltrans also provides guidance for determining whether a project requires a TIS.

**Construction.** Except for the initial movement of construction equipment to the site at the start of construction and eventual movement from the site at the end of construction, construction of the proposed project would not affect roads or other transportation corridors. There would be approximately 1 to 10 truck trips per day during most construction periods to haul away debris and make internal Port moves to transport clean fill to the site... In addition, there will be three construction events that will require higher truck demands: asphalt paving, base rock delivery, and concrete pour day. Each of these events is expected to be completed within 1 day and would require up to 10 trucks per hour or a total of 100 trucks per day. Assuming peak day demands, there would be at maximum 20 trucks (or 40 trips) during peak hours, defined as the peak hour of the 2-hour morning peak period (7:00 a.m. and 9:00 a.m.) and evening peak period (4:00 p.m. to 6:00 p.m.). Therefore, construction-related traffic would remain under the threshold of 100 trips new trips during peak hours, and a TIA would not be required.

**Operations.**

**Trip Generation.** Estimates of new annual, daily, and peak-hour proposed project vehicle trip generation were developed using a standard net vehicle trip generation table based on the *Trip Generation Manual, 10th Edition + Supplemental* (ITE 2021). The table considers the movement of traffic associated with the proposed project at the maximum year and background traffic data. Estimates of weekday morning and evening peak-hour trip generation were developed to coincide with the time periods when adjacent street traffic demands are greatest and when the proposed project generates the most traffic. Estimates of daily trip generation are also provided.

As discussed in Section 2.7, the proposed project expects to operate with total of 100 daily employees split evenly over two shifts, and 312 daily truck calls. Assuming each employee makes one trip in and one trip out, as well as a round trip for lunch, there would be 400 daily vehicle trips and 624 truck trips, for a total of 1,024 daily trips as shown in Table 23.

**Table 23  
Trip Generation Based on Proposed Project Design**

Trip Type	Daily	Morning Peak Hour			Afternoon Peak Hour		
		In	Out	Total	In	Out	Total
Automobiles	400	99	24	123	24	91	115
Trucks	624	10	9	19	15	14	29
<b>Total Net-New Trips</b>	1,024	109	33	142	39	105	144

Notes:

- Daily automobile trips estimated based on information provided by the Project applicant (100 employees daily).  
AM peak-hour automobile trips:  $AUTO_{AM} = TOTAL_{AM} - TRUCK_{AM}$ .  
PM peak-hour automobile trips:  $AUTO_{PM} = TOTAL_{PM} - TRUCK_{PM}$ .
- Daily truck trips estimated based on information provided by the Project applicant. AM and PM peak-hour trips estimated using truck trip generation rates for land use 150, Warehousing (ITE). Includes outdoor storage.

AM peak-hour truck trips (TRUCK<sub>AM</sub>): TRUCK<sub>AM</sub> = 0.02 (X), X in units of 1,000 sq. ft., 52% Inbound, 48% Outbound

PM peak-hour truck trips (TRUCK<sub>PM</sub>): TRUCK<sub>PM</sub> = 0.03 (X), X in units of 1,000 sq. ft., 52% Inbound, 48% Outbound

3. Daily combined automobile and truck trips: TOTAL<sub>DAILY</sub> = AUTO<sub>DAILY</sub> + TRUCK<sub>DAILY</sub>

AM and PM peak-hour combined automobile and truck trips estimated using trip generation rates for land use 150, Warehousing. Includes outdoor storage.

AM peak-hour trips (T<sub>AM</sub>): T<sub>AM</sub> = 0.12 (X) + 25.32, X in units of 1,000 square feet (sq. ft.), 77% Inbound, 23% Outbound

PM peak-hour trips (T<sub>PM</sub>): T<sub>PM</sub> = 0.12 (X) + 27.82, X in units of 1,000 sq. ft., 27% Inbound, 73% Outbound

Sources:

ITE 2021

Appendix F of this DEIR

Trucks were not converted to passenger car equivalents (i.e., 1 truck equal to 2 passenger cars) for the traffic operations analysis because the existing truck percentages observed on the roadway is similar to that of the proposed project. The existing truck percentage at the study intersections range from 8% to 43% during the peak hours, with the highest truck percentages occurring adjacent or within the Port.

As shown, daily trips could exceed the 100 peak new trips threshold triggering the need for a TIA to provide information to decision-makers and the public, to assist Port staff in understanding the proposed project's transportation impacts, and to evaluate the proposed project's consistency with the City General Plan LOS policy. The full TIA is provided in Appendix F, and a summary of the findings is presented in the following subsections.

**Intersection Analysis.** Vehicular access to the project site is provided by two driveways along the Port of Stockton Expressway/McCloy Avenue. Passenger car and truck conflicts are limited since employees must utilize the northern driveway located on McCloy Avenue, and trucks must utilize the southern driveway located on Port of Stockton Expressway.

Driveway operations and queueing were evaluated for the proposed project with the assumption that the intersection is side-street stop-controlled. Intersection volumes were balanced to the adjacent study intersections. Peak-hour signal warrants would not be met at either driveway as a result of proposed project operations. Intersection LOS calculation worksheets and peak-hour signal warrant worksheets are provided in Appendix F. According to the City's TIA Guidelines, a deficiency is identified at a signalized intersection:

- If the addition of project traffic causes a signalized intersection to perform at an unacceptable LOS E or F condition during a peak hour, or
- If the addition of project traffic exacerbates an existing LOS E or F condition by increasing the delay by 5 or more seconds.

When factoring in additional traffic from surrounding areas in the future and proposed project operations, all of the study intersections would operate at LOS D or better except for the intersection of I-5 NB Ramps and West Charter Way (Intersection 7). This intersection is forecasted to operate at

LOS E without the operation of the proposed project during afternoon peak hours. With the addition of proposed project trips, the intersection of I-5 NB Ramps and West Charter Way (Intersection 7) would remain at LOS E during the afternoon peak hour and experience a 12-second increase in delay; all of the other study intersections would continue to operate at LOS D or better during the morning and afternoon peak periods.

Movements at one intersection would exceed the available storage capacity with operation of the proposed project. Specifically, at Intersection 7 (I-5 NB Ramps and West Charter Way), the eastbound left turn movement during the morning and afternoon peak hours would exceed the available storage capacity.

**Parking.** The proposed project would provide a total of 610 parking spaces: 5 motorcycle parking spaces, 300 passenger vehicle parking spaces (6 of which are ADA-accessible), and 305 truck spaces/docks.

The City of Stockton Municipal Code 16.24.150 requires uses of land allowed within the Port to provide a minimum of three parking spaces for every four employees and a maximum of one off-street parking space for each employee computed on the basis of the maximum number of employees which can be employed on the largest shift at any one time. The proposed project anticipates having 100 employees on a typical day, split into two shifts that overlap (i.e., employees from one shift would stay until the employees from another arrive); therefore, the maximum number of employees on site at one time during a typical day would be approximately 100 employees. Based on the Municipal Code, the proposed project is required to provide a minimum of 75 parking spaces. The proposed parking supply exceeds the minimum parking supply requirements.

During peak times of the year (i.e., holiday season when Christmas trees are in high demand, or during times when lumber is in high demand) the proposed parking supply is designed to accommodate the maximum number of employees on site at one time and provide extra storage for products therefore the proposed parking supply would satisfy the maximum parking supply requirements.

The state of California has mandated that all new passenger car and truck sales in the state be all-electric by the year 2035. Although not required by Stockton Municipal Code, the California Green Building Standards Code (2016) recommends that 6% of passenger vehicle parking spaces are equipped with electric vehicle charging infrastructure for developments of this size. To address this recommendation, the final site plan should identify which parking spaces could be easily upgraded to accommodate electric vehicle charging infrastructure.

**Impact Determination:** With a maximum of 40 trips per peak hours, construction-related traffic would remain under the threshold of 100 trips during peak hours, defined as the peak morning period of 7:00 a.m. to 9:00 a.m. and the peak afternoon period of 4:00 p.m. to 6:00 p.m.

As shown in Table 23, the proposed project would result in 1,024 daily calls (heavy-duty trucks and passenger vehicles) at maximum build-out. During peak morning hours, there would be 142 new passenger car equivalent trips. During afternoon peak hours, there would be 144 new passenger car equivalent trips. Therefore, proposed project operations are expected to generate more than the 100 net-new vehicle trips in either the morning or evening peak hours, even considering the passenger car equivalents for truck trips during operations, so a TIA was completed for the proposed project.

Based on the results of the TIA, the addition of proposed project traffic causes the eastbound left turn movement at the intersection of I-5 NB Ramps and West Charter Way (Intersection 7) to exceed the available storage (350 feet) during the morning (95th percentile queue length increases from 375 to 425 feet) and afternoon (95th percentile queue length increases from 675 to 725 feet) peak hours. Since the proposed project causes the 95th percentile queue length to exceed the available storage and increases the 95th percentile queue length by more than 25 feet during the morning and afternoon peak hours, impacts are considered significant.

As discussed previously, the proposed parking supply would satisfy the maximum parking supply requirements and impacts would be considered less than significant; however, the site plan currently does not supply the required number of accessible spots to comply with ADA requirements, which would constitute a significant impact.

**Mitigation Measures:** The following mitigation measures would be implemented to reduce potential transportation impacts:

- **MM-TRA-1: Signal Timing.** The Port and TC NO. CAL. Development will work with the City and Caltrans to revise the signal timing at the I-5 NB Ramps and Charter Way intersection to accommodate proposed project traffic.
- **MM-TRA-2: Accessible Parking.** In order to comply with ADA requirements, the TC NO. CAL. Development will install at least eight accessible parking spaces, two of which must be van-accessible.

**Residual Impact:** Implementation MM-TR-1 would improve the LOS at the intersection of I-5 NB Ramps and West Charter Way (Intersection 7) from E to B and would reduce the queue length to better than future without project conditions. Implementation MM-TR-2 would ensure the required number of ADA-accessible parking spaces. Residual impacts would be less than significant.

### 3.11.3.5.2 TRA-2: Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3 (b)?

CEQA Guidelines Section 15064.3(b) describes specific considerations for evaluating a project's transportation impacts and notes that VMT is the most appropriate measure of transportation impacts consistent with SB 743. As discussed in Section 3.11.2.1.2, SB 743 creates a process to change the way that transportation impacts are analyzed under CEQA and requires OPR to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. CEQA Guidelines Section 15064.3 defines VMT as the amount and distance of automobile travel, specifically for cars and light trucks, attributable to a project. (OPR Technical Advisory, p. 4. [OPR 2018b])

As discussed in Section 3.11.3.3, the City has developed VMT guidance. Consistent with this guidance, VMT impacts for the proposed project would be less than significant if any one of the identified screening criteria outlined below are met:

1. Small Projects: The proposed project generates fewer than 110 vehicle trips per day.
2. Low-VMT Areas: The proposed project meets map-based screening criteria by being located in an area that exhibits below threshold VMT, or 15% or more below the regional average.
3. Major Transit Stop: The proposed project is located in a Transit Priority Area or within 0.5 mile of a Major Transit Stop<sup>3</sup> or high-quality transit corridor<sup>4</sup> and satisfies all of the following:
  - a. Has a Floor Area Ratio of greater than 0.75
  - b. Does not include more parking for use by residents, customers, or employees than other typical nearby uses, or more than required by the City
  - c. Is consistent with the applicable Sustainable Communities Strategy (as determined by the lead agency)
  - d. Does not replace affordable residential units with a smaller number of moderate- or high-income residential units
4. Affordable Residential Development: The proposed project must be 100% affordable residential development in an infill location.

The proposed project does not meet any of the four criteria listed. As discussed in TRA-1, proposed project operations would generate approximately 1,124 vehicle trips per day and therefore exceeds the 110 trips a day threshold. Based on the screening map provided in the *City of Stockton Transportation Impact Analysis Guidelines*, the proposed project is located in an area that would

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<sup>3</sup> CEQA Guidelines Section 21064.3 defines a “major transit stop” as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during morning and afternoon peak commute times.

<sup>4</sup> CEQA Guidelines Section 21155(b) defines a “high quality transit corridor: means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

exhibit higher VMT than the Citywide average and does not meet the 15% below the regional average) necessary to satisfy Criterion 2. The nearest transit stop to the project site is approximately 2 miles away and therefore there is no major transit stop within 0.5 mile. Finally, the proposed project is an industrial development and would not provide any affordable residential housing. Therefore, a VMT analysis using the City's General Plan Model was completed to determine if there would be a significant VMT impact. The full VMT analysis is included in Appendix F.

Per the OPR recommendations and their interpretation of Public Resources Code, Section 15064.3, VMT analysis for CEQA transportation impact purposes can focus solely on automobile travel and can exclude truck trips. Consistent with City Guidance, automobile generated VMT was evaluated under baseline (existing) and proposed project 2040 conditions. The impact analysis includes two types of VMT:

- **Project-generated VMT** per capita. The project-generated VMT method relies on tracking trips to/from an individual project. In simple terms, it looks at the total number and distance each trip travels divided by the population that generated those trips (i.e., residents, employees, students, visitors, as appropriate).
- **Project effect on VMT** compares how a project changes total VMT on the network. This VMT applies what is known as the boundary method, which captures all VMT on a network within a defined boundary (i.e., Stockton/Model Area). This VMT captures a project's overall influence on the VMT generation of surrounding land uses.

Both VMT assessments are compared to a 15% below the Citywide average for home-based work VMT per employee. The VMT analysis was completed using the City's General Plan Model. As presented in Table 24, the proposed project-generated home-based-work VMT per employee (21.96%) is 18.1% higher than the Citywide average (18.59%) and does not meet the threshold of 15% below the Citywide average (15.80%). The second scenario presented is for the proposed project plus surrounding traffic volume. Its generated home-based-work VMT per employee (23.43%) is 18.4% higher than the Citywide average (19.79%) and it also does not meet the threshold of 15% below the Citywide average (16.82%).

As presented in Table 25, the VMT for proposed project and proposed project plus surrounding traffic volume scenario is higher than the same scenarios without operation of the proposed project.

**Table 24**  
**Proposed Project-Generated Vehicle Miles Traveled**

Scenario	Home-Based Work VMT Per Employee			15% Below City Average
	Citywide Average	15% Below Citywide Average	Project	
Proposed Project Only	18.59	15.80	21.96	No
Proposed Project + Surrounding Traffic	19.79	16.82	23.43	No

Note:  
Source: see Appendix F

**Table 25**  
**Proposed Project Effect on Vehicle Miles Traveled**

Scenario	Citywide VMT		
	No Project	Proposed Project	Differences
Proposed Project Only	4,919,484	4,922,460	+2,976
Including Surrounding Traffic	6,293,618	6,295,290	+1,672

Note:  
Source: see Appendix F

**Impact Determination:** The proposed project does not satisfy any of the screening criteria and was required to conduct a VMT analysis. Industrial projects in the City must adhere to the same VMT thresholds established for office land uses: 15% below the Citywide average for home-based work VMT per employee. The proposed project-generated home-based-work VMT per employee is 18.1% higher than the respective Citywide average. Factoring in surrounding traffic, the proposed project-generated home-based-work VMT per employee is 18.4% higher than the respective Citywide average. The proposed project would not meet the threshold of 15% below the Citywide average and impacts would be considered significant.

**Mitigation Measures:** The following mitigation measure would be implemented to reduce potential impacts:

- **MM-TRA-3: Implement a Transportation Demand Management (TDM) Plan.** TC NO. CAL. Development would implement a TDM Plan that includes the following components:
  - Identification of locations along the project frontage on the Port of Stockton Expressway/McCloy Avenue where bus stops could be constructed with a pedestrian connection from the bus stop to primary building entrances

- Coordination with the San Joaquin RTD to determine if transit services could be provided to the project site and if service could be coordinated to accommodate future shift changes
- Implementation of a commute trip reduction program that could include a carpooling/ride-matching program and/or preferential carpool parking

**Residual Impact:** The proposed project would require a 39.2% reduction in VMT to meet the threshold of 15% below the Citywide average. Although the implementation of a TDM Plan would reduce the proposed project's VMT, reduction to 15% below the Citywide average is ambitious and achieving this goal cannot be guaranteed. Therefore, impacts of the proposed project remain significant and unavoidable.

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

Vehicular access to the project site is provided by two driveways along the Port of Stockton Expressway/McCloy Avenue. Passenger car and truck conflicts are limited since employees must utilize the northern driveway located on McCloy Avenue and trucks must utilize the southern driveway located on Port of Stockton Expressway. These roadways provide access to the project site from the interstate highway system and are all designated to accommodate trucks carrying industrial products. Added truck traffic would be limited to the routes designed and designated to accommodate commercial trucks carrying heavy loads.

As discussed in TRA-1, an intersection analysis was completed to determine if the proposed project could result in potential impacts. The proposed project was found to cause the eastbound left turn movement at the intersection of I-5 NB Ramps and West Charter Way (Intersection 7) to exceed the available storage (350 feet) during the AM (95th percentile queue length increases from 375 to 425 feet) and PM (95th percentile queue length increases from 675 to 725 feet) peak hours, which could result in dangerous conditions at the intersection.

Rail would travel on the existing internal rail network which is designed for Port cargo and would not substantially increase any hazards due to a geometric design feature or result in any incompatible uses.

**Impact Determination:** The proposed project is consistent with overall uses at the Port. However, based on projected traffic levels, operations could increase queueing rates that exceed the capacity of an existing intersection constituting a potentially significant impact.

**Mitigation Measures:** The following mitigation measure would be implemented to reduce potential impacts:

- **MM-TRA-1: Signal Timing** (see TRA-1 for more information).

**Residual Impact:** Implementation MM-TRA-1 would reduce the queue length and impacts would be less than significant.

#### *3.11.3.5.4 TRA-4: Would the project result in inadequate emergency access?*

All vehicular access to and from the project site would be provided from the Port of Stockton Expressway and McCloy Avenue. While truck trips would increase as part of the proposed project, the trucks can be accommodated within the larger Port network which is designed for Port and industrial operations. The Port has developed an emergency response plan to address emergency needs Port-wide and maintains its own Police Department, which is responsible for providing security protection of Port tenants on a 24-hour basis. Additionally, the closest fire station to the project site is approximately 3.5 miles to the east of the site at 110 West Sonora Street. There are two additional fire stations located at 3499 Manthey Road and 1501 Picardy Drive, approximately 4 miles south and northeast of the project site, respectively.

**Impact Determination:** Because the proposed project is not expected to increase the need for emergency services or block any emergency access routes, the proposed project is expected to have no impact related to inadequate emergency access.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

## 3.12 Tribal Cultural Resources

This section details the existing tribal cultural resources within the study area and the relevant federal, state, and local regulations and policies. The information presented in this section is largely based on tribal consultation to date, as well as information from the cultural resources evaluation in Section 3.4.

Tribal cultural resources are defined in PRC 21074 as follows:

1. A site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC 5020.1(k); or
2. A resource determined by the lead agency to be significant pursuant, after considering the significance of the resource to a California Native American Tribe.

For the purposes of this analysis, the study area is defined as the 102-acre project site.

### 3.12.1 *Environmental Setting*

As noted in Section 3.4.1, the project area is in the traditional territory of the Yokuts people and may also have been used or settled by Plains Miwok and Wintun peoples. Two Native American Tribes have requested to be contacted regarding projects at the Port: the Buena Vista Rancheria of Me-Wuk Indians of California and the Wilton Rancheria Tribe. The Port routinely consults with three other Tribes under AB 52: the Northern Valley Yokuts Tribe, the Confederated Villages of Lisjan, and the Tule River Indian Tribe. Under AB 52, NAHC must also be consulted.

The Port sent letters to the five aforementioned Tribes and the NAHC on March 26, 2021. The NAHC responded on April 23, 2021, noting that a search of the Sacred Lands File was negative and suggesting that the Port consult with a sixth Tribe, the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area. The Port sent a letter to the Muwekma Ohlone on April 26, 2021.

The Port received responses from three Tribes requesting consultation on the proposed project: the Buena Vista Rancheria of Me-Wuk Indians of California, the Wilton Rancheria Tribe, and the Northern Valley Yokuts Tribe. The Port responded to each Tribe, acknowledging the requests and providing further information on the CEQA timeline. Consultation is ongoing.

## 3.12.2 *Applicable Regulations*

### 3.12.2.1 **State**

#### 3.12.2.1.1 *Assembly Bill 52*

AB 52, enacted in 2016, establishes a formal role for California Native American Tribes in the CEQA process and promotes the involvement of California Native American Tribes in the decision-making process when it comes to identifying and developing mitigation for impacts to resources of importance to their culture. AB 52 requires consideration of tribal cultural resources, which are defined as a property, landscape, or object which is of cultural value to a Tribe and is eligible for the CRHR or a local historic register (or is determined by the lead agency to be a tribal cultural resource). Under the updated guidelines, Tribes must be notified of a project when it is initiated, and can request consultation within 30 days, after which the lead agency must begin consultation within 30 days of the request.

## 3.12.3 *Environmental Impacts and Mitigation Measures*

### 3.12.3.1 **Baseline**

At the time of publication of the NOP for the proposed project, the site consisted of largely vacant disturbed land with five operational warehouses in the northwest corner. As described in Section 2.1, the Warehouse Development Area consists of ruderal vegetation, including non-native grasses, a small area of asphalt or concrete paving, and an access road. Three open stormwater drainage ditches are located within the Warehouse Development Area. Areas adjacent to the Warehouse Development Area have similar characteristics.

### 3.12.3.2 **Thresholds**

For purposes of this DEIR, the following thresholds, which are based on Appendix G of the CEQA Guidelines (Environmental Checklist), were used to determine whether the proposed project would result in impacts on tribal cultural resources. The proposed project would have an impact on tribal cultural resources, if:

- **TCR-1:** The project would cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is
  - Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC 5020.1(k), or
  - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth PRC 5024.1(c).

### 3.12.3.3 Methodology for Determining Impacts

The CEQA Guidelines define a substantial adverse change in the significance of a tribal cultural resource as a significant effect on the environment. A substantial adverse change to tribal cultural resources is defined to include physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource (its eligibility for the CRHR or local preservation registers) would be materially impaired (CEQA Guidelines Section 15064.5[b][1]).

### 3.12.3.4 Impact Analysis

#### 3.12.3.4.1 TCR-1: *The project would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074.*

There are no known sites, features, places, or cultural landscapes that are listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC 5020.1(k), or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC 5024.1(c) in the project area. Native American Tribes and NAHC have been consulted per AB 52, and no unknown tribal cultural resources have been identified. As described in Section 3.4.3, the proposed project would be built in fill, possibly extending into native sediments that have low potential for archaeological materials or human remains. While the potential is low, native sediments may contain previously unrecorded archaeological sites or human remains could be tribal cultural resources.

**Impact Determination:** Because the proposed project includes disturbance of soil through direct removal, if archaeological materials or remains are present in previously undisturbed native sediments, they could potentially be disturbed during construction. If archaeological materials or human remains are encountered during construction, impacts could be considered potentially significant.

#### **Mitigation Measures:**

- **MM-CHR-1: Stop Work in the Area If Prehistoric or Historical Archaeological Resources Are Encountered** (see CHR-1 in Section 3.4.3.4.2 for more information). A qualified archaeologist will provide training materials to the construction contractor in identification of cultural resources, and in the event that any artifact, or an unusual amount of bone, shell, or non-native stone, is encountered during construction, work would be immediately stopped and relocated to another area. The contractor would stop construction within 10 meters (30 feet) of the exposure of these finds until a qualified archaeologist can be retained by the Port to evaluate the find (see 36 CFR 800.11.1 and 14 CCR 15064.5[f]). Examples of such cultural materials might include concentrations of ground stone tools such as mortars, bowls, pestles,

and manos; chipped stone tools such as projectile points or choppers; flakes of stone not consistent with the immediate geology, such as obsidian or fused shale; a historic trash pit containing bottles and/or ceramics; or structural remains. Native American Tribes and the Office of Historic Preservation would be notified of the find. If the resources are found to be significant, they would be avoided or if avoidance is not possible, mitigated. Mitigation would be developed in coordination with Native American Tribes and could include development of a treatment plan to guide data recovery and interpretation of results for the public. This interpretation could include adding information on the resources to the Port's website, which will include a history portal site, developing informational brochures or signage on site or in the Port administrative building, and/or providing material to the Tribes.

**Residual Impact:** Less-than-significant impact.

## 3.13 Utilities

This section details the existing utilities within the study area and analyzes the proposed project's potential impacts on utilities and service systems. For the purposes of the utilities analysis, the study area is defined as all relevant utility or service systems (water supply, wastewater, stormwater, solid waste disposal, gas and electrical, and telecommunication utilities) that provide service to the project site.

### 3.13.1 Environmental Setting

#### 3.13.1.1.1 Stormwater

There are currently three open channelized stormwater drainage ditches located within the project site. The first bisects the center of the site from east to west. The second, connected to the central ditch, is located on the western edge of the Warehouse Development Area. The third ditch extends east to west on the southern edge of the site. These ditches are part of the Port's West Complex drainage system, which conveys stormwater to a single pump-controlled discharge point on the west side of the West Complex.

#### 3.13.1.1.2 Water Supply

Water service providers in the Stockton metropolitan area include the Stockton Municipal Utilities Department and the California Water Service (City 2018a). Approximately 22% of the City's water supply originates from groundwater wells, with the remaining water supply from treated surface water supplied by the Stockton East Water District (Cal Water 2016). The Delta Water Supply Project was completed in 2012 to provide the City with a reliable water supply to meet both current and future water needs (City 2021c). California Water Service provides domestic water in the area. Non-potable water obtained directly from the San Joaquin River is used for most non-domestic Port development needs.

#### 3.13.1.1.3 Wastewater Infrastructure

The Stockton Regional Wastewater Control Facility (located just off State Route 4 on both sides of the San Joaquin River) provides secondary and tertiary treatment of municipal wastewater throughout the City. The Stockton Regional Wastewater Control Facility is a tertiary treatment facility that handles 55 million gallons per day. The facility serves the City and outlying San Joaquin County areas and currently processes an average of 33 million gallons per day (City 2021c).

#### 3.13.1.1.4 Solid Waste

Solid waste within the City and Port is transported and disposed of primarily in the privately owned San Joaquin County-owned Foothill Sanitary Landfill and North County Landfill & Recycling Center. The City's *Envision Stockton 2040 General Plan Update and Utility Master Plan Supplements Draft*

*Environmental Impact Report* indicates that all the landfills have sufficient capacity to serve the region’s needs (City 2018b). The most recently reported remaining capacity and acceptable waste types for these facilities are listed in Table 26.

**Table 26**  
**Project Vicinity Landfills**

Landfill	Remaining Capacity	Waste Type
Foothill Sanitary Landfill	125,000,000 cubic yards (reported June 10, 2010)	Agricultural, construction/demolition, dead animals, industrial, mixed municipal, tires, wood waste
North County Landfill & Recycling Center	35,400,000 cubic yards (reported December 31, 2009)	Construction/demolition, industrial, mixed municipal, tires, other designated, agricultural, metals, wood waste

Note:

Source: CalRecycle 2021 database

### 3.13.1.1.5 Utilities

Utility extensions would be required for gas, electricity, water, wastewater, fire service (i.e., fire hydrants) and telecommunications. Estimated operation rates are anticipated to be as described in Table 5. Connections to existing utilities are available on the southwest corner of the property.

## 3.13.2 Applicable Regulations

### 3.13.2.1 Regional and Local

#### 3.13.2.1.1 City of Stockton

The City’s 2040 General Plan (City 2018a) is the primary document governing policy for provision of public services and utilities. The following 2040 General Plan goals and policies are relevant to the utilities and service systems analysis for the proposed project.

- **Policy LU-5.4:** Require water and energy conservation and efficiency in both new construction and retrofits.
  - **Action LU-5.4B:** Require all new development, including major rehabilitation, renovation, and redevelopment to incorporate feasible and appropriate energy conservation and green building practices, such as building orientation and shading, landscaping, and the use of active and passive solar heating and water systems.
- **Policy LU-6.1:** Carefully plan for future development and proactively mitigate potential impacts.
  - **Action LU-6.1E:** Do not approve new development unless there is infrastructure in place or planned and funded to support the growth.

- **Action LU-6.1G:** Maintain adequate staffing levels to support achieving the City’s service level goals for police and fire protection.
- **Policy LU-6.3:** Ensure that all neighborhoods have access to well-maintained public facilities and utilities that meet community service needs.
  - **Action LU-6.3A:** Require development to mitigate any impacts to existing sewer, water, stormwater, street, fire station, park or library infrastructure that would reduce service levels.
- **Policy SAF-3.2.2:** Protect the availability of clean potable water from groundwater sources
  - **Action SAF-3.2A:** Continue to cooperate with San Joaquin County, Stockton East Water District, and Cal Water to monitor groundwater withdrawals and ensure that they fall within the target yield for the drinking water aquifer.
- **Policy SAF-3.4:** Ensure adequate collection, treatment, and safe disposal of wastewater.
  - **Action SAF-3.4A:** Require all new urban development to be served by an adequate wastewater collection system to avoid possible contamination of groundwater from on-site wastewater disposal systems.
  - **Action SAF-3.4-C:** Continue to discharge treated effluent to the Delta and reuse that water through the City’s California Water Code Section 1485 water right.

Additionally, the City adopted the Water Master Plan Update (WMPU) in February 2021 in accordance with the City’s 2040 General Plan Update. The goal of the plan is to evaluate the existing water system infrastructure and address potential impacts of near-term and long-term planned growth (City 2021d). “The WMPU includes analysis of the City Water Utility’s existing system, projected water demand based on the 2040 General Plan, water supply, calibration of the City’s water distribution system’s hydraulic model, identification of infrastructure needs, and development of short-and-long-term Capital Improvement Program (CIP) with cost estimates for future improvements” (City 2021c).

### *3.13.3 Environmental Impacts and Mitigation Measures*

#### **3.13.3.1 Baseline**

At the time of publication of the NOP for the proposed project, the site consisted of largely vacant disturbed land with five operational warehouses in the northwest corner. No utilities are currently being used on the site.

### 3.13.3.2 Thresholds

For purposes of this DEIR, the following thresholds, which are based on Appendix G of the CEQA Guidelines (Environmental Checklist), were used to determine whether the proposed project would result in impacts on utilities. The proposed project would have an impact on utilities and service if:

- **UTI-1:** The project would require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- **UTI-2:** The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
- **UTI-3:** The project would result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's project demand in addition to the provider's existing commitments.
- **UTI-4:** The project would generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
- **UTI-5:** The project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

### 3.13.3.3 Methodology for Determining Impacts

Impacts to utilities were quantitatively and qualitatively evaluated based on the proposed project's projected utility usage, state and local standards, and capacity of local infrastructure.

### 3.13.3.4 Impact Analysis

#### *3.13.3.4.1 UTI-1: Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

The proposed project would require extension (expansion) of electricity, water, sanitary sewer, stormwater drainage, natural gas, and telecommunications facilities. The proposed project would require relocation of one existing fire service line, and one existing drainage ditch. Stormwater drains would be constructed to connect to the relocated drainage ditch and two detention basins proposed for the project. The detention ponds would be sized to restrict post-construction runoff to pre-construction runoff rates as required by the DSP (Port 2009)

Operational utility demand is detailed in Table 5. Operational utility demands would be comparable to similar warehouse structures and would be accommodated for via connections to the existing utilities at the southwest corner of the property. A restroom would be installed to accommodate

approximately 100 employees, and wastewater demand would be limited to plumbing fixture waste from employee use. Non-potable water demand would be limited to as-needed emergency fire controls. No industrial wastewater nor process-water would be generated.

**Impact Determination:** As shown in Table 5, the proposed project's demands for expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities would be modest. This modest increase would not require or result in the construction or expansion of existing water or wastewater treatment facilities. Impacts would be less than significant.

**Mitigation Measures:** None required.

**Residual Impact:** Less-than-significant impact.

*3.13.3.4.2 UTI-2: Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?*

The proposed project would connect to Port water supplies but would require limited operational potable supply for drinking and wash water. Non-potable water demand would be limited to as-needed emergency fire controls.

**Impact Determination:** This limited water use would be accommodated by existing water supply resources and would not require new or expanded supply. Therefore, the proposed project would have no impact pertaining to water supply.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

*3.13.3.4.3 UTI-3: Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's project demand in addition to the provider's existing commitments?*

The proposed project entails installation and use of a bathroom for approximately 100 employees, which will result in impact wastewater treatment providers similar to comparable warehouse facilities. No process or industrial wastewater would be generated. Facility runoff would be connected to the existing sanitary sewer system at the southwest corner of the property.

**Impact Determination:** The proposed project would contribute to additional runoff to this system but would be comparable to similar warehouse structures and would be accommodated for via connections to existing utilities. Therefore, the impact would be less than significant.

**Mitigation Measures:** None required.

**Residual Impact:** Less-than-significant impact.

*3.13.3.4.4 UTI-4: Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

Construction of the proposed project would generate little solid waste. Excavated soil will generally be consolidated on-site and placed as fill, primarily within the proposed building and outdoor storage area footprints. Limited amounts of contaminated soil excavated from the site may be transported off site to a permitted waste facility. Any soils transported off site would be placed in trucks and transferred to a permitted hazardous waste transfer facility capable of handling materials.

**Impact Determination:** The amount of solid waste generated by the operation of the proposed project would be negligible and limited to nonhazardous waste generated by personnel on site and through facility operation and maintenance. The intent is to place the soils on site and cover them with caps. If needed, the landfills in the area have adequate capacity to meet the region's need and are authorized to accept waste materials that may be generated during construction of the proposed project. Therefore, there would be no impact related to landfill capacities.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

*3.13.3.4.5 UTI-5: Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The proposed project would be constructed within the parameters of applicable federal, state, and local solid waste regulations. As described, area landfills are authorized to accept the types of waste potentially generated by proposed project construction and operation.

**Impact Determination:** The proposed project would comply with all statutes and regulations related to solid waste. There would be no impact.

**Mitigation Measures:** None required.

**Residual Impact:** No impact.

## 4 Cumulative Impacts

### 4.1 Requirements for Cumulative Impact Analysis

CEQA requires that EIRs analyze cumulative impacts. As defined in Section 15355 of the CEQA Guidelines, a cumulative impact consists of an impact that is created as a result of the combination of a project evaluated in an EIR together with other past, present, and reasonably foreseeable future projects causing related impacts in the vicinity of the proposed project. CEQA Guidelines Section 15130 requires that an EIR discuss cumulative impacts of a project when the project's incremental effect is "cumulatively considerable." The following definition of cumulatively considerable is provided in CEQA Guidelines Section 15065(a)(3):

"Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

According to CEQA Guidelines Section 15130(b):

[t]he discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. Cumulative impact assessments are not required for impacts that do not result in part from a project evaluated in an EIR. Therefore, the cumulative impact analysis in this section focuses on whether the impacts of the proposed project are cumulatively considerable within the context of impacts caused by other past, present, or future projects. The cumulative impact scenario considers other projects proposed within the area defined for each resource that have the potential to contribute to cumulatively considerable impacts.

According to CEQA Guidelines Section 15130(b):

Factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.

In preparing the cumulative impact analysis, related projects that have been or may be constructed in the geographic scope of the proposed project were reviewed and evaluated. Using guidance provided in CEQA Guidelines Section 15130, past projects related to the development of the Port and present and future projects that have similar potential for impacts and are located in the same geographical area as the proposed project were identified. Section 4.1.1 includes a discussion of past projects that have shaped the Port, and Table 27 offers a list of present and probable future projects considered for their related impacts. In consideration of these projects, cumulative impact analyses for each environmental issue potentially affected by the proposed project are presented herein. For several resource areas, this cumulative impact analysis also includes projected future growth as a factor.

#### ***4.1.1 Projects Considered Under Cumulative Analysis***

Consistent with CEQA Guidelines, the cumulative impact scenario considers other projects proposed within the geographic scope defined for each resource that has the potential to contribute to cumulatively considerable impacts. Impacts were identified using the list methodology. Resource areas were analyzed using a list of closely related projects that have been or would be constructed in the cumulative geographic scope. The list of related projects is provided in Section 4.1.1.2. In addition to using the list methodology, for resource areas where background growth projections could be incorporated, the cumulative analysis also considered projections included in the City's 2040 General Plan (City 2018a) and other regional planning documents. For example, traffic projections contained in the SJCOG's RTP were considered in the traffic analysis.

##### **4.1.1.1 Past History of the Port**

This section describes the past projects that have contributed to the development of the Port and surrounding area. These projects have collectively established the general project area as a working port and transportation hub. Collectively, the projects contribute to the baseline conditions present in the project area, Port, and surrounding area, including air quality attainment status and cultural significance.

The City has been a hub of trade since the early 1800s when the gold rush spurred the movement of goods and materials from the coast inland by boat on the San Joaquin River and later rail. Following the gold rush, trade continued to support area agriculture. By the early 1900s, the City was a major industrial and transportation center, supporting flour mills, wagon factories, iron foundries, and shipyards. In 1930, dredging of the San Joaquin River began to increase navigational depths and create a navigation channel to support larger vessels (City 2018a). In 1933, the Port opened as the first inland seaport in California. The first dock and transit shed were constructed at the Port in the 1930s followed by the unified rail. The Port officially opened in 1933 with the arrival of a cargo ship carrying 75,000 tons of lumber from the Pacific Northwest. The first on-dock rail operation started in 1934, and the first petroleum container was constructed at the Port during the same year. Deepening of the navigation channel to -35 feet MLLW began in 1935 (Port 2017). Large portions of the Port were commissioned by the Navy and became part of the Stockton Ordnance Depot during World War II. Many of the paved roads and rail spurs at the Port were constructed during this period. In 1956, the Department of Defense began the process of conveying the property to the Port, which was completed in 1967. Rough and Ready Island, an area to the west of the Port, remained Navy property, with active operations ongoing through the 1990s.

Containerization of cargo started in the late 1950s when the Matson Navigation Company's ship *Hawaiian Merchant* carried 20 containers from Alameda, California, to Honolulu, Hawaii. The Port strategically elected not to pursue containerization in the 1960s, establishing itself as one of the largest dry/break-bulk and liquid bulk ports on the West Coast. The Port continued to modernize through the mid and late 1900s to support bulk shipments, including replacing older timber wharves with concrete wharves, expanding warehouse facilities, and constructing more rail facilities. Today, the Port supports warehouse storage and handling facilities for both dry and liquid bulk materials, facilities, and equipment to handle break-bulk cargoes by land or sea. Over time, the Port has continued to grow, adding land and terminals. The most recent acquisition was Rough and Ready Island, which the Navy transferred to the Port through a series of agreements in 2000, 2002, 2003, and 2011.

The area surrounding the Port has also grown. Since the 1940s, there have been major commercial and residential developments and industrial growth, mostly to the north of the Port. The transportation network, especially highways, has consequently grown to accommodate growth in residential, agricultural, and energy sectors (City 2018a).

#### **4.1.1.2 Present and Future Projects**

As shown in Table 27 and Figure 5, 25 present or reasonably foreseeable future related projects (approved or proposed) were identified within the general vicinity of the proposed project that could contribute to cumulative impacts. These projects were selected because they are located in the Port or are located in the immediate project area (generally within the City) through which proposed

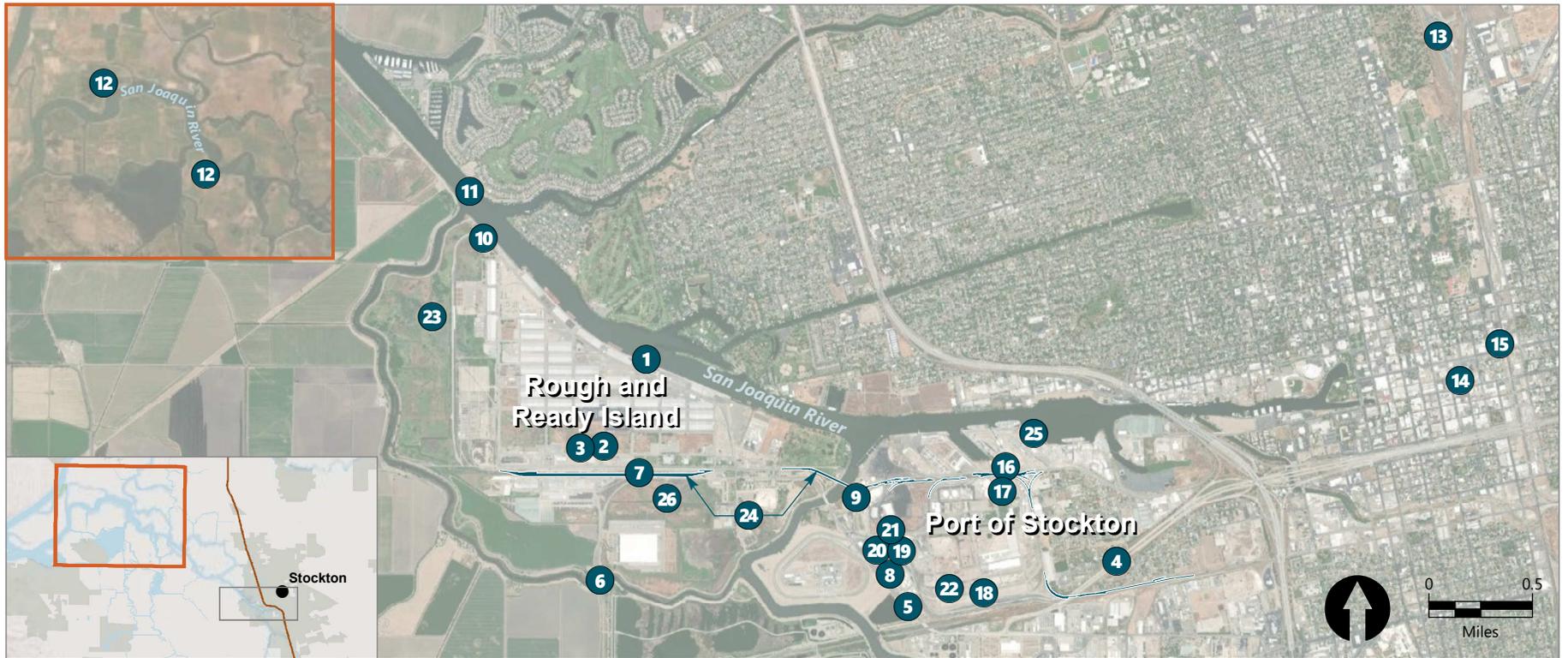
project mobile sources (i.e., trucks and rail) would be likely to travel (including roadways in the area). Projects on the list were analyzed to determine whether they may have the potential to result in related impacts to those of the proposed project (e.g., air quality impacts from the use of construction equipment or new sources of combustion) when considered in conjunction with the proposed project. The cumulative geographic scope differs by resource and sometimes for impacts within a resource; related projects may contribute to a cumulative risk in one resource area but not in another. Cumulative regions of influence are documented in Section 4.2.

**Table 27**  
**Related Present and Future Projects Considered in the Cumulative Impact Analysis**

Reference No.	Project Name	Location	Project Description	Project Status
1	Port of Stockton West Complex Development Plan: Marine Terminal Development	Port of Stockton	Marine terminal-related development associated with the Port's West Complex	In progress
2	Port of Stockton West Complex Development Plan: Commercial and Industrial Park Development	Port of Stockton	Upland commercial development associated with the Port's West Complex	In progress
3	Port of Stockton West Complex Development Plan: Infrastructure Improvements	Port of Stockton	Industrial development associated with the Port's West Complex	In progress
4	State Route 4 Crosstown Freeway Extension	City of Stockton	Extension of existing ramps with 1 mile of elevated structure; minor widening and realignment of Navy Drive between Fresno Avenue and BNSF underpass	Complete
5	Navy Drive Widening	Port of Stockton	Widening Navy Drive to accommodate traffic changes from SR-4 Crosstown Freeway Ramp Extension Project	Complete
6	Daggett Road Grade Separation	Port of Stockton	Construction of a new bridge over the BNSF railroad tracks on Daggett Road (now known as the Port of Stockton Expressway)	Complete
7	McCloy Avenue Extension	Port of Stockton	Extension of McCloy Avenue on the Port's West Complex	Complete
8	Targa Stockton Terminal	Port of Stockton	Construction and operation of a tank farm/terminal facility on approximately 19 acres within the rail circle that encompasses the Pacific Ethanol production facility, use of Berth 9 at the Port, and an existing public right of way for a product pipeline for transferring fuels	In progress

Reference No.	Project Name	Location	Project Description	Project Status
9	SATCO Marine Terminal	Port of Stockton	Construction and operation of a sulfuric acid facility on the East Complex	In progress
10	Nautilus Data Technology Data Storage Facility	Port of Stockton	Construction and operation of a waterborne data center facility at the West Complex	In progress
11	San Francisco Bay to Stockton (John F. Baldwin and Stockton Ship Channels) Navigation Improvement	Stockton Deep Water Ship Channel	Deepening the Stockton DWSC by 5 to 7 feet to improve maritime commerce efficiencies	Planning underway
12	Twitchell and Mandeville Island Dredged Material Placement Sites	Port of Stockton	Construction and operation of new dredge material placement sites for maintenance dredged sediment	Complete
13	ACE Rail Maintenance Facility Improvements	San Joaquin Regional Rail Commission	Installation of Wayside Power at the ACE Rail Maintenance Facility to reduce idling time for the diesel locomotives, thereby reducing emissions and noise nuisance concerns raised by nearby sensitive receptors	Complete
14	Open Window Master Development Plan	City of Stockton	Master Development Plan for downtown Stockton	Approved
15	Miner Avenue Complete Streets Road Plan	City of Stockton	Lane reduction from four to two lanes and the addition of Class II bicycle lanes throughout the project area and other traffic improvements	In progress
16	Contanda Port Road A Facility Expansion	Port of Stockton	Expanding an existing liquid bulk terminal by removing 14 existing ASTs and replacing them with five new ASTs of greater capacity	In progress
17	Contanda Renewable Diesel Bulk Liquid Terminal Development	Port of Stockton	Development of a new renewable diesel bulk liquid terminal at the Port. As part of the project, 16 ASTs of varying capacity would be built at a vacant parcel at the Port. Project would come into the Port via vessels and rail and leave via truck.	In progress
18	Eco-Energy Liquid Bulk Receiving Terminal Development	Port of Stockton	Construction and operation of a 10-acre liquid bulk receiving terminal, which would be operated only using unit trains (replacing existing manifest train movements at NuStar). A pipeline would connect the Eco-Energy Liquid Bulk Receiving Terminal with the NuStar terminal.	In progress
19	NuStar Ethanol Infrastructure Upgrades	Port of Stockton	On-terminal infrastructure upgrades to accommodate Eco-Energy supplied ethanol	In progress
20	NuStar Domestic Renewable Diesel	Port of Stockton	On-terminal infrastructure upgrades to accommodate domestic renewable diesel deliveries	In progress

<b>Reference No.</b>	<b>Project Name</b>	<b>Location</b>	<b>Project Description</b>	<b>Project Status</b>
21	NuStar Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS) Development and Vessel Service	Port of Stockton	Dock upgrades to comply with MOTEMS standards and support a new vessel service for renewable diesel deliveries	In progress
22	CVAG Bulk Whole Cottonseed Transloading Facility	Port of Stockton	A new transloading facility to receive whole cottonseed by rail and transport it out by truck	Complete
23	Denmar Natural Soda Ash Terminal	Port of Stockton	A new terminal to receive natural soda ash by rail and transport it out by ship	EIR Addendum certified; permitting in progress
24	Port of Stockton Rail Bridge Replacement and Rail Improvements	Port of Stockton	Replacing functionally obsolete rail bridge with a double-track rail bridge, adding a second Port lead track, constructing new yard track on the East Complex, and constructing a new rail classification yard on the West Complex to increase the overall efficiency of train operations within the Port	IS/MND certified; permitting not yet commenced
25	Lehigh Cement West (formerly Lehigh Southwest) Stockton Terminal	Port of Stockton	Redevelopment of existing bulk cementitious material receiving and distribution terminal at the Port to improve operational efficiency and accommodate additional capacity.	Recirculated DEIR in progress
26	Proposed Project			



- |  |   |   |
|--|---|---|
| <ul style="list-style-type: none"> <li>1 Port of Stockton West Complex Development Plan: Marine Terminal Development Project</li> <li>2 Port of Stockton West Complex Development Plan: Commercial and Industrial Park Development Project</li> <li>3 Port of Stockton West Complex Development Plan: Infrastructure Improvements Project</li> <li>4 State Route 4 Crosstown Freeway Extension Project</li> <li>5 Navy Drive Widening Project</li> <li>6 Daggett Road Grade Separation Project</li> <li>7 McCloy Avenue Extension Project</li> <li>8 Targa Stockton Terminal Project</li> <li>9 SATCO Marine Terminal Project</li> </ul> | <ul style="list-style-type: none"> <li>10 Nautilus Data Technology Data Storage Facility Project</li> <li>11 San Francisco Bay to Stockton (John F. Baldwin and Stockton Ship Channels) Navigation Improvement Project</li> <li>12 Twitchell and Mandeville Island Dredge Material Placement Sites Project</li> <li>13 ACE Rail Maintenance Facility Improvements Project</li> <li>14 Open Window Master Development Plan Project</li> <li>15 Miner Avenue Complete Streets Road Plan Project</li> <li>16 Contanda Port Road A Facility Expansion Project</li> <li>17 Contanda Renewable Diesel Bulk Liquid Terminal Development Project</li> <li>18 Eco-Energy Liquid Bulk Receiving Terminal Development Project</li> </ul> | <ul style="list-style-type: none"> <li>19 NuStar Ethanol Infrastructure Upgrades Project</li> <li>20 NuStar Domestic Renewable Diesel Project</li> <li>21 NuStar Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS) Development and Vessel Service Project</li> <li>22 CVAG Bulk Whole Cottonseed Transloading Facility Project</li> <li>23 Denmar Natural Soda Ash Terminal Project</li> <li>24 Port of Stockton Rail Bridge Replacement and Rail Improvements Project</li> <li>25 Lehigh Cement West (formerly Lehigh Southwest) Stockton Terminal Project</li> <li>26 TC NO. CAL. Development Warehousing and Distribution Facility Project</li> </ul> |
|--|---|---|

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**Figure 5**  
**Cumulative Projects**  
 Draft Environmental Impact Report  
 TC NO. CAL. Development Warehousing and Distribution Facility Project

## **4.1.2 Cumulative Impacts for Unaffected Environmental Resource Areas**

### **4.1.2.1 Agriculture and Forestry Resources**

The project site does not include any farmlands or forestry resources. The proposed project would have no impact on farmlands or forest lands, which precludes the proposed project from cumulatively contributing to an impact on these resources.

### **4.1.2.2 Land Use and Planning**

The City's 2040 General Plan (City 2018a) designates the project site as "Institutional," and the zoning designation of the project area is "Port" (City 2021a). The project site does not include residences, hospitals, schools, convalescent facilities, or other features that would constitute an established community. The proposed project is consistent with all applicable and established zoning regulations and requirements and would have no impacts related to land use, which precludes the proposed project from cumulatively contributing to an impact on this resource. For these reasons, the proposed project would result in no impacts to land use and planning, which precludes the proposed project from cumulatively contributing to an impact on these resources.

### **4.1.2.3 Mineral Resources**

There are no mineral resources within the project site, and extraction of mineral resources within San Joaquin County is focused on the southwestern portion of the County in the vicinity of the San Joaquin River. The project area is classified as a Mineral Resource Zone-1, meaning "adequate information indicates that no significant mineral deposits are present, or it is judged that little likelihood exists for their presence" (California Department of Conservation 2012). Therefore, the proposed project would have no impact related to mineral resources, which precludes the proposed project from cumulatively contributing to an impact on this resource.

### **4.1.2.4 Population and Housing**

The project site is located in the Port's West Complex, for which growth was analyzed in the West Complex Development Plan Final EIR (Port 2004). No new homes would be constructed as a result of the proposed project, nor are there housing units in the project area. The proposed project would have no effect on the availability of housing for existing residential areas, and the site's zoning precludes the potential for future housing developments. Therefore, the proposed project would result in no impacts pertaining to population and housing, which precludes the proposed project from cumulatively contributing to an impact on these resources.

### **4.1.2.5 Public Services**

The proposed project would not result in the need for additional public services or facilities, including fire or police protection, schools, or parks, beyond those currently available in the project area. The project area is adequately served by the City Fire Department, City Police Department, and

Port Police. Any minor increases in demand would be accommodated by these existing service providers. The proposed project would result in no impact to fire protection, police, schools, parks, or other public facilities, which precludes the proposed project from cumulatively contributing to an impact on these resources.

#### **4.1.2.6 Recreation**

The proposed project does not include construction or expansion of any recreational facilities and would not result in increased demand or other effects to recreational facilities. The proposed project would result in no impacts related to recreation, which precludes the proposed project from cumulatively contributing to an impact on this resource.

#### **4.1.2.7 Wildfire**

The project area and nearby communities are generally considered to have lower wildfire risk (CAL FIRE 2019). The project and nearby communities are located in a local responsibility area (CAL FIRE 2021). There are regional emergency response plans for the project area. The proposed project would not impair emergency response plans, require the installation of infrastructure that could exacerbate wildfire risk, or expose people to significant risks. Therefore, the proposed project would result in no impacts related to wildfire, which precludes the proposed project from cumulatively contributing to an impact on this resource.

## **4.2 Analysis of Cumulative Impacts**

The proposed project, in conjunction with other past, present, and reasonably foreseeable future related projects, has the potential to result in significant cumulative impacts when its independent impacts and the impacts of related projects combine to create impacts greater than those of the proposed project alone. The proposed project would not contribute to cumulative impacts related to those environmental resource areas on which it would have no impact, including all issues associated with agriculture and forestry resources, land use and planning, mineral resources, population and housing, public services, recreation, and wildfire. Rationale for this determination is summarized in Section 4.1.2. The cumulative impact evaluation presented in Section 4.2.1 is therefore focused on the same resources evaluated in Section 3: aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, GHG emissions, hazards and hazardous materials, noise, transportation, tribal cultural resources, and utilities.

### **4.2.1 *Cumulative Impacts for Affected Environmental Resource Areas***

#### **4.2.1.1 Aesthetics**

The geographic scope of the cumulative aesthetics analysis consists of the project site and the immediate vicinity at the Port. Projects that have the potential to result in impacts to scenic vistas,

scenic resources, visual quality and view blockage, and nighttime illumination and glare have the potential to contribute to cumulative impacts on aesthetics resources. These include projects that result in the loss of scenic resources or the introduction of contrasting features that could degrade the visual character of the project area. There are no identified scenic highways or vantage points in the project area from which the proposed project could be seen, and the project area is located in an area identified as industrial both currently and in future plans.

#### *4.2.1.1.1 Cumulative Impact Analysis*

As discussed in Section 3.1, the proposed project would have less-than-significant impacts to aesthetics resources. In general, because the proposed project would not be visible from or block views of any identified scenic vista or scenic highway, it would not contribute to such cumulative impacts. The proposed project would be similar in character to existing conditions and surrounding industrial Port projects.

The projects in Table 27 of relevance to the cumulative impact analysis for aesthetics are those that contribute to the overall industrial nature of the surrounding area. Most the projects listed in Table 27 are industrial sites and within Port property. None of the projects in Table 27 are located along, or are visible from, a scenic highway; therefore, they would not cumulatively affect scenic resources along a scenic highway. Any development project would be reviewed for potential impacts to daytime or nighttime views and would be required to address any potential impacts with mitigation. While the proposed project would introduce new sources of light and glare, these new sources of light and glare would be limited to an industrial area with daytime and nighttime views that are already affected and would be shielded from sensitive visual receptors by on-site and adjoining developments. Other projects constructed or planned for construction could also introduce new sources of light and glare, including Projects 1 through 3, 6, 7, 23, and 24; but those projects would not individually have significant residual light and glare impacts and are not close enough to cause a cumulatively considerable impact.

#### *4.2.1.1.2 Conclusion*

Based on this analysis, it is concluded that the proposed project and projects listed in Table 27 would not have cumulatively considerable impacts on aesthetics.

#### **4.2.1.2 Air Quality**

The geographic scope of the cumulative air quality analysis is the SJVAB. The proposed project would contribute air emissions from construction and operational activities. As discussed in Section 3.2.1, the SJVAB is an "extreme" nonattainment area for 8-hour O<sub>3</sub> under the NAAQS. Under the CAAQS, the SJVAB is presently in nonattainment for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Therefore, projects emitting O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>, along with O<sub>3</sub> precursors such as NO<sub>x</sub>, would contribute to nonattainment levels and subsequent adverse air quality effects.

As discussed in Section 3.2, SJVAPCD has developed plans to address PM<sub>10</sub>, PM<sub>2.5</sub>, and O<sub>3</sub> emissions in the region. The most recent plans include development of emission thresholds such as those used in this analysis and region-wide programs to reduce emissions. The plans also acknowledge that reducing mobile source emissions, including those from cars, trucks, aircraft, and farm vehicles, are critical to attaining the standard but are not under the direct authority of SJVAPCD. The proposed project-specific air emissions were found to exceed SJVAPCD significance thresholds, and because of the existing air quality violations in the SJVAB, the proposed project has the potential to contribute to cumulative impacts when considered in conjunction with other related projects resulting in such emissions.

#### 4.2.1.2.1 *Cumulative Impact Analysis*

**Criteria Air Pollutants.** Construction and operational emissions are the source of impacts related to air quality. Each of the projects listed in Table 27 would occur within the SJVAB and include emissions from construction or operations. Therefore, air quality impacts from all of the projects in Table 27 were considered in terms of their cumulative impacts. Projects listed in Table 27 have been or would be required to perform their own analyses of associated air quality impacts, including development of mitigation measures to address significant impacts, if necessary.

Several of the projects listed in Table 27 include or have included the construction and operation of industrial facilities within the Port, including Projects 1 through 3, 5 through 11, and 16 through 22. Emissions from these projects would be generated from construction equipment and activities, as well as from stationary and mobile source operational emissions. Several of the project construction schedules, including for Projects 2, 3, 23, 24, and 25, may overlap with that of the proposed project. Projects 1 through 3, 8 through 11, 13, and 16 through 25 include truck, rail, and/or ship movements that would result in mobile source emissions and/or result in emissions from on-terminal equipment. Emissions from these projects combined with the proposed project would emit O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>, along with O<sub>3</sub> precursors such as NO<sub>x</sub>, and contribute to nonattainment levels and subsequent adverse air quality effects.

**Health Risk.** Because the NAAQS and CAAQS are health-based standards and air quality in the San Joaquin Valley routinely violates the state and federal standards, ambient air quality in the valley already puts sensitive receptors at risk. The San Joaquin Valley also has some of the highest PM concentrations in the state. For example, health surveys reported in 2001 show a 24% higher prevalence of asthma in children in the San Joaquin Valley than in the rest of the state and a 19% higher prevalence for adults (ARB 2015). Similar to the discussion on criteria pollutants, related projects in Table 27 resulting in new or expanded sources of air emissions would combine with emissions from the proposed project and could potentially contribute to existing health risks in the region.

Unlike air quality standards that measure mass emissions within a region, an HRA considers the specific effects of criteria pollutants and air toxic on the closest sensitive receptors. Projects 1 through 3, 10, 23, and 24 in Table 27 would all occur in the same general area as the proposed project and would generate new rail, truck, and on-terminal equipment emissions that may affect the same sensitive receptors.

#### **4.2.1.2.2 Conclusion**

Because the proposed project's emissions would exceed thresholds and because of the proximity of other industrial projects that exceed thresholds, its implementation combined with other related past, present, or probable future projects would result in substantial combined cumulative adverse effects related to air quality and health risk, and impacts would be considered cumulatively significant. This cumulative impact would primarily result from the combined O<sub>3</sub>, (including O<sub>3</sub> precursors such as NO<sub>x</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from related projects, including Projects 1 through 3, 10, 23, and 24 in Table 27, combined with those of the proposed project. Cumulative health risks would primarily result from DPM emissions.

While some emissions contributing to cumulative risk are generated by on-terminal stationary sources in the project area, the majority of emissions from the proposed project and other cumulative projects would originate from non-road construction equipment and mobile sources. Construction equipment is regulated by ARB through a comprehensive program aimed at accelerating the turnover of the oldest equipment to newer, cleaner models. Because construction is directly contracted by the project owner/operator, additional mitigation can be written into construction contracts. As discussed in Section 3.2.3, mobile sources, however, are often not directly controlled by the project owner/operator at the Port. Rather, those sources are contracted through third parties, making direct control via mitigation complicated. For example, rail movements are controlled almost exclusively by the two mainline locomotive companies (BNSF and UP). While trucks are also contracted by terminal operators, trucking companies and owner/operators are more numerous and operate within a more local market presenting more opportunities for choice. Therefore, mitigation is generally focused on construction equipment and trucks. However, because the area is in nonattainment and the effects of mitigation may be limited, impacts are considered cumulatively significant.

#### **4.2.1.3 Biological Resources**

The geographic scope of the cumulative biological resources analysis consists of the project site and areas in close proximity that may be affected by the proposed project's construction or operations. Past, present, and reasonably foreseeable future development that could contribute to significant cumulative impacts on terrestrial resources are those projects that involve land disturbance, such as grading, paving, landscaping, and construction of infrastructure.

#### *4.2.1.3.1 Cumulative Impact Analysis*

Construction, operation, and maintenance of the proposed project would take place on degraded, undeveloped land that is not likely to support many special status species or protected habitats. The proposed project's impacts to biological resources would be mitigated through implementation of MM-BIO-1, MM-BIO-2, and MM-BIO-3. None of the other projects in Table 27 that could be under construction at the same time as the proposed project, are in close proximity to the proposed project, or that are similar in nature to the proposed project would result in significant biological resources impacts. In general, there is feasible mitigation to ensure that impacts on biological resources, including special status species and habitats and jurisdictional waters are fully mitigated to ensure no net loss of habitat functions.

#### *4.2.1.3.2 Conclusion*

Based on this analysis, it is concluded that the proposed project and projects listed in Table 27 would not have cumulatively considerable impacts on biological resources.

#### **4.2.1.4 Cultural and Historic Resources**

The geographic scope of the cumulative cultural and historic resources analysis consists of the project site and the immediate vicinity at the Port. Projects on land that have the potential to modify or demolish structures that are more than 50 years old have the potential to contribute to cumulative impacts on historic architectural resources. Projects that include excavation that may disturb native fill may disturb, damage, or degrade listed, eligible, or otherwise unique or important archaeological resource.

#### *4.2.1.4.1 Cumulative Impact Analysis*

As discussed in Section 3.4.1, while alluvial processes have likely erased most early archaeological sites, the Delta has probably been occupied since the late Pleistocene/early Holocene, beginning around 11,000 years ago. The earliest documented sites in the region date to about 9,000 years ago and are thought to have been mobile communities focused on hunting and fishing. There is evidence of industrial and land development in the immediate vicinity of the project site since at least the early 1900s, which intensified through the mid to late twentieth century. Based on these conditions, archaeological and historical resources have the potential to be present in the Port.

The proposed project includes excavation into native soils. If archaeological materials or human remains are present in previously undisturbed native sediments, they could potentially be disturbed during construction. Although much of the area has been previously disturbed, construction activities (i.e., excavation, dredging, and land filling) associated with present and future Port projects, including Projects 1 through 3, 5, 8 through 11, 18, and 21, would also include excavation into native soils and could also disturb archaeological resources or human remains. The proposed project requires implementing "provisions for historical or unique archaeological resources accidentally discovered

during construction" (MM-CHR-1). At a minimum, any construction associated with the projects listed in Table 27 that include excavation would also proceed in adherence with these guidelines, in addition to federal, state, and local regulations designed to address cultural resource impacts potentially arising from construction.

#### **4.2.1.4.2 Conclusion**

Based on these analyses, it is concluded that the proposed project and projects listed in Table 27 would not have cumulatively considerable impacts on cultural and historic resources.

#### **4.2.1.5 Energy**

The geographic scope of the cumulative energy analysis includes the project site, the immediate vicinity at the Port, and the service area for PG&E which provides electricity to the Port.

##### **4.2.1.5.1 Cumulative Impact Analysis**

The proposed project would not require any unusual or excessive construction equipment or practices compared to projects of similar type and size. Implementation of MM-GHG-1 and MM-GHG-2 would ensure that the proposed project complies with the City's 2040 General Plan and the Port's *Renewable Portfolio Standard Procurement Plan*. The proposed project would not waste or unnecessarily consume energy resources or conflict with renewable energy or energy efficiency plans. Most other projects in Table 27 are in the City and would similarly be required to comply with the City's 2040 General Plan. None of the projects in Table 27 have documented the need for excessive construction equipment or practices compared to projects of similar type and size.

##### **4.2.1.5.2 Conclusion**

Based on the above analysis, it is concluded that the proposed project and projects listed in Table 27 would not have cumulatively considerable impacts related to energy consumption or efficiency.

#### **4.2.1.6 Geology and Soils**

The geographic scope of the cumulative geology and soils resources analysis is limited to the project site and immediate surroundings because the project site does not contain any substantial topographic features or notable geologic conditions that could expand geology and soil effects beyond this area.

##### **4.2.1.6.1 Cumulative Impact Analysis**

Of the projects listed in Table 27, Projects 1 through 3, 10, 23, and 24 would occur in close proximity to the geographic scope of proposed project and would similarly be affected by a geological event. The proposed project would construct improvements that would be subject to ground shaking, as is common for the region. In consideration of design standards relating to seismic hazards, and plans addressing earthquake hazards, potential impacts associated with siting in a seismically active region

would be less than significant. There would be no other impacts from the proposed project related to geology or soils. Similar to the proposed project, these projects would be constructed in adherence with applicable design standards relating to seismic hazards.

#### *4.2.1.6.2 Conclusion*

Based on these analyses, it is concluded that the proposed project and projects listed in Table 27 would not have cumulatively considerable impacts related to geology and soils.

### **4.2.1.7 Greenhouse Gas Emissions**

The geographic scope of the cumulative GHG emissions analysis in this DEIR is California, because the state has established target statewide GHG reductions. As discussed further in Section 3.7, the state has established a comprehensive goal to reduce GHG to 80% below the 1990 level by 2050, which includes emission reduction targets from all sectors enacted by a series of regulations and programs. The state's plan also requires local communities to develop CAPs.

#### *4.2.1.7.1 Cumulative Impact Analysis*

Global surface temperatures have trended higher over the past century, due to the generation of GHG emissions from human activities. Some observed changes include shrinking glaciers, thawing permafrost, and shifts in plant and animal ranges. Emissions of GHGs contributing to global climate change are attributable to human activities associated with manufacturing, utilities, energy extraction, transportation, agriculture, and residential uses. Therefore, the proposed project, all past projects, and all present and future related projects in Table 27 that maintain or increase mass GHG emissions contribute to global climate change.

#### *4.2.1.7.2 Conclusion*

Each of the projects listed in Table 27 would occur within California and emit GHG emissions from construction and operations. Emissions would come largely from mobile source combustion, and electricity use. Because of the nature of GHGs, impacts from these projects would be additive. The projects listed in Table 26 would be required to perform their own analysis of associated GHG impacts, including development of mitigation measures to address these impacts, if required.

As discussed in Section 3.7.3, there would be limited mitigation options to reduce such emissions. Mitigation measures MM-AQ-1, MM-AQ-3, MM-AQ-4, and MM-AQ-5 would be implemented as part of the proposed project and would help reduce GHG emissions and criteria pollutant emissions by controlling unnecessary idling and promoting the use of newer, more efficient trucks. Implementation of MM-GHG-1, MM-GHG-2, and MM-GHG-3 would help reduce waste and increase energy efficiency.

In addition, the proposed project, as well as other reasonably foreseeable future projects, including those in Table 27, would be subject to future requirements imposed by ARB's 2017 Climate Change Scoping Plan Update (ARB 2017). The Climate Change Scoping Plan Update describes how California will reduce its GHG emissions by 40% below 1990 levels by 2030, and all of the projects in Table 27 are subject to statewide initiatives. For example, low carbon fuels are becoming more available because of the LCFS. Statewide programs to incentivize electric cars, trucks, and equipment, along with initiatives to promote renewable energy standards which will decarbonize the electricity grid will reduce emissions.

However, until such requirements are implemented and mandated at a project level it is assumed that cumulative GHG emissions would be cumulatively considerable.

#### **4.2.1.8 Hazards and Hazardous Materials**

The geographic scope of the cumulative hazards and hazardous materials analysis consists of the project site, soil and groundwater in the immediate area, and rail and roadways that would be affected in the event of an accidental release of hazardous materials during transport.

##### *4.2.1.8.1 Cumulative Impact Analysis*

Construction of the proposed project would include excavation of contaminated soils and the use of common industrial materials. Handling of all hazardous materials would be conducted in compliance with standard BMPs in accordance with all applicable state and federal laws. The Port will prepare a RAP to address the risks associated with the handling and transportation of hazardous materials. In the unlikely event of a spill or accident, the City Fire Department is equipped to provide response. The proposed project would not result in significant hazards or hazardous materials impacts.

Several of the projects listed in Table 27, particularly the projects in close proximity to the proposed project with proposed industrial uses, including Projects 8, 9, and 16 through 21, may similarly include the use, transport, and disposal of hazardous materials or occur on or near listed hazardous material sites. Other projects that may include ground disturbance on or near listed hazardous material sites include Projects 4, 5, 16, and 17. For these projects, potential impacts from hazardous materials on site would likely be localized, and any transport or disposal of materials would occur per federal, state, and local regulations. Because the likelihood of accidental upset during transport of hazardous materials is relatively low, it is unlikely that there would be simultaneous accident events from shipping, and cumulative effects are not anticipated.

##### *4.2.1.8.2 Conclusion*

Based on these analyses, it is concluded that the proposed project and projects listed in Table 27 would not have cumulatively considerable impacts related to hazards and hazardous materials.

#### **4.2.1.9 Hydrology and Water Quality**

The geographic scope of the cumulative hydrology and water quality analysis consists of the project site, including the three drainage ditches located on the project site, the Port's West Complex drainage system, the stormwater retention basin on the western end of the West Complex, and adjoining Burns Cutoff and San Joaquin River waters.

##### *4.2.1.9.1 Cumulative Impact Analysis*

The proposed project would entail remediation and grading and would require an alteration to the project area existing drainage system, which may impact water quality. Even with implementation and maintenance of existing spill control measures, adherence to NPDES and other permitting requirements, and compliance with the Port's MS4 permit terms and DSP, the proposed project would result in significant impacts related to water quality standards.

Several of the projects listed in Table 27, particularly the projects in close proximity to the proposed project with proposed industrial uses, including Projects 1 through 3, 10, 23, and 24, may similarly use materials or entail construction that could adversely affect water quality if improperly managed. These projects may also entail minor alterations to existing drainage systems. Similar to the proposed project, each of these projects would occur in adherence with NPDES permit requirements, other permitting requirements, and compliance with the Port's DSP.

##### *4.2.1.9.2 Conclusion*

Based on these analyses, it is concluded that the proposed project and projects listed in Table 27 would not have cumulatively considerable impacts related to hydrology and water quality.

#### **4.2.1.10 Noise**

The geographic scope of the cumulative noise analysis includes the project site and surrounding industrial area, as well as sensitive receptors that may be affected by construction equipment and proposed facility operation. The cumulative noise analysis relies in part on community noise standards included in the 2040 General Plan.

##### *4.2.1.10.1 Cumulative Impact Analysis*

The nearest sensitive receptor to the project site is Burns Cutoff (a recreational location) located approximately 1,500 feet to the south of the project site, and the closest schools (Washington Elementary and Madison Elementary) are approximately 2 and 2.1 miles to the east and northeast, respectively. The nearest park is Louis Park, approximately 2,700 feet northeast of the project site across the San Joaquin River from the West Complex. Noise levels generated by the proposed project construction and operations would be within the conditionally acceptable ranges. Consistent with the City's ordinance, construction would not occur between the hours of 10:00 p.m. and

7:00 a.m. Heavy equipment vibration from construction would not exceed the FTA damage criteria, and proposed project operations would not generate any new sources of vibration.

Construction noises from the projects listed in Table 27, including the projects likely to have overlapping construction schedules (Projects 2, 3, 23, 24, and 25) with the proposed project, could result in short-term cumulative noise impacts from construction activities. However, Projects 2, 3, 23, and 25 are located approximately 1,500 to 6,800 feet from the project site. Based on the way noise attenuates, these projects would likely affect different receptors than the proposed project. Only Project 24 would be located in very close proximity to the project site and be constructed during the same time frame as the proposed project. Project 24, combined with the proposed project's construction noise levels, would be within the existing range for ambient noise levels in the area and below the City's maximum noise level for industrial uses.

Operational noise would combine with other projects listed in Table 27. However, the overall operational noise stemming from the projects in Table 27 would be intermittent during product deliveries or distribution and consistent with overall Port industrial conditions and land uses. Based on previous noise analyses, Port noise levels are within the City's acceptable ambient noise levels for the area as identified in the 2040 General Plan. Because operations would be consistent with existing Port uses and would occur within areas zoned industrial, noise levels are not expected to cumulatively affect sensitive land uses.

#### *4.2.1.10.2 Conclusion*

Based on these analyses, it is concluded that the proposed project and projects listed in Table 27 would not have cumulatively considerable impacts related to noise.

#### **4.2.1.11 Traffic and Transportation**

The geographic scope for cumulative impacts on transportation and traffic includes existing transportation resources in the area surrounding the project site, consisting of roads, highways, and rail lines. As discussed in Section 3.11, aspects of a traffic analysis are by nature a cumulative issue. Traffic can be caused by poor infrastructure design, short-term construction, or mass accumulation of vehicles on a roadway during peak travel hours. Like the analysis in Section 3.11, the cumulative analysis considers regional traffic plans and projections.

##### *4.2.1.11.1 Cumulative Impact Analysis*

The projects listed in Table 27 include a mix of industrial and infrastructure projects. Projects 3 through 7 include congestion relief projects that provide wider roads, bridge overpasses, and intersection improvements affecting roadways into and through the Port and adjacent areas, to reduce impacts on local road networks. Project 15 includes upgrades to the local rail network. Each

of these projects may contribute to short-term traffic during construction but in the long-term would increase the operational capacity of Port roads and infrastructure thereby reducing traffic levels.

Development projects listed in Table 27, including Projects 1 through 3, 8 through 11, 16 through 22, and 25 would contribute additional vehicles to the roadway and could contribute to traffic within the general Stockton area. Any development projects would be reviewed for impacts related to transportation and traffic using the same guidance from the City's TIA Guidelines, which considers regional conditions and would be required to address any potential impacts with mitigation. Because the proposed project is expected to generate more than 100 net-new vehicle trips in either the morning or evening peak hour, a VMT assessment was completed and levels were found to exceed regional VMT standards. As discussed in Section 3.11.3, there would be no feasible mitigation measures to reduce VMT impacts.

Because the number of construction workers is relatively low and public transportation access is limited at the site, the proposed project is not expected to increase public transit use and impacts would be less than significant. All of the projects listed in Table 27 would occur in areas with similarly low levels of public transportation service and are therefore not anticipated to have high demand for public transportation services. Any development projects would be reviewed for impacts related to public transportation services and would be required to address any potential impacts with mitigation. Because the proposed project does not include construction or operations that would affect alternative transportation plans, policies, or programs, there would be no impact on these resources, which precludes the proposed project from cumulatively contributing impacts to these resources.

#### *4.2.1.11.2 Conclusion*

Based on these analyses, it is concluded that the proposed project and projects listed in Table 27 would have cumulatively considerable impacts related to traffic and transportation.

#### **4.2.1.12 Tribal Cultural Resources**

The geographic scope of the cumulative tribal cultural resources analysis consists of the project site and the immediate vicinity at the Port.

##### *4.2.1.12.1 Cumulative Impact Analysis*

No tribal cultural resources as defined in PRC 5020.1(k) have been identified in the project area. No tribal cultural resources have been identified at the Port during CEQA review of any of the projects listed in Table 27. The proposed project includes excavation into native soils; therefore, if archaeological materials or human remains are present in previously undisturbed native sediments, they could potentially be disturbed during construction. Although much of the area has been previously disturbed, construction activities (i.e., excavation, dredging, and land filling) associated

with present and future Port projects, including Projects 1 through 3, 5, 8 through 11, 18, 21, 23, and 24 would also include excavation into native soils and could also disturb archaeological resources or human remains. These could also be considered tribal cultural resources.

The proposed project requires implementing “provisions for historical or unique archaeological resources accidentally discovered during construction” (MM-CHR-1). At a minimum, any construction associated with the projects listed in Table 27 that include excavation would also proceed in adherence with these guidelines, in addition to federal, state, and local regulations designed to address cultural resource impacts potentially arising from construction.

#### *4.2.1.12.2 Conclusion*

Based on these analyses, it is concluded that the proposed project and projects listed in Table 27 would not have cumulatively considerable impacts on tribal cultural resources.

#### **4.2.1.13 Utilities**

The geographic scope of the cumulative utilities analysis consists of the project site, the immediate vicinity at the Port, and surrounding areas that are served by the same utilities systems as the proposed project.

##### *4.2.1.13.1 Cumulative Impact Analysis*

The proposed project would require an expansion of electricity, water, sanitary sewer, stormwater drainage, natural gas, and telecommunications facilities. Utility demands during construction and operation of the proposed project would be comparable to other warehouse facilities and would be accommodated by existing utility service systems. None of the projects listed in Table 27 are expected to result in significant and unavoidable impacts related to utilities.

##### *4.2.1.13.2 Conclusion*

Based on projected construction and operations, the proposed project and projects listed in Table 27 would not result in a cumulative contribution to impacts on utilities.

## 5 Other Required Analyses

### 5.1 Unavoidable Significant Impacts

As required by CEQA Guidelines Section 15126.2(b), an EIR must describe any significant impacts that cannot be avoided, including those impacts that can be mitigated but not reduced to a less-than-significant level. Sections 3 and 4 of this DEIR describe the potential environmental impacts of the proposed project and recommend mitigation measures to reduce impacts, where feasible. As presented in Section 3, construction and operation of the proposed project would result in exceedances of air quality, GHG, and transportation thresholds. These impacts are considered significant and unavoidable.

### 5.2 Significant Irreversible Environmental Changes

Pursuant to Section 15126.2(c) of the CEQA Guidelines, an EIR must consider any significant irreversible environmental changes that would be caused by the proposed project should it be implemented. Section 15126.2(c) of the CEQA Guidelines states the following:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as a highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The proposed project would require the use of non-renewable resources, such as water, bulk building products and consumer goods, fossil fuels, and non-renewable construction materials. Resources that are committed irreversibly and irretrievably are those that would be used by a project on a long-term or permanent basis. Resources committed to the proposed project include water, bulk building products and consumer goods, fossil fuels, and non-renewable construction materials. Fossil fuels and energy would be consumed during construction activities. Fossil fuels, in the form of diesel oil and gasoline, would be used to power construction equipment and vehicles. The use of these energy resources would be irretrievable and irreversible. Non-recoverable materials and energy would be used during construction activities; the amounts consumed would be accommodated by existing supplies. Although the increase in materials and energy used would be limited and readily accommodated, these resources would nevertheless be unavailable for other uses.

## 5.3 Growth-Inducing Impacts

The CEQA Guidelines require an EIR to discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing or facilities, either directly or indirectly, in the surrounding environment. This discussion includes an analysis of whether the proposed project would remove obstacles to population growth or trigger the construction of new community services facilities that could cause significant environmental effects. Specifically, Section 15126.2(d) of the CEQA Guidelines states the following:

Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

### 5.3.1 *Direct Impacts*

A project would directly induce growth if it would directly foster economic or population growth or the construction of new housing in the surrounding environment. The proposed project would result in a net increase in bulk building products and consumer goods throughput at the Port, which would result in additional truck and rail calls, as outlined in Section 2.7. As discussed in the NOP/IS, the project site is located in the Port's West Complex, for which growth was analyzed in the West Complex Development Plan Final EIR (Port 2004). Growth at the Port's West Complex is expected to increase direct employment opportunities; however, this increase in employment is not expected to result in a significant need for additional housing in the area because of the large number of workers that already reside within the area and the relatively high rate of unemployment for the Stockton-Lodi Metropolitan Statistical Area (9% for November 2020; CEDD 2021) compared to the state of California (7.9% for December 2020; CEDD 2021) and the United States (6.7% for November 2020; BLS 2021; Port 2004).

One of the objectives of the proposed project is to meet the current demand for modern warehouse space created by existing logistics needs. Therefore, the proposed project would not result in direct economic growth outside of that analyzed as part of the proposed project description and

subsequent impact analyses. The proposed project would not result in a population increase or in new housing.

### *5.3.2 Indirect Impacts*

A project would indirectly induce growth if it would foster economic or population-expanding activities that would lead to further development by taxing existing facilities and eventually requiring the construction of new facilities. The proposed project would not result in indirect economic growth outside of that analyzed as part of the proposed project description and subsequent impact analyses. The proposed project would not result in expanding populations, tax existing facilities, or require new facilities to be constructed.

## 6 Alternatives

CEQA requires that an EIR present a range of reasonable alternatives to the proposed project. Alternatives were developed based on comments received during public scoping, as well as Port staff consideration. Through the alternatives analysis process, the proposed project and two other alternatives were found to meet most of the objectives. In addition, CEQA requires an EIR to consider the No Project Alternative.

The following two alternatives to the proposed project, in addition to the No Project Alternative, were carried forward for impact analysis in this DEIR:

- Alternative 2: Reduced Project Alternative
- Alternative 3: Alternative Site Locations

### 6.1 Requirements to Analyze Alternatives

CEQA Guidelines Section 15126.6 requires that an EIR present a range of reasonable alternatives to a proposed project, or to the location of a project, that could feasibly attain most of the basic project objectives but would avoid or substantially lessen any significant effects of a project. Pursuant to CEQA Guidelines Section 15126.6(e)(2), an EIR must also include an analysis of a No Project Alternative. The No Project Alternative analyzes what would be expected to occur if the proposed project were not approved. CEQA Guidelines Section 15126.6 also requires an evaluation of the comparative merits of the alternatives. An EIR is not required to consider alternatives that are infeasible. Pursuant to CEQA Guidelines Section 15126.6 (f)(1), “among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent).” Although these factors do not present a strict limit on the scope of reasonable alternatives to be considered, they help establish the context against which “the rule of reason” is measured when determining an appropriate range of alternatives sufficient to establish and foster meaningful public participation and informed decision-making.

As stated in Section 2.2, Project Need and Objectives, the proposed project’s goal is to construct and operate a distribution warehouse facility to accommodate Port-bound cargo and to remediate Site 47. To accomplish these goals, the following key project objectives must be accomplished:

- Remediate Site 47 per applicable regulations and standards.
- Initiate a lease with the Port consistent with the proposed project.

- Provide modern warehouse space to meet the existing need for an on-demand logistical model as the current growth in logistics has outpaced the availability of modern warehouse space.
- Receive, store, and ship bulk building products and consumer goods in a manner that promotes safe and efficient handling while ensuring environmental protection and controls.
- Increase the availability of building materials and supplies to the local area, region, and state.

The following sections describe the alternatives considered to reduce environmental impacts and presents the environmental analysis in comparison to the proposed project. The alternatives analysis only addresses resource areas for which the proposed project could cause potentially significant environmental impacts. The following resource areas were found to have no impact in the NOP/IS developed for the proposed project and therefore are not considered in the analysis: agriculture and forestry resources, land use and planning, mineral resources, population and housing, public services, recreation, and wildfire.

### ***6.1.1 Alternative 1: No Project Alternative***

The No Project Alternative analyzes what would be expected to occur if the proposed project were not approved. Pursuant to CEQA Guidelines Section 15126.6(e)(2), the No Project Alternative shall “discuss the existing conditions at the time the NOP is published, or if no NOP is published, at the time the environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.”

Under this alternative, no new warehouse building or associated improvements would be constructed, and there would be no change to operations. The commercial operator’s cargo could potentially still be handled through the existing facility on the East Complex at present levels. Additionally, remediation of Site 47 would not occur as described in the proposed project. A different remedial design would be developed per applicable regulation and standards.

#### **6.1.1.1 Aesthetics**

The No Project Alternative would have no impact on aesthetics because there would be no construction or new equipment associated with the No Project Alternative. Operations through the existing facility on the East Complex could potentially remain relatively the same and consistent with the general aesthetic of the area.

#### **6.1.1.2 Air Quality**

Air quality impacts resulting from implementation of the No Project Alternative have not been quantified; however, the No Project Alternative would not include any construction or new operations associated with the proposed project. While throughput levels may increase over their

current levels at the existing facility on the East Complex as part of the No Project Alternative, throughput levels would be limited by the existing facility limited capacity and would be less than the proposed project. Emissions would be less than presented in Section 3.2.3. Regional emissions may continue to increase under the No Project Alternative because bulk material would likely be shipped to the region through an alternative facility. However, no such facility has been identified and therefore an analysis is speculative. Therefore, while air quality impacts of the No Project Alternative would likely increase over current emissions at the existing facility on the East Complex, such emission would be much less than the proposed project and impacts to air quality would be considered less than significant.

#### **6.1.1.3 Biological Resources**

The No Project Alternative would have no impact on biological resources in the project area because there would be no construction or operations at the existing facility. Remediation of the project site would occur, which would prevent the further release of contaminants into the environment that could impact biological resources. Delineated habitat conditions, as described in Section 3.3.1, would remain similar to existing conditions. Existing operations could potentially continue at the existing facility on the East Complex. While throughput at the existing facility on the East Complex levels may increase over current operations, such operations would not impact biological resources.

#### **6.1.1.4 Cultural and Historic Resources**

The No Project Alternative would have no impact on cultural and historic resources because there would be no construction, no excavation, or new operations associated with the No Project Alternative. Operations at the existing facility on the East Complex would not affect cultural and historic resources.

#### **6.1.1.5 Energy**

The No Project Alternative would not include any construction or new operations associated with the proposed project. While operations at the existing facility on the East Complex could potentially use equipment that consumes fossil fuels and could potentially increase, energy consumption levels would be limited by the existing facility limited capacity and would be less than the proposed project. Therefore, the impacts to energy would be considered less than significant.

#### **6.1.1.6 Geology and Soils**

The No Project Alternative would have no impact on geology and soils because there would be no construction or new operations associated with the No Project Alternative. Operations at the existing facility on the East Complex would not affect geology and soils.

### **6.1.1.7 Greenhouse Gas Emissions**

GHG impacts resulting from implementation of the No Project Alternative have not been quantified. However, the No Project Alternative would not include any construction, and operations would be less than under the proposed project. While throughput levels may increase over their current levels at the existing facility on the East Complex as part of the No Project Alternative, throughput levels would be limited by the existing facility limited capacity and would be less than the proposed project. Emissions would be less than those presented in Section 3.7.3. Regional emissions may continue to increase under the No Project Alternative because bulk material would likely be shipped to the region through an alternative facility. However, no such facility has been identified, and therefore an analysis is speculative. Therefore, while GHG emissions under the No Project Alternative would likely increase over current emissions at the existing facility on the East Complex, such emissions would be much less than the proposed project and impacts to climate change would be considered less than significant.

### **6.1.1.8 Hazards and Hazardous Materials**

There would be no construction or new operations associated with the No Project Alternative. However, site remediation throughout the project area would still occur under a different design meeting NCP criteria, and therefore arsenic- and PAHs-contaminated soils would be removed from the project area. Operations at the existing facility on the East Complex could potentially continue and may increase but would only utilize small quantities of common industrial materials, some of which may be hazardous if improperly managed. The risk for the existing facility on the East Complex to result in spills, erosion, or other inputs of common industrial pollutants to downstream waterbodies would be minimal. Because there would not be continued release of arsenic and PAHs into the environment, impacts would be less than significant.

### **6.1.1.9 Hydrology and Water Quality**

The No Project Alternative would have no impact on hydrology and water quality because there would be no construction or new operations associated with the No Project Alternative. Existing drainage ditches would remain in place. Operations at the existing facility on the East Complex would not affect hydrology and water quality.

### **6.1.1.10 Noise and Vibration**

There would be no construction under the No Project Alternative, and operations would be less than the proposed project. As described previously, operations could likely increase at the existing facility on the East Complex but would be much less than expected under the proposed project. Noise levels would likely remain relatively unchanged (maybe nominally higher than the current level at the existing facility on the East Complex) under the No Project Alternative as equipment would remain the same. Therefore, impacts are considered less than significant.

#### **6.1.1.11 Transportation**

There would be no construction under the No Project Alternative and existing operations on the East Complex would be less than the proposed project. As described previously, operations could likely increase at the existing facility on the East Complex but would be much less than expected under the proposed project. Daily traffic levels could increase at the existing facility on the East Complex as compared to their current conditions under the No Project Alternative; however, throughput would be limited by the size of the existing facility. Therefore, impacts are considered less than significant.

#### **6.1.1.12 Tribal Cultural Resources**

The No Project Alternative would have no impact on tribal cultural resources because there would be no construction or new operations associated with the No Project Alternative. Operations at the existing facility on the East Complex would not affect tribal cultural resources.

#### **6.1.1.13 Utilities**

The No Project Alternative would have no impact on utilities because there would be no construction or new operations associated with the No Project Alternative. Operations at the existing facility on the East Complex would not affect utilities.

### ***6.1.2 Alternative 2: Reduced Project Alternative***

The Reduced Project Alternative would consist of warehouse building construction and operation at two-thirds the capacity of the proposed project. This alternative includes development of a warehouse building and associated infrastructure (e.g., parking areas) over a 40-acre area at the same location as the proposed project. With the smaller warehouse building, there would be a commensurate reduction in throughput capacity. Because this alternative would still overlap with Site 47, it is anticipated that the extent of remediation associated with this alternative would be the same as that of the proposed project. While a warehouse of this size would not meet the Project Objective of providing a modern warehouse for existing logistical needs, this alternative is being analyzed based on comments received during public scoping. In addition, a project alternative need not meet all project objectives to be considered in the alternatives analysis.

Under the Reduced Project Alternative, the warehouse building would be constructed and operate at two-thirds the capacity of the proposed project, which would reduce the maximum throughput expected at the warehouse as shown in Table 28.

**Table 28**  
**Reduced Project Alternative Throughput as Compared to the Proposed Project**

Mode <sup>1</sup>	Maximum Annual Calls <sup>2</sup>	
	Reduced Project	Proposed Project
Inbound Truck Calls	21,500	32,287
Outbound Truck Calls	42,100	63,211
Total Truck Calls	63,600	95,498
Total Rail Calls <sup>3</sup>	1,300	2,053

Notes:

1. Cargo would be delivered to the facility by truck and rail. All cargo would be distributed from the facility by truck.
2. Calls are expressed in round trips. Each truck and train call makes two trips: one trip in and one trip out.
3. Rail cargo would be shipped via manifest rail.

### 6.1.2.1 Aesthetics

Under the Reduced Project Alternative, there would be less construction than under the proposed project. Equipment associated with the No Project Alternative would be the same. Operations would remain relatively the same as under the proposed project and consistent with the general aesthetic character of the area. Accordingly, the Reduced Project Alternative would have a less-than-significant impact on aesthetics. Mitigation measure MM-AES-1 would likely apply to the Reduced Project Alternative, which would be expected to reduce impacts to less-than-significant levels.

### 6.1.2.2 Air Quality

Because construction activities under the Reduced Project Alternative would be reduced as compared to the proposed project, construction emissions would be less than those of the proposed project. Operationally, reducing throughput would reduce train and truck trips, which would reduce emissions. Air quality impacts resulting from implementation of the No Project Alternative have not been quantified. As shown in Table 28, throughput would be two-thirds of that of the proposed project. Emissions would exceed annual thresholds; therefore, emissions would also be considered significant and unavoidable for the Reduced Project Alternative. Mitigation measures MM-AQ-1 through MM-AQ-5 would likely apply to the Reduced Project Alternative which would be expected to reduce impact to less-than-significant levels.

### 6.1.2.3 Biological Resources

Because construction of the warehouse and remediation of Site 47 would still occur, potential impacts to biological resources under the Reduced Project Alternative would be similar to those of the proposed project. Mitigation measures MM-BIO-1 through MM-BIO-4 would likely apply to the Reduced Project Alternative, which would be expected to reduce impacts to less-than-significant levels.

#### **6.1.2.4 Cultural and Historic Resources**

Similar to the proposed project, the Reduced Project Alternative is not expected to encounter intact archaeological resources. However, because the Reduced Project Alternative would also include disturbance of soil through direct removal, if archaeological materials are present in previously undisturbed native sediments, they could potentially be disturbed during construction, which would constitute a potentially significant impact. Mitigation measure MM-CHR-1 would likely apply to the Reduced Project Alternative, which would be expected to reduce impacts to less-than-significant levels.

#### **6.1.2.5 Energy**

The Reduced Project Alternative would include construction and new operations similarly to the proposed project. Even if reduced by a third of the proposed project operations, operations at the warehouse would use equipment that consumes fossil fuels and could increase energy consumption levels. Mitigation measure MM-GHG-1 would likely apply to the Reduced Project Alternative, and impacts would be expected to be less than significant.

#### **6.1.2.6 Geology and Soils**

Construction would be reduced as compared to the proposed project and operations would also occur at a reduced level. Potential impacts to geology and soils from the Reduced Project Alternative would be generally similar to those of the proposed project. Mitigation measures MM-GEO-1 through MM-GEO-3 would likely apply to the Reduced Project Alternative. Impacts would be expected to be less than significant.

#### **6.1.2.7 Greenhouse Gas Emissions**

Because construction would be reduced as compared to the proposed project, construction emissions under the Reduced Project Alternative would be less than those of the proposed project. Operationally, reducing throughput would reduce train and truck trips, which would reduce emissions. Mitigation measures MM-AQ-1 through MM-AQ-5 and MM-GHG-1 through MM-GHG-3 would likely apply to the Reduced Project Alternative. As shown in Table 28, throughput would two-thirds of proposed project levels. Emissions would exceed annual thresholds; therefore, emissions would also be considered significant and unavoidable for the Reduced Project Alternative.

#### **6.1.2.8 Hazards and Hazardous Materials**

Construction would be reduced as compared to the proposed project and operations would also occur at a reduced level. Remediation of Site 47 would still be completed under this alternative. Potential impacts to hazards and hazardous materials would be similar to the proposed project. Mitigation measures MM-HAZ-1, MM-HAZ-2, and MM-GEO-1 would likely apply to the Reduced Project Alternative. Impacts would be expected to be less than significant.

### **6.1.2.9 Hydrology and Water Quality**

Construction would be reduced as compared to the proposed project and operations would also occur at a reduced level. Potential impacts to hydrology and water quality from the Reduced Project Alternative would be generally similar to those of the proposed project. Mitigation measures MM-GEO-1, MM-GEO-3, MM-HAZ-1, and MM-HAZ-2 would likely apply to the Reduced Project Alternative. Impacts would be expected to be less than significant.

### **6.1.2.10 Noise and Vibration**

Construction would be reduced as compared to the proposed project and operations would also occur at a reduced level. Therefore, impacts would be expected to be slightly less than the proposed project in the long term and would be less than significant.

### **6.1.2.11 Transportation**

Because construction activities associated with the Reduced Project Alternative would be slightly less than the proposed project, impacts on transportation from construction would be expected to be reduced. While throughout would increase over baseline (albeit reduced as compared to the proposed project), trips would remain below the 100 net-new peak-hour trips. Impacts would be expected to be less than significant.

### **6.1.2.12 Tribal Cultural Resources**

Construction would be reduced as compared to the proposed project and operations would also occur at a reduced level. However, because the Reduced Project Alternative would also include disturbance of soil through direct removal, if archaeological materials or human remains that could be tribal cultural resources are present in previously undisturbed native sediments, they could potentially be disturbed during construction, which would constitute a potentially significant impact. Mitigation measure MM-CHR-1 would likely apply to the Reduced Project Alternative, which would be expected to reduce impacts to less-than-significant levels.

### **6.1.2.13 Utilities**

Construction would be reduced as compared to the proposed project, and operations would also occur at a reduced level. The Reduced Project Alternative would have similar impacts on utilities as the proposed project. Utilities impacts as part of the proposed project are anticipated to be less than significant. Similarly, impacts to utilities as part of the Reduced Project Alternative would also be anticipated to be less than significant.

## **6.1.3 *Alternative 3: Alternative Site Locations***

This alternative considers locating the proposed project at another site within the Port. This alternative will consider whether an available existing facility could be retrofitted to provide

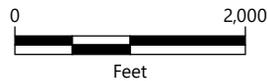
warehousing or a separate parcel of land could be developed to meet proposed project objectives. As part of this alternative, no remediation of Site 47 would occur, leaving contaminated soils in the project area.

No existing facility at the Port could be retrofitted to provide enough warehousing space to accommodate as much bulk material as proposed as part of this project. Figure 6 illustrates two vacant Alternative Site Locations on the West Complex that could be considered for this proposed project—Site A, depicted in orange, and Site B, depicted in yellow. Site B is slightly smaller than the proposed project; therefore, it would result in a smaller warehouse footprint than the proposed project. If it is determined that either of the alternative sites requires remediation, the regulatory process governing remediation would be completed specific to the selected site.

Construction and operation activities under the Alternative Site Locations would be similar to those of the proposed project. Therefore, Site A and Site B—the Alternative Site Locations—are analyzed in Sections 6.1.3.1 through 6.1.3.13 for impacts as has been done for the proposed project.



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**Figure 6**  
**Alternative Sites on the West Complex**  
Draft Environmental Impact Report  
TC NO. CAL. Development Warehousing and Distribution Facility Project

### **6.1.3.1 Aesthetics**

Similar to the proposed project, the Alternative Site Locations would cause construction and operations impacts. However, these sites, particularly Site A, would be closer to a recreational area (Burns Cutoff) and a residential receptor (located on the other side of Burns Cutoff across from Rough and Ready Island) than the proposed project. Therefore, Site A and Site B could result in more visual impacts than under the proposed project. Accordingly, while Site B may have a less-than-significant impact on aesthetics, Site A would be directly visible from Burns Cutoff, which would result in a significant impact on aesthetics.

### **6.1.3.2 Air Quality**

Because construction and operation activities under the Alternative Site Locations would be similar to the proposed project, construction emissions would be similar to those of the proposed project. Mitigation measures MM-AQ-1 through MM-AQ-5 would likely apply to the Alternative Site Locations. As with the proposed project, emissions would exceed annual thresholds; therefore, emissions would also be considered significant and unavoidable for the Alternative Site Locations.

### **6.1.3.3 Biological Resources**

Construction of the distribution facility would occur under both Alternative Site Location scenarios. As such, potential impacts to biological resources under the Alternative Site Locations would be similar to those of the proposed project—yet slightly increased based on their moderately improved habitat values and presence of additional jurisdictional waters—to the proposed project. Mitigation measures MM-BIO-1 through MM-BIO-4 would likely apply to the Alternative Site Locations, which would be expected to reduce impacts to less-than-significant levels.

### **6.1.3.4 Cultural and Historic Resources**

Similar to the proposed project, the Alternative Site Locations are not expected to encounter intact archaeological resources. However, because these alternative sites would also include disturbance of soil through direct removal, if archaeological materials are present in previously undisturbed native sediments, they could potentially be disturbed during construction, which would constitute a potentially significant impact. Mitigation measure MM-CHR-1 would likely apply to the Alternative Site Locations, which would be expected to reduce impacts to less-than-significant levels.

### **6.1.3.5 Energy**

The Alternative Site Locations would include construction and new operations similar to the proposed project. Operations at the distribution facility would use equipment that consumes fossil fuels and could increase energy consumption levels. Mitigation measure MM-GHG-1 would likely apply to the Alternative Site Locations, ensuring efficient consumption of resources and reducing the

proposed project's impacts to a less-than-significant level. Therefore, the impacts to energy would be considered less than significant for Site A and Site B.

#### **6.1.3.6 Geology and Soils**

Construction and operations would be similar to the proposed project level. Potential impacts to geology and soils from the Alternative Site Locations would be generally similar to those of the proposed project. Mitigation measures MM-GEO-1 through MM-GEO-3 would likely apply to the Alternative Site Locations. Impacts would be expected to be less than significant.

#### **6.1.3.7 Greenhouse Gas Emissions**

Because construction and operation activities under the Alternative Site Locations would be similar to the proposed project, construction emissions would be similar to those of the proposed project. Mitigation measures MM-AQ-1 through MM-AQ-5 and MM-GHG-1 through MM-GHG-3 would likely apply to the Alternative Site Locations. As with the proposed project, emissions would exceed annual thresholds; therefore, emissions would also be considered significant and unavoidable for the Alternative Site Locations.

#### **6.1.3.8 Hazards and Hazardous Materials**

Construction and operation activities under the Alternative Site Locations would be similar to those of the proposed project. Potential impacts from hazards and hazardous materials are similar to the proposed project. Mitigation measures MM-HAZ-1, MM-HAZ-2, and MM-GEO-1 would likely apply to the Alternative Site Locations. If an alternative site is chosen and remediation is required, remedial activities would occur to prevent the release of contaminants into the environment. Impacts would be expected to be less than significant.

#### **6.1.3.9 Hydrology and Water Quality**

Because construction and operation activities under the Alternative Site Locations would be similar as compared to the proposed project, potential impacts to hydrology and water quality from the Alternative Site Locations would be generally similar to those of the proposed project. However, Site A has a long border adjacent to Burns Cutoff, which could increase the complexity of water quality management considerations for this Alternative Site Location. Mitigation measures MM-GEO-1, MM-GEO-3, MM-HAZ-1, and MM-HAZ-2 would likely apply to the Alternative Site Locations. Impacts would be expected to be less than significant.

#### **6.1.3.10 Noise and Vibration**

Because construction and operation activities under the Alternative Site Locations would be similar as compared to the proposed project, potential impacts to noise and vibration from the Alternative Site Locations would be generally similar to those of the proposed project. Both sites, particularly Site A, would be closer to Burns Cutoff (a recreational sensitive receptor) and a residential receptor

across Burns Cutoff than the proposed project and thus could result in more noise and vibration impacts than the proposed project. Accordingly, while Site B may have a less-than-significant impact on noise and vibration, Site A would be in close proximity to two sensitive receptors, which could potentially result in a significant noise and vibration impact.

#### **6.1.3.11 Transportation**

Because construction and operation activities under the Alternative Site Locations would be similar as compared to the proposed project, potential impacts to transportation from the Alternative Site Locations would be generally similar to those of the proposed project. Mitigation measures MM-TRA-1 through MM-TRA-3 would likely apply to the Alternative Site Locations, and impacts would be expected to be significant.

#### **6.1.3.12 Tribal Cultural Resources**

Because construction and operation activities under the Alternative Site Locations would be similar as compared to the proposed project, potential impacts to tribal cultural resources from the Alternative Site Locations would be generally similar to those of the proposed project. If archaeological materials or human remains that could be tribal cultural resources are present in previously undisturbed native sediments, those materials or remains could potentially be disturbed during construction, which would constitute a potentially significant impact. Mitigation measure MM-CHR-1 would likely apply to the Alternative Site Locations, which would be expected to reduce impacts to less-than-significant levels.

#### **6.1.3.13 Utilities**

Because construction and operation activities under the Alternative Site Locations would be similar as compared to the proposed project, potential impacts to utilities from the Alternative Site Locations would be generally similar to those of the proposed project. Impacts to utilities as part of the Alternative Site Locations would also be anticipated to be less than significant.

### **6.2 Comparison of Alternatives**

Table 29 provides a summary comparison of the potential environmental impacts after implementation of mitigation measures resulting from the proposed project and alternatives relative to the topics analyzed in this DEIR. As shown, the proposed project would result in greater impacts than the No Project Alternative, Reduced Project Alternative, and would result in lesser impacts than the Alternative Site Locations A and B. The Reduced Project Alternative would not meet the Project Objective of providing a modern warehouse for existing logistical needs. Additionally, the footprint of Alternative Site Location B would be slightly smaller than the proposed project, and therefore would not be able to sustain the projected demand on bulk product distribution.

**Table 29  
Comparison of Potential Impacts from Proposed Project and Alternatives (with Incorporation of Mitigation)**

<b>Resource</b>	<b>Proposed Project</b>	<b>Alternative 1: No Project Alternative</b>	<b>Alternative 2: Reduced Project Alternative</b>	<b>Alternative 3: Alternative Site Locations (Site A)</b>	<b>Alternative 3: Alternative Site Locations (Site B)</b>
<b>Aesthetics</b>	Less-than-significant Impact	No Impact	Less-than-significant Impact	Significant and Unavoidable Impact	Less-than-significant Impact
<b>Air Quality</b>	Less-than-significant Impact	Less-than-significant Impact	Less-than-significant Impact	Significant and Unavoidable Impact	Significant and Unavoidable Impact
<b>Biological Resources</b>	Less-than-significant Impact	No Impact	Less-than-significant Impact	Less-than-significant Impact	Less-than-significant Impact
<b>Cultural Resources</b>	Less-than-significant Impact	No Impact	Less-than-significant Impact	Less-than-significant Impact	Less-than-significant Impact
<b>Energy</b>	Less-than-significant Impact	Less-than-significant Impact	Less-than-significant Impact	Less-than-significant Impact	Less-than-significant Impact
<b>Geology and Soils</b>	Less-than-significant Impact	No Impact	Less-than-significant Impact	Less-than-significant Impact	Less-than-significant Impact
<b>GHG Emissions</b>	Significant and Unavoidable Impact	Less-than-significant Impact	Significant and Unavoidable Impact	Significant and Unavoidable Impact	Significant and Unavoidable Impact
<b>Hazards and Hazardous Materials</b>	Less-than-significant Impact	Less-than-significant Impact	Less-than-significant Impact	Less-than-significant Impact	Significant and Unavoidable Impact
<b>Hydrology and Water Quality</b>	Less-than-significant Impact	No Impact	Less-than-significant Impact	Less-than-significant Impact	Less-than-significant Impact
<b>Noise</b>	Less-than-significant Impact	Less-than-significant Impact	Less-than-significant Impact	Significant and Unavoidable Impact	Less-than-significant Impact
<b>Transportation</b>	Significant and Unavoidable Impact	Less-than-significant Impact	Less-than-significant Impact	Significant and Unavoidable Impact	Significant and Unavoidable Impact
<b>Tribal Cultural Resources</b>	Less-than-significant Impact	No Impact	Less-than-significant Impact	Less-than-significant Impact	Less-than-significant Impact
<b>Utilities</b>	Less-than-significant Impact	No Impact	Less-than-significant Impact	Less-than-significant Impact	Less-than-significant Impact

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