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ENVIRONMENTAL ASSESSMENT FOR REAL PROPERTY MASTER PLAN ACTIVITIES AT MILITARY OCEAN TERMINAL CONCORD, CONTRA COSTA COUNTY, CALIFORNIA

SEPTEMBER 2025

DRAFT ENVIRONMENTAL ASSESSMENT
FOR REAL PROPERTY MASTER PLAN ACTIVITIES AT
MILITARY OCEAN TERMINAL CONCORD, CA

Proponent: Military Ocean Terminal Concord

NEPA Lead Agency: Surface Deployment and Distribution Command (SDDC) at the Military Ocean Terminal Concord

CERTIFICATION

The United States Army's Military Surface Deployment and Distribution Command has considered the factors mandated by the National Environmental Policy Act (NEPA) and certifies that the Environmental Assessment for Real Property Master Plan Activities at Military Ocean Terminal Concord (MOTCO) represents a good faith effort to prioritize documentation of the most important considerations required by the statute within the congressionally mandated page limits and this prioritization reflects United States Army expert judgement; and any considerations addressed briefly or left unaddressed are, in the United States Army's judgment, comparatively not of a substantive nature that meaningfully informed the consideration of environmental effects and the resulting decision on how to proceed.

_____ _____

Date

Kelsey Lamer
NEPA Program Manager
Military Ocean Terminal Concord

APPROVAL

This Environmental Assessment for Real Property Master Plan Activities at MOTCO was prepared in accordance with NEPA of 1969, as amended (42 United States Code [U.S.C.] sections 4321 et seq.) and the Department of Defense NEPA Implementing Procedures.

_____ _____

Date

James M. Smith
Major General
Commanding General (Acting)
U.S. Army Installation Management Command

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1.0 INTRODUCTION

The United States (U.S.) Army's Military Surface Deployment and Distribution Command (SDDC) proposes to implement mission-essential facility and infrastructure upgrades at Military Ocean Terminal Concord (MOTCO) in northern California. This Environmental Assessment (EA) evaluates the potential environmental and socioeconomic effects of construction, operation, and maintenance of specific facility modernization projects identified during the installation's master planning process. The Army has planned and prepared this EA in accordance with master plan and National Environmental Policy Act (NEPA) regulatory and analytical timelines. Thus, this EA is focused on specific master plan implementation actions that are currently planned or programmed to occur from approximately fiscal year (FY) 2027 to FY 2030 (FY27–FY30) that have not yet been evaluated or begun analysis under NEPA. In addition, the EA provides a programmatic analysis of the effects of implementing more broadly defined real property maintenance, repair, upgrade, and development actions that are still in the concept phase.

The Army has prepared this EA in accordance with requirements of NEPA (Title 42 of the United States Code [U.S.C.] section 4321 et seq.) and the Department of Defense (DoD) NEPA Implementing Procedures (DoD 2025a). The Army is the lead agency for the Proposed Action and there are no cooperating agencies.

1.1 INSTALLATION DESCRIPTION AND MASTER PLAN BACKGROUND

MOTCO is a 4,312-acre installation located in the east San Francisco Bay region of California, approximately 40 nautical miles inland past the Carquinez Strait that connects Suisun Bay to San Pablo Bay (**Figure 1.1-1**). Approximately one-third of the installation's total land area (2,045 acres) is situated on seven offshore islands in the bay. MOTCO is SDDC's munitions and general cargo transshipment facility operated by the Army's 834th Transportation Battalion (834th Trans BN). Installation management oversite of MOTCO is under the Army's land holding command of U.S. Army Installation Management Command (IMCOM). The SDDC and IMCOM are subordinate commands to the U.S. Army Materiel Command (AMC).

Facility modernization requirements at MOTCO are identified to meet mission requirements and are evaluated and prioritized during the master planning process. Within the framework of the installation master planning process, as defined in Unified Facilities Criteria (UFC) 2-100-01 (DoD 2025b), an Area Development Plan (ADP) provides a comprehensive strategy for responsible development of an installation in logical planning phases.

MOTCO's ADPs support and update previous real property master plan documents and are addressed in two geographically separate planning districts: the 4,197-acre Mission District and the approximately 115-acre Administrative District (**Figure 1.1-1**). The ADPs are living documents and updated through MOTCO's Installation Planning Board (IPB) and SDDC's Executive Plan Review Board (EPRB). Projects are added, modified, removed, and re-prioritized as needed in response to changing mission needs and funding availability.

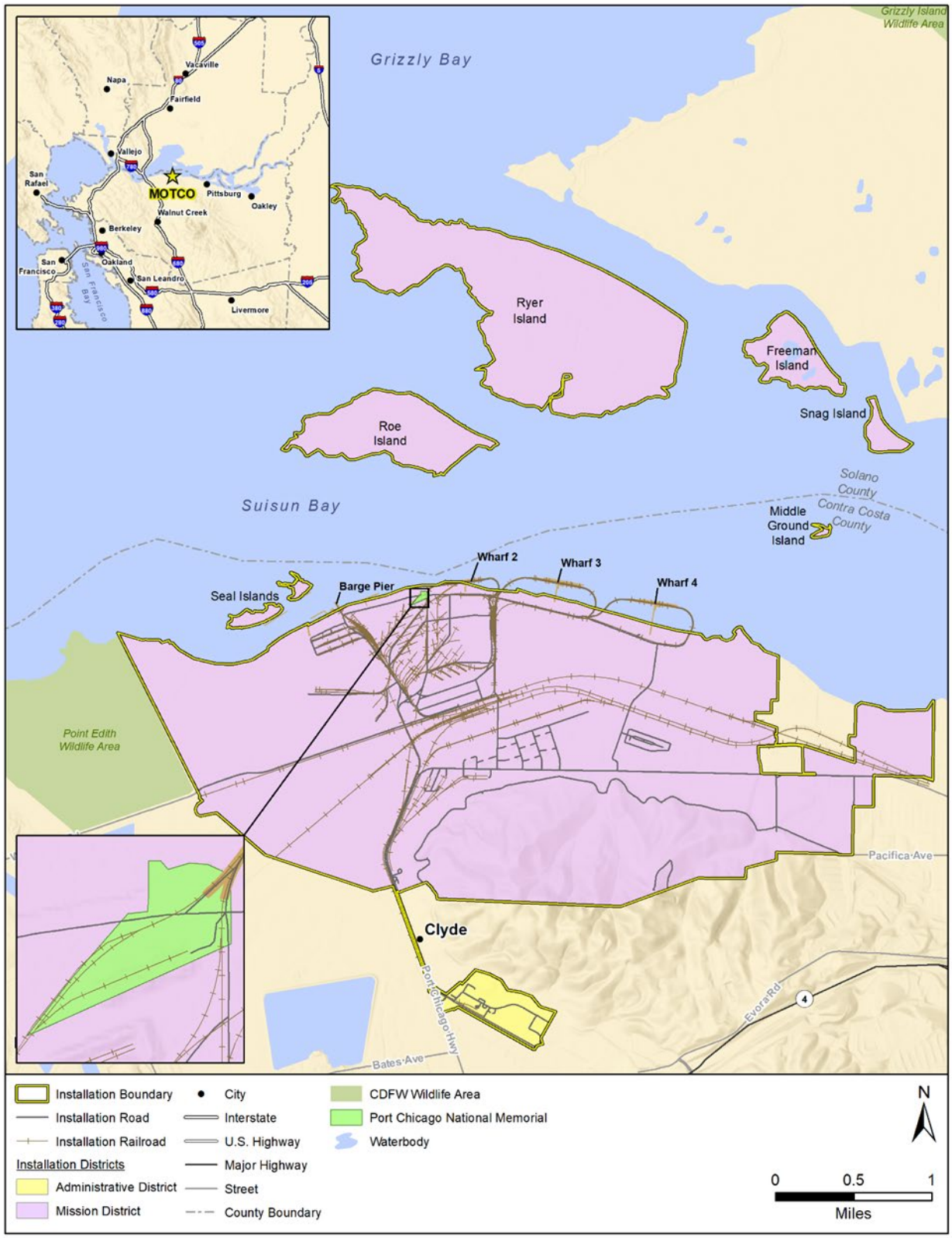


Figure 1.1-1 MOTCO Location and Districts

1.2 PURPOSE OF AND NEED FOR THE PROPOSED ACTION

The purpose of the Proposed Action is to comply with and implement the DoD/Army real property master planning process for MOTCO in accordance with DoD Instruction 4165.70, *Real Property Management* and the requirements and guidance of UFC 2-100-01, *Installation Master Planning* (DoD 2025b). The need for the Proposed Action is to address MOTCO's real property deficiencies, shortcomings, and suboptimal facility conditions and provide modern, efficient, flexible, safe, and sustainable facilities to meet current and future mission requirements. The proposed facility and infrastructure upgrade projects evaluated in this EA would comply with federal, DoD, and Army standards pertaining to safety, security, environmental compliance, and operational efficiency. **Table 1.2-1** provides the need for each of the components of the Proposed Action, which are described in further detail in **Section 2.4**. Without the implementation of the Proposed Action, mission effectiveness would continue to be impeded by these deficiencies and be further compounded over time.

Table 1.2-1 Need for the Proposed Action

Project No.	Project Description	Need	Area Disturbed (acre)[1]	Proposed Year Start
Administrative District				
1	**Construct New Vehicle and Pedestrian Transportation Infrastructure in the Administrative District**	• Reduce costs associated with off-installation fueling. • Improve vehicle and pedestrian safety. • Modernize and meet electrical vehicle charging station needs.	**<3**	**FY27–FY30**
	1A: Construct Logistics Readiness Center Parking Lot and Fuel Point		<1	FY29
	1B: Install and Repair Sidewalks		<1	FY27
	1C: Install Electric Vehicle Charging Stations		<1	FY30
2	**Construct Access Control Point #2 Bypass Road**	• Address logistical shortfalls in transportation network connecting the Administrative and Mission Districts, to eliminate off-installation travel and associated access control burden.	**5**	**FY30**
3	**Building 635 Parking Lot Expansion**	• Address deficiency regarding lack of dedicated parking for this building.	**2**	**FY27**
4	**Mt Diablo Creek Flood Control**	• Address flooding issues which impact base security and access.	**1**	**FY29**
Mission District				
5	**Wastewater System Repairs and Improvements**	• Address deficiencies in aging infrastructure.	**1**	**FY30**
6	**Convert Lot #1 Ammunition Transfer Area to Staging and Marshalling**	• Improve operational efficiencies due to lacking infrastructure in closer proximity to the active wharves.	**12**	**FY27**

Project No.	Project Description	Need	Area Disturbed (acre)[1]	Proposed Year Start
7	**Construct Organizational Parking for MHE**	• Address deficiency of lacking dedicated MHE parking.	**17**	**FY29**
8	**Construct Perimeter Road and Fencing**	• Provide additional physical security critical to the safety of MOTCO personnel and property.	**11**	**FY27**
9	**Modernize Rail Infrastructure**	• Increase safety and efficiency of the MOTCO rail system, including easing of existing rail curvature, improvements/additions to rail interchanges and track/operational area connections, and related actions to meet standards of modern locomotives and railcars.	**32**	**FY27–FY30**
	9A: Repair Industrial Lead Connection to Union Pacific Line		<1	FY27
	9B: Construct Railcar Inspection Stations		1	FY30
	9C: Expand Class Yard 1		3	FY27
	9D: Demolish/Repair Railroad Tracks – Rail Barricaded Sidings Area		22	FY28
	9E: Construct Curve B347		2	FY27
	9F: Construct New Rail Along Waterfront Road		3	FY29
10	**Construct the Network Enterprise Center**	• Meet IT requirements and facility deficiencies with a modern facility.	**9**	**FY29**
11	**Repair/Renovate Buildings 542, 605, 607, 608, 177**	• Address deficiencies in buildings and improve useability and function.	**1**	**FY29**

Note: [1]Area of Disturbance is the maximum estimated area of disturbance that could occur from the Proposed Action based on the planning completed to date.

Legend: < = less than; FY = Fiscal Year; IT = Information Technology; MHE = Materiel Handling Equipment; MOTCO = Military Ocean Terminal Concord

1.3 SCOPE OF ENVIRONMENTAL ANALYSIS

This EA incorporates by reference the analysis contained within the 2020 *Programmatic Environmental Assessment (PEA) for Real Property Master Plans on U.S. Army Installation Management Command Installations*, and that PEA's resulting Finding of No Significant Impact (FONSI).

This EA includes an evaluation of the short- and long-term effects to the environment of implementing the Proposed Action and informs decisionmakers and the public of the potential environmental and socioeconomic effects. None of the proposed project components of the Proposed Action (**Table 1.2-1 and Section 2.4**) would be implemented without the appropriate NEPA analysis and review. As planning and design details evolve, additional NEPA analysis (either a Record of Environmental Consideration [REC] to document use of an Army applied categorical exclusion or Supplemental EA) may be tiered from this EA (see **Appendix C**).

Resources evaluated in this EA include: Air Quality, Geological and Soil Resources, Water Resources, Biological Resources, Cultural Resources, Hazardous and Toxic Materials and Waste, Land Use and Coastal Zone Management, Utilities and Service Systems, and Safety.

1.4 DECISION TO BE MADE

As a result of the EA process, the Army plans to select one of the alternatives analyzed in this EA, enabling a decision informed by knowledge of anticipated environmental and socioeconomic effects, and the public's concerns. The decision will be documented in a FONSI or publication of a notice of intent to prepare an Environmental Impact Statement (EIS).

1.5 REGULATORY FRAMEWORK

In accordance with Army NEPA implementing policy and guidance, the Army determined that the federal, state, and local regulations; laws; and Executive Orders (EOs) listed in **Appendix F** are potentially applicable to the Proposed Action.

1.6 PUBLIC AND AGENCY INVOLVEMENT

The Army invites and strongly encourages public participation in the NEPA process. Consideration of the views and information of all interested parties promotes open communication and enables better decision-making. The Army specifically requests all agencies, organizations, Tribes, and members of the public with a potential interest in the Proposed Action to participate in the decision-making process.

The 30-day public comment period for this EA and a draft FONSI and draft Finding of No Practicable Alternative (FONPA) started with the publication of a notice of availability (NOA) in the *East Bay Times* on September 20, 2025, and September 22, 2025. The documents were also made available for public review at the Concord Public Library, 2900 Salvio Street, Concord, California 94519; the Bay Point Library, 205 Pacifica Avenue, Bay Point, California 94565; and online at https://www.sddc.army.mil/SitePages/Environmental%20Programs.aspx. Comments submitted by October 23, 2025, will be considered during preparation of the Final EA and in any subsequent decisions.

Through the public involvement process, the Army coordinated with relevant federal, state, and local agencies and Tribes and notified them and the public of the Proposed Action. Based on potential impacts to resource areas and as required by federal environmental laws and regulations, the Army initiated consultation with the following organizations:

- U.S. Fish and Wildlife Service (USFWS)
- California State Historic Preservation Office (SHPO)
- Bay Conservation and Development Commission (BCDC)
- Tribes

Following the public comment period, a summary of public and agency correspondence and comments received will be added to **Appendix A**.

2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

The Proposed Action is to construct, operate, and maintain real property projects currently planned for implementation in FY27–FY30. The timeline for implementation is based on the current government funding targets. Changes in prioritization and fluctuations in funding availability could impact the timelines, but this would not affect meaningful and timely NEPA analysis to inform the Army's decision. The individual projects are listed in **Section 1.0, Table 1.2-1** and discussed further in **Section 2.4.**

2.2 ALIGNMENT OF MASTER PLANNING AND NEPA ALTERNATIVES ANALYSIS

Both UFC 2-100-01 and the DoD NEPA Implementing Procedures were used for incorporating master planning alternatives development into the NEPA process. Aligning the development of master planning and NEPA alternatives streamlines the planning process and allows for the exploration of alternatives in a comprehensive and multidisciplinary manner while avoiding inefficiencies. During the planning process, three distinct ADP alternatives were evaluated and ranked from most to least effective and evaluated for areas of strengths and weaknesses. The ADP Full Implementation Alternative (Preferred Alternative) was prepared as a hybrid alternative that incorporated the most favorable elements of all three alternatives, allowing MOTCO the flexibility to meet both sustainment and contingency missions and provide a network of modern and resilient real property assets that would ensure workplace safety and process efficiency.

2.3 NEPA REASONABLE RANGE OF ALTERNATIVES

For NEPA alternatives to be considered reasonable and warrant further detailed analysis, they must meet the purpose of and need for the Proposed Action. The following screening factors were considered when identifying a reasonable range of alternatives:

- **Mission Compatibility:** Alternatives must allow for MOTCO to accomplish the mission effectively and efficiently.
- **Short- and Long-Range Real Property Needs:** Alternatives must consider the goals of the long-term (20-year) planning horizon, while also responding to current and short-range missions and requirements in a manner that is consistent with the master plan.
- **Cost Efficiency/Financial Stewardship:** Alternatives must be practical and feasible from a technical and economic standpoint and identify opportunities for reduced life-cycle costs of real estate assets and reduction in energy and water consumption, air emissions, and waste generation.

2.4 ALTERNATIVES CARRIED FORWARD FOR ANALYSIS

2.4.1 Full Implementation Alternative (Preferred Alternative)

Under this Alternative, MOTCO would execute the complete list of projects described below. The timeline for implementation presented herein is based on the targeted government FY for funding at the time the ADP was approved. Changes in priorities and fluctuations in the availability of funding may affect the final implementation timeline but are not expected to affect the NEPA analysis and its ability to inform the Army's decision making. The timing of any potential environmental effects typically lags

the funding year as meaningful actions (e.g., site clearing, construction) would normally occur in the following calendar year and continue throughout the anticipated project implementation timeline. **Table 1.2-1** lists the specific ADP projects to be evaluated in this EA. **Figure 2.4-1** shows the project locations at MOTCO and **Appendix H** contains figures showing detailed project locations.

2.4.1.1 Administrative District Projects

Project 1A: Construct Logistics Readiness Center Parking Lot and Fuel Point

Under the Proposed Action, the Army would upgrade and pave an existing 2,650-square yard (SY) gravel parking area and construct a fuel point that would be co-located in the parking area. An existing 450-square foot (SF) canopy would be reinstalled as part of the secondary containment system for the fuel point. Three aboveground storage tanks would be installed, one each for gasoline, diesel fuel, and diesel exhaust fluid. The fueling facilities would be secured with approximately 750 linear feet (LF) of added perimeter fencing and two vehicle gates. No facilities would be demolished as part of this project and no site clearing is required. The proposed construction components of the fuel point and parking lot are shown in **Appendix H, Figure H-1.** Constructing a fuel point at MOTCO would remove the need to drive vehicles outside the installation to fuel them at commercial fueling stations and at a higher cost. Construction is estimated to begin in FY29.

Project 1B: Install and Repair Sidewalks

Concrete sidewalks would be constructed and repaired in the Administrative District. Approximately 6,000 LF of sidewalk would be constructed on both sides of A Street and both sides of Coyote Street, as shown in **Appendix H, Figure H-1**. An additional 3,000 LF would be installed along Kinney Boulevard. Existing sidewalks would be repaired as necessary to comply with Americans with Disabilities Act requirements. Construction and repairs are estimated to begin in FY27.

Project 1C: Install Electric Vehicle Charging Stations

Six electric vehicle charging stations would be installed at MOTCO and tied into the installation's electrical grid. Five of the stations would be installed in the Administrative District and one nearby at the entrance to the Mission District. The proposed charging station locations are shown in **Appendix H, Figure H-1**. Three stations would be installed at the location shown in the top left of the figure, while one station each would be installed at the other three locations. All stations would be installed on previously paved parking lots but could require minimal trenching to connect each of the charging stations to the existing electrical utility lines. Existing electrical conduits would be used if available and proximate to the charging station locations. Construction is estimated to begin in FY30.

Project 2: Construct Access Control Point #2 Bypass Road

This project includes the construction of an asphalt-paved, two-lane road connecting the Administrative District and Mission District of MOTCO following the route of the existing Contra Costa Water District canal access road, as shown in **Appendix H, Figure H-2**. Lighting would be required along the route in accordance with UFC requirements. The minimal traffic load that is currently carried on MOTCO roads would be redirected to this road. Construction is estimated to include approximately 13,100 SY of asphalt pavement beginning in FY30.

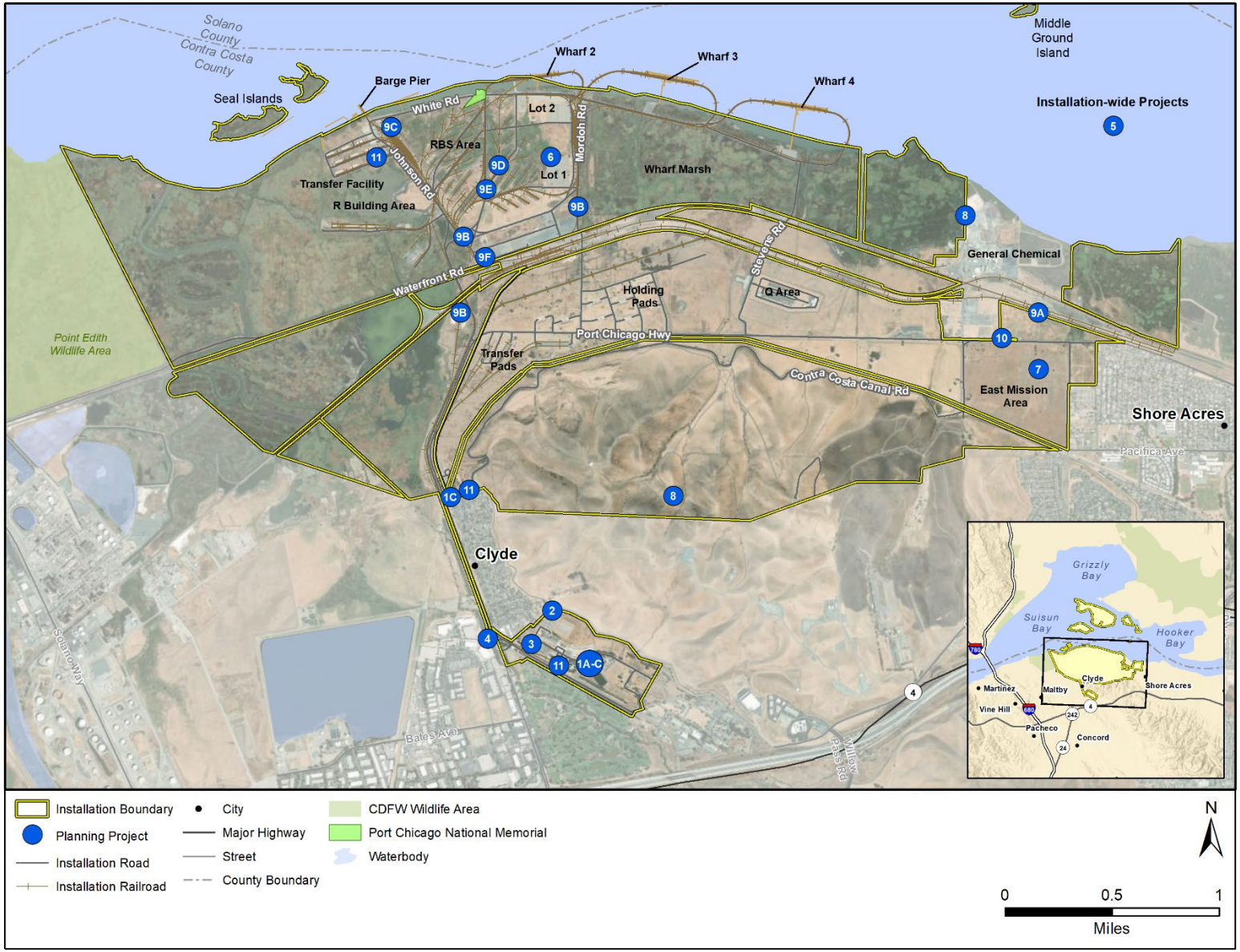


Figure 2.4-1 Project Locations

Project 3: Building 635 Parking Lot Expansion

This project would expand existing pavement at Building 635 for additional parking, as shown in **Appendix H, Figure H-2**. The building parking lot was never constructed, though it was part of the original design and plans. There is not current parking capacity for the personnel that work in this building. An approximately 33,000 SF parking lot would be constructed. Construction is estimated to begin in FY27.

Project 4: Mt Diablo Creek Flood Control (Programmatic)

This project would address flooding issues associated with Mt Diablo Creek. Currently, during high rain events, the storm surge floods Port Chicago Highway at both MOTCO access control points preventing access to both districts of the base. The proposed flood control project would channelize approximately 2,400 LF of creek along Port Chicago Highway (**Appendix H, Figure H-2**) to ensure proper drainage and to prevent flooding during storm surges. Construction is estimated to begin in FY29.

2.4.1.2 Mission District Projects

Project 5: Wastewater System Repairs and Improvements

This proposed project would require improvements and repairs to the wastewater system throughout the Mission District. The wastewater system would be either slip lined or epoxy coated to correct current deficiencies in the wastewater system. Any manholes that are found to be leaking would be rebuilt. Wastewater system improvements are estimated to begin in FY30.

Project 6: Convert Lot #1 Ammunition Transfer Area to Staging and Marshalling

Project 6, shown in **Appendix H, Figure H-3**, would involve installation of a new western access road to Lot #1, and installation of two side-by-side rails along a newly constructed holding pad near the southern portion of the lot. Construction would involve full-depth replacement of and conversion of approximately 19,000 SY of Lot #1 Open Storage Area to paved transfer pad space. Construction would add approximately 7,300 SY of pavement, fencing, a catenary lightning protection system, 3,330 LF of rail lines and switches, and 1,900 SY of structural fill. This project would also include potential munitions and explosives of concern (MEC) or unexploded ordnance (UXO) clearing. Construction is estimated to begin in FY27. Post construction, Lot #1 would support locomotive/rail operations, container handlers, and possibly forklifts. Creating a transfer area would provide a location on the north side of the commercial rail line to load/unload rail cars and provide some container storage that is closer to the active wharves.

Project 7: Construct Organizational Parking for MHE

Materiel Handling Equipment (MHE) dedicated parking does not currently exist at MOTCO. The proposed project, shown in **Appendix H, Figure H-3**, would involve construction of a motor pool; approximately 900 LF of road redevelopment; approximately 2,400 LF of new paved access roadway; bridging along Nichols Creek; a dispatch facility; and a fuel point, wash rack, fencing, and supporting utilities to the site. Approximately 19,000 SY would be paved for the parking area. Construction is estimated to begin in FY29.

Project 8: Construct Perimeter Road and Fencing

This project would include the construction of an exterior perimeter fence and road to provide security forces with the ability to drive the distance of the new fence line. The new perimeter road would only be constructed to follow the new fence that would be installed at the southern boundary of the Mission District. This project would include installation of approximately 19,000 LF of proposed exterior perimeter fencing and 19,000

LF of associated dirt roadway, as shown in **Appendix H, Figure H-4**. The perimeter road would be a dirt, one-lane road similar to other fire roads on the installation and located on undisturbed land. Grading would be required to establish an even roadbed and appropriate drainage. Construction is estimated to begin in FY27. Post-construction, the road would be maintained on an as needed basis.

Project 9A: Repair Industrial Lead Connection to Union Pacific (UP) Line

This project would repair approximately 1.4 miles of an existing lead connection rail UP line. The lead connection repair project location is shown in **Appendix H, Figure H-5**. Old rail would be replaced in previously disturbed areas. The improvements would provide a safer and more efficient way to receive ammunition from commercial rail systems. Construction is estimated to begin in FY27.

Project 9B: Construct Railcar Inspection Stations

This proposed project would install a camera-based inspection station at three locations in the Mission District to visually inspect the bottom, top, and sides of all railcars entering MOTCO. **Appendix H, Figure H-6** shows an example of the type of inspection station that is proposed. The cameras for the underside inspection of the railcar would be low profile, sitting between the rails, and would be barely noticeable (as shown in the left photo in **Appendix H, Figure H-6**). For the side and top railcar inspection, the cameras would likely be pole mounted. The photo on the right side of **Appendix H, Figure H-6** shows an example of the largest pole mount infrastructure that could be used. Since MOTCO is part of a U.S. Army Corps of Engineers (USACE) pilot program for railcar inspection stations, the pole mounting of cameras is expected to be much smaller in size as the efficacy of smaller mounts with newer camera technologies are proven in the pilot program. Minor digging would be needed to install the camera pole mount footings. Construction is estimated to begin in FY30.

Project 9C: Expand Class Yard 1

This project would expand Class Yard 1 as shown in **Appendix H, Figure H-7**. The expansion would require demolition of three adjacent building foundations to make way for new track. The class yard expansion would allow the yard to be worked by two train crews at the same time and allow MOTCO to handle incoming cargo more effectively. Class Yard 1 would continue to function during construction so that only one half of the yard would be out-of-service at any time. It also includes new curves to connect Class Yard 1 with adjacent operational areas. Construction is estimated to begin in FY27.

Project 9D: Demolish/Repair Railroad Tracks–Rail Barricaded Sidings (RBS) Area

This project would modernize the existing rail loop in the Mission District with track that is navigable for modern railcars. The location of the track that would be repaired is shown in **Appendix H, Figure H-7**. A total of approximately 17,000 LF of existing railroad track would be repaired. The project would involve the demolition of approximately 5,000 LF of railroad tracks, as well as the removal of four soil barricades/revetments and up to 5,200 SF of earth-covered ammunition magazines.

This project would primarily be executed on existing developed land. Most of the rail would be installed in the path of current existing railbeds. The additional new track would be installed on previously developed land and would require some demolition and site preparation. Construction is estimated to begin in FY28.

Multiple existing assets would be demolished or placed into “caretaker” status as part of this project. **Appendix H, Figure H-7** shows the extent of the Port Chicago Naval

Magazine National Memorial, operated by the National Park Service (NPS). The NPS has proposed to expand the Memorial exhibit to include an additional three barricades that would be preserved, as shown in **Appendix H, Figure H-7**.

Project 9E: Construct Curve B347

This project would include the construction of 1,000 LF of rail curve. Curve B347 (see **Appendix H, Figure H-7**) would allow rail traffic in the Mission District to move from Class Yard 1 to Class Yard 2 without having to stop, reverse, and flip switches. Constructing this curve would provide a continuous loop around the terminal which would help to increase throughput. Construction is estimated to begin in FY27.

Project 9F: Construct New Rail Along Waterfront Road

A new rail curve would be constructed along Waterfront Road in the Mission District as shown in **Appendix H, Figure H-7**. The approximately 3,200 LF of new rail would be constructed on previously disturbed areas and would create a southern loop of rail within the RBS area so that railcars can access Lot #1 Transfer Area without having to briefly exit MOTCO and use the UP rail. Construction is estimated to begin in FY27.

Project 10: Construct the Network Enterprise Center

This project includes the construction of an approximately 7,845 SF Network Enterprise Center facility with associated organizational parking in the eastern portion of the Mission District, as shown in **Appendix H, Figure H-8**. Proposed supporting facilities include site development, utilities and connections, lighting, paving, walkways, storm drainage, information systems, landscaping, and signage. Construction is estimated to begin in FY29.

Project 11: Repair/Renovate Buildings 542, 605, 607, 608, 177

This project includes repairs and renovations to Buildings 542, 605, 607, 608, and 177 (**Appendix H, Figure H-9**). These aging buildings require improvements for usability and function. All repairs and renovations would be interior improvements. These improvements are estimated to begin in FY29.

2.4.2 Partial Implementation Alternative

The Partial Implementation Alternative is a subset of activities included in the Full Implementation Alternative, with the difference being that the Partial Implementation Alternative would not implement Project 4 (Mt Diablo Flood Control). Although the Partial Implementation Alternative would not address all requirements as comprehensively as the Full Implementation Alternative, it would substantially improve conditions and adequately address immediate installation needs in a manner consistent with the Full Implementation Alternative.

2.4.3 No Action Alternative

Under the No Action Alternative, MOTCO would not implement the proposed real property master plan activities/projects. Existing facilities would continue to be maintained as specified under the *PEA for Routine Maintenance and Repair at MOTCO* or, if not currently being maintained, would continue to deteriorate, and could become unusable, all of which would impede mission effectiveness. Construction of new facilities would not be executed and MOTCO would be unable to fully meet mission requirements. The No Action Alternative would not satisfy the purpose of or need for the Proposed Action but is evaluated in this EA per the requirements of the DoD NEPA Implementing Procedures.

2.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER ANALYSIS

The MOTCO ADP analysis included development and evaluation of alternative courses of action, which are detailed below.

- ADP Alternative 1 focused on maximizing long-term resiliency at MOTCO based on a 3-foot sea level rise scenario. Consideration was given to protecting or relocating mission-critical assets to ensure continuity of operations. Current and anticipated flooding threats were evaluated, and mitigation measures were proposed where appropriate.
- ADP Alternative 2 focused on the theme of maximizing reutilization of existing facilities and structures based on current ammunition throughput requirements at MOTCO (limited new construction).
- ADP Alternative 3 examined a long-term development scenario focused on expanding MOTCO's footprint and throughput capabilities within an unconstrained environment.

During the ADP process, these alternatives were analyzed and screened per the factors presented in **Section 2.2**. This early consideration and elimination of alternative development scenarios from the reasonable range of alternatives under NEPA is consistent with the guidance for early integration, alignment, and streamlining of planning process (specifically UFC 2-100-01 Sections 3-6.1.3.4 and the DoD NEPA Implementing Procedures).

3.0 EXISTING CONDITIONS AND ENVIRONMENTAL CONSEQUENCES

This chapter presents relevant general baseline conditions, focusing on specific aspects of the environment that may be affected by the alternatives. This chapter also presents an analysis of the potential direct effects of each alternative on the affected environment.

3.1 RESOURCES ELIMINATED FROM DETAILED CONSIDERATION

NEPA regulations indicate that the lead agency should identify and eliminate from detailed study the issues that are not important or that have been covered by prior environmental review, narrowing the discussion of these issues in the document to a brief presentation of why they would not have a significant effect on the human or natural environment. The potential effects to the following resource areas are considered negligible so they were not analyzed in detail in this EA:

Socioeconomics. Socioeconomics refers to the economic effects of a proposed action generally in terms of population, employment, and housing conditions. The Proposed Action does not include any changes to personnel or economic output and does not affect housing demand. Demolition and construction associated with implementing the Proposed Action could result in the temporary minor increase of jobs within the project area. All projects would occur within the installation boundary, except for the Mt Diablo Creek Flood Control Project. This project is covered programmatically in this EA and socioeconomic impacts from this project would be included in subsequent required NEPA analysis.

Transportation and Traffic. Transportation refers to roadways, parking, and rail. Any long-term changes to existing roadways associated with the Proposed Action involve updates to pavement or improvements of access ways. There are no changes proposed to the road network outside the installation. Transportation and traffic associated with proposed construction and demolition activities would be short term and intermittent. Improvements to existing rail would increase the efficiency of cargo operations within the Mission District. Construction and demolition activities would be expected to result in increased heavy vehicle traffic as well as construction and demolition crew commuting traffic that may impact level of service on some roadways or intersections. These impacts would be temporary and intermittent. Best Management Practices (BMPs) would be employed to minimize on- and off-installation disruptions. Once implemented, the Proposed Action would continue similar traffic generating activities already underway at MOTCO and improve rail efficiency on the base.

Noise. Noise generated at MOTCO is associated with operations of an active cargo terminal with heavy equipment use. Noise associated with proposed construction activities would be short term and intermittent. Project activities would take place within the installation's boundary and no sensitive noise receptors are known to exist within 1 mile of the project areas except for the Mt Diablo Creek Flood Control Project. This project is covered programmatically in this EA and noise impacts from this project would be included in subsequent required NEPA analysis. Once implemented, the Proposed Action would continue similar noise-generating activities already underway at MOTCO.

Visual. All projects associated with the Proposed Action would be within industrial areas characterized by industrial and mission-related functions. New construction would

be consistent with Installation Planning Standards for building, street, and landscaping aesthetics. There are no unique visual resources within the Proposed Action area (e.g., viewsheds, areas of visual sensitivity, outstanding landforms or landmarks). Visual impacts to any cultural resource are included in **Section 3.8**.

3.2 CUMULATIVE EFFECTS

Cumulative effects are effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

Cumulative effects are most likely to arise when a relationship or synergism exists between a proposed action and other actions expected to occur in a similar location or during a similar time period. Actions overlapping with or in proximity to the Proposed Action would be expected to have more potential for a relationship than those more geographically separated. Similarly, relatively concurrent actions would tend to offer a higher potential for cumulative effects.

3.2.1 Past, Present, and Reasonably Foreseeable Activities

Past, present, and reasonably foreseeable activities at MOTCO are listed in **Table 3.2-1**. This includes ongoing programs of maintenance and management and reasonably foreseeable master planning activities that could contribute to cumulative effects at MOTCO.

3.2.2 Cumulative Effects Analysis

The cumulative effects analysis focuses on the resources where an incremental effect from the Proposed Action could have the potential for significant direct or indirect cumulative effects. Cumulative effects are included in the following resource sections and based upon the analysis provided in this EA.

Table 3.2-1 Cumulative Scenario–Present and Reasonably Foreseeable Actions

Project Name/Location	Status/Anticipated Timeline	Project Summary
Suisun Marsh Restoration Plan	Planning phase	The United States Department of the Interior is the project sponsor for tidal restoration targets of 5,000 to 7,000 acres and 44,000 to 46,000 acres of managed wetlands during the 30-year implementation period.
MOTCO Wharf 2 Modernization/Wharf 3 Repairs	Acquisition Phase	MOTCO project to modernize Wharf 2 and repair Wharf 3. Wharf 3 was completed in May 2021. Repair of Wharf 2 east trestle was completed in 2024. Installation of cranes on Wharf 2 is anticipated to occur in Quarter 2 of FY27.
MOTCO Wharf 4 and Lighter Berth Removal	Planning Phase	MOTCO project to remove the existing Wharf 4 and remove unused lighter berths (anticipated to occur in FY28 or later). To be included as part of the MOTCO Boat Ramp Supplemental NEPA; not addressed in this EA.
MOTCO Boat Ramp	Planning/Design Phase	MOTCO project to construct Boat Ramp in former Navy Tug Basin in FY27. Construction of this facility is included in the EA for Construction, Operation,

Project Name/Location	Status/Anticipated Timeline	Project Summary
		and Maintenance of a Loading/Unloading Ramp at MOTCO. Initial dredging and design changes to be covered by a Supplemental EA is in progress.
Federal Navigation Channel Dredging	Acquisition Phase	USACE annual dredging of the Federal navigation channels in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary area.
Modernize Rail Infrastructure	Planning/Design Phase	MOTCO project to repair the industrial lead connection to the Union Pacific Line, construct railcar inspection stations, expand Class Yard 1, demolish and repair railroad tracks and rail barricaded sidings area, and construct new rail along Waterfront Road.
Cargo Staging Area	Acquisition Phase	MOTCO project to construct eleven new cargo staging areas adjacent to the eight existing areas to meet mission requirements.
Waterside Security Barrier	Planning Phase	MOTCO project to construct a floating waterside security barrier in the Suisun Bay to a secure perimeter from the waterside of MOTCO.
Waterfront Floodwall	Planning Phase	MOTCO project to construct a floodwall along the waterfront at MOTCO to prevent flooding and tidal influences to impact the MOTCO mission and operations.

Legend: EA = Environmental Assessment; FY = Fiscal Year; MOTCO = Military Ocean Terminal Concord; NEPA = National Environmental Policy Act; USACE = United States Army Corps of Engineers

3.3 AIR QUALITY

The Clean Air Act (CAA) is the primary federal statute governing the control of air quality. The CAA designates specific pollutants as criteria pollutants for which the U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) to protect public health and welfare (**Table 3.3-1**).

NAAQS are classified as primary or secondary. Primary standards protect against adverse health effects; secondary standards are designed to protect public welfare, such as prevent damage to farm crops, vegetation, and buildings. Some pollutants have long-term and short-term standards. Short-term standards are designed to protect against acute, or short-term, health effects, while long-term standards were established to protect against chronic health effects. States may also establish their own ambient air quality standards that are more stringent than those set by federal law. The state of California has adopted standards that are more stringent than the NAAQS.

Areas that are in compliance with the NAAQS are designated as attainment areas. Areas that do not meet NAAQS for criteria pollutants are designated “nonattainment areas” for that pollutant. Areas that have transitioned from nonattainment to attainment are designated as maintenance areas and are also required to adhere to maintenance plans to ensure continued attainment.

The CAA requires states to develop a general plan to attain and maintain the NAAQS in all areas of the country and a specific plan for each non-attainment or maintenance pollutant (including the pollutant’s precursor) to achieve (non-attainment) or maintain (maintenance) compliance with the appropriate NAAQS for that pollutant. These plans, known as State Implementation Plans, are developed by state and local air quality management agencies and submitted to the EPA for approval.

Table 3.3-1 National Ambient Air Quality Standards

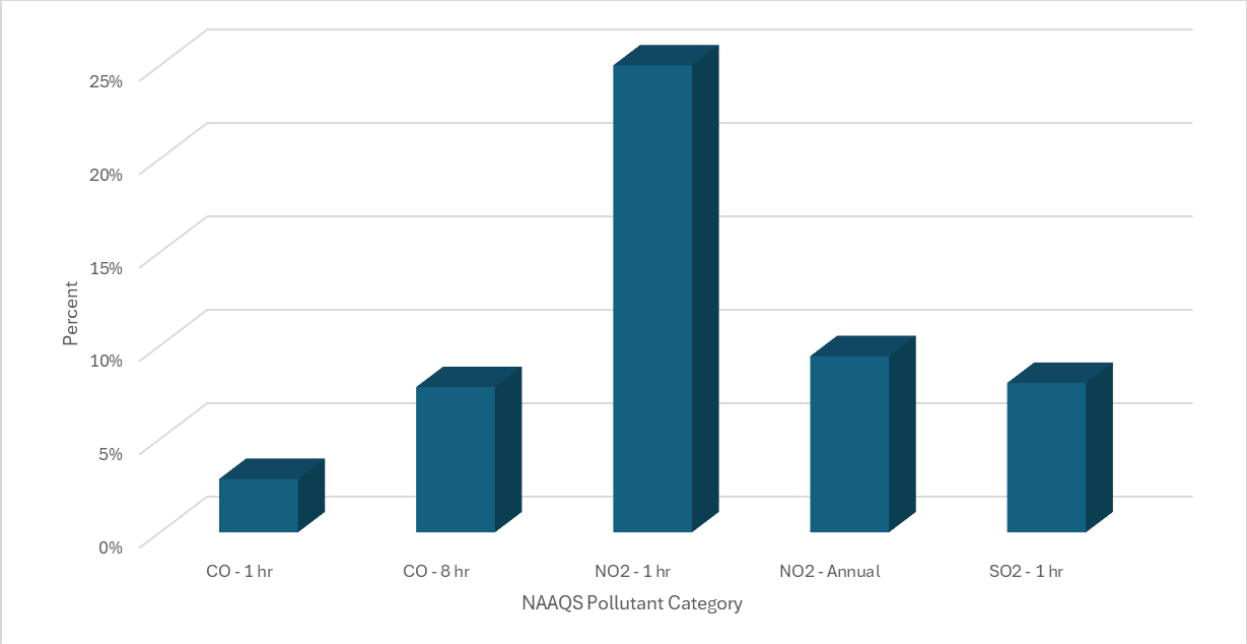
Air Pollutant	Averaging Time[1]	Federal Primary Standard[2]	Federal Secondary Standard[3]
CO	1-hour 8-hour	35 ppm 9 ppm	—
NO_2	1-hour Annual	100 ppb 53 ppb	— 53 ppb
PM_{10}	24-hour Annual	150 µg/m^3 —	150 µg/m^3 —
$PM_{2.5}$	24-hour Annual	35 µg/m^3 9 µg/m^3	35 µg/m^3 15 µg/m^3
O_3	8-hour	0.070 ppm	0.070 ppm
SO_2	1-hour 3-hour 24-hour Annual	75 ppb — — —	— — — 10 ppb
Pb	Rolling 3-month	0.15 µg/m^3	0.15 µg/m^3

Notes: [1] The period over which pollutant concentrations are measured.
[2] Primary Standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly.
[3] Secondary Standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.

Legend: — = none; µg/m^3 = microgram per cubic meter; CO = carbon monoxide; NO_2 = nitrogen dioxide; O_3 = ozone; Pb = lead; ppb = parts per billion; ppm = parts per million; PM_{10} = particulate matter less than or equal to 10 microns in diameter; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter; SO_2 = sulfur dioxide.

Source: EPA 2024a.

The State of California operates air monitoring stations throughout the state for ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), particulate matter less than or equal to 10 microns in diameter (PM_{10}), particulate matter less than or equal to 2.5 microns in diameter ($PM_{2.5}$), and sulfur dioxide (SO_2). The nearest station to MOTCO is in Concord and measures all criteria pollutants. This station monitor is located approximately 6 miles south of the project area. **Figure 3-2** presents published pollutant design values based on the most current ambient monitoring levels (2023) for the region and demonstrates that emission levels are below the most stringent NAAQS. Design values apply to pollutants for which the area is in attainment, and includes CO, NO_2, and SO_2. A design value is a statistic that describes the air quality status of a given location relative to the NAAQS. Design values are computed and published annually by EPA's Office of Air Quality Planning and Standards and reviewed in conjunction with the EPA Regional Offices. **Figure 3.3-1** presents the applicable criteria pollutant design values for the station closest to MOTCO that monitors criteria pollutant ambient air quality emissions.



Legend: µg/m^3 =microgram per cubic meter; CO = carbon monoxide; NAAQS = National Ambient Air Quality Standards; NO_2 = nitrogen dioxide; SO_2 = sulfur dioxide
Source: EPA 2023

Figure 3.3-1 Comparison of 2023 Contra Costa County Design Values with NAAQS

The EPA General Conformity Rule applies to federal actions occurring in nonattainment or maintenance areas when the total direct and indirect emissions of nonattainment criteria pollutants (or their precursors) exceed specified thresholds. The emissions thresholds that trigger requirements for a conformity analysis are called *de minimis* levels. *De minimis* levels (in tons per year [tpy]) vary by pollutant and also depend on the severity of the nonattainment status for the air quality management area in question. There is no *de minimis* threshold for O_3; volatile organic compounds (VOCs) and nitrogen oxides (NO_x) have *de minimis* thresholds because they are precursors to O_3 and $PM_{2.5}$ formation. Additionally, SO_2 emissions are precursors to $PM_{2.5}$ formation.

A conformity applicability analysis is the first step of a conformity evaluation and assesses if a federal action must be supported by a conformity determination. This is typically done by quantifying applicable direct and indirect emissions that are projected to result due to implementation of the federal action. Indirect emissions are those emissions caused by the federal action and originating in the region of interest, but which can occur at a later time or in a different location from the action itself and are reasonably foreseeable. The federal agency can control and maintains control over the indirect action due to a continuing program responsibility of the federal agency. Reasonably foreseeable emissions are projected direct and indirect emissions that are identified at the time that the conformity evaluation is performed. The location of such emissions is known and the emissions are quantifiable, as described and documented by the federal agency based on its own information and after reviewing any information presented to the federal agency. If the results of the applicability analysis indicate that the total emissions would not exceed the *de minimis* emissions thresholds, then the conformity evaluation process is completed. *De minimis* threshold emissions applicable to this analysis are presented in **Table 3.3-2**.

Table 3.3-2 General Conformity *de minimis* levels

Pollutant	Area Type	tpy
$PM_{2.5}$ Direct emissions, SO_2, NO_x (unless determined not to be a significant precursor), VOC or ammonia (if determined to be significant precursors)	All nonattainment and maintenance	100
O_3 (VOC and NO_x)	Marginal and moderate nonattainment outside an ozone transport region	100

Legend: NO_x = nitrogen dioxide; O_3 = ozone; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter; SO_2 = sulfur dioxide; tpy = tons per year; VOC = volatile organic compound
Source: EPA 2024b.

In addition to the NAAQS for criteria pollutants, national standards exist for hazardous air pollutants (HAPs), which are regulated under Section 112(b) of the 1990 CAA Amendments. The *National Emission Standards for Hazardous Air Pollutants* regulate HAP emissions from stationary sources (40 Code of Federal Regulations [CFR] part 61). California has also implemented a state HAP program. HAP emissions from the Proposed Action would be emitted from mobile sources (diesel fuel combustion). The primary HAPs associated with combustion of diesel fuel are benzene and formaldehyde. Unlike the criteria pollutants, there are no NAAQS for these and other HAPs. The primary control methodologies for these pollutants for mobile sources involves reducing their content in fuel and altering the engine operating characteristics to reduce the volume of pollutants generated during combustion.

The CAA also established a national goal of preventing degradation or impairment in federally designated Class I areas. Class I areas are defined as those areas where any appreciable degradation in air quality or associated visibility impairment is considered significant. The closest Class I area to MOTCO is the wilderness area in the Point Reyes National Seashore, which lies approximately 50 miles to the west of the project area. Greenhouse gases (GHGs) are gas emissions that trap heat in the atmosphere. These emissions occur from natural processes and human activities. Scientific evidence indicates increasing global temperatures over the past century are due to an increase in GHG emissions from human activities.

The primary GHGs from construction activities include carbon dioxide (CO_2), methane, and nitrous oxide. GHG emissions are quantified using the carbon dioxide equivalent (CO_2e). Factors are assigned to methane and nitrous oxide (28 for methane and 265 for nitrous oxide). CO_2e is calculated by multiplying the appropriate factor of a non-CO_2 GHG by the amount of that gas emitted.

3.3.1 Affected Environment

MOTCO is located in Contra Costa County in California, which serves as the region of influence for assessing air quality effects and lies within the Bay Area Air Quality Management District (BAAQMD). The county is designated moderate nonattainment for $PM_{2.5}$ and marginal nonattainment for O_3. It is in attainment for all other criteria pollutants.

Depending on an installation's location and whether it is considered a "major source" of air pollutants, the CAA may require permitting for stationary sources before construction or demolition commences. Currently, MOTCO maintains an Air District Engine permit, 12769, issued by BAAQMD, for the operation of stationary sources of air emissions (BAAQMD 2025a). The permit covers sources including emergency

generators, a fixed fuel storage tank, and woodworking equipment. The facility also holds an Open Burning Permit, which allows burning of grasses and wood for fire training purposes (BAAQMD 2025b).

Figure 3.3-2 presents the 5-year average predominant wind direction for MOTCO and surrounding areas, along with the location of sensitive receptor locations (e.g., schools, parks, senior living, medical facilities). Winds are largely out of the south to southwest for most of the year, which indicates that areas that would be considered downwind of MOTCO, where pollutants would move off site, would primarily lie north and northeast of the installation (Iowa State University 2025). Most of the sensitive receptors are not located north or northeast of the project areas; therefore, these are not expected to be affected with any frequency by emissions from MOTCO due to the direction of prevailing winds. Receptors that lie in the direction of the prevailing wind include the Shore Acres neighborhood, which includes Shore Acres Elementary School, and several day care facilities.

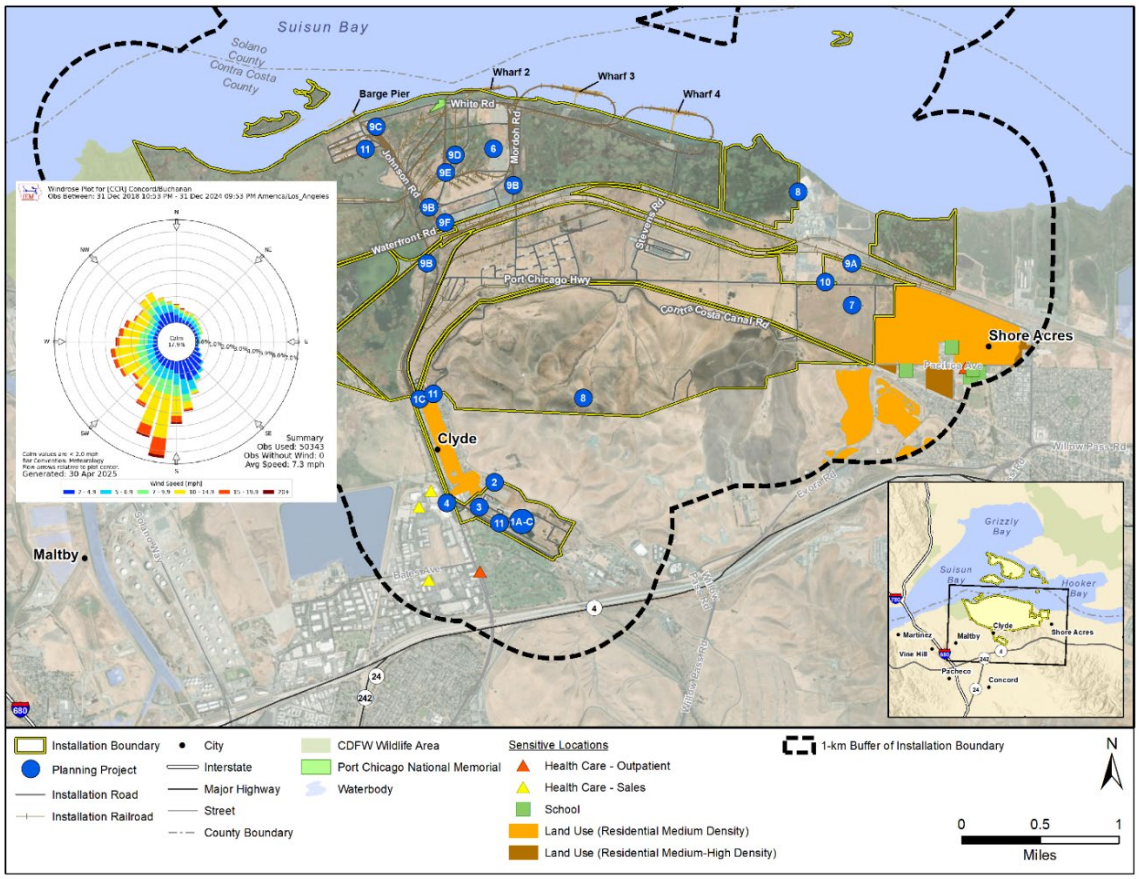


Figure 3.3-2 Sensitive Receptors Located Near MOTCO and Predominant Wind Patterns

3.3.2 Environmental Consequences

Effects on air quality are based on estimated direct and indirect emissions associated with the action alternatives. To assess whether or not impacts from either the Full Implementation Alternative or the Partial Implementation Alternative could be considered significant, the estimated air emissions are (1) compared to the General Conformity *de minimis* thresholds for VOCs, NO_x, SO_2, and $PM_{2.5}$; (2) evaluated against

the most current design values for CO and PM_{10}; and (3) assessed with regard to downwind impacts to sensitive populations.

Lead, a criteria pollutant, is not carried forward for analysis because there are no sources of lead emissions associated with the Proposed Action. HAPs are not carried forward for analysis due to the intermittent and short duration work periods for the construction activity, which would result in very low concentrations of HAPs for short periods of time.

3.3.2.1 Full Implementation Alternative (Preferred Alternative)

Total VOC, NO_x, SO_2, and $PM_{2.5}$ air pollution emission estimates as a result of the Full Implementation Alternative are provided in **Table 3.3-3**. This includes emissions from construction, demolition, and land clearing. These activities would include the use of mobile sources; examples of these sources are haul trucks delivering materials to the site, equipment engaged in construction activities (such as dozers, loaders, graders, and paving equipment), haul trucks to remove demolition debris, and construction worker commutes to the work site. While projects are anticipated to occur during specific timeframes, the air quality analysis evaluated the most conservative scenario, wherein all projects would be completed in a single calendar year. Additional details on calculations can be found in **Appendix B**.

The anticipated emissions from the Full Implementation Alternative would be below *de minimis* thresholds for NO_x, VOC, SO_2, and $PM_{2.5}$, so the general conformity applicability analysis is complete, and the proposed emissions would be exempt from General Conformity. A Record of Non-Applicability is included in **Appendix B**.

Table 3.3-3 VOC, NO_x, SO_2, and $PM_{2.5}$ Emission Estimates for the Full Implementation Alternative in Tons Compared to General Conformity *de Minimis* Thresholds

Activity	VOCs	NO_x	SO_2	$PM_{2.5}$
Truck Transport	0.14	1.38	0.001	0.14
Construction	0.51	8.23	0.36	0.45
Fugitive Dust	NA	NA	NA	1.19
Worker Trips	0.09	0.27	0.01	0.94
Total Emissions	**0.74**	**9.88**	**0.37**	**2.72**
De Minimis Threshold	100	100	0.001	100
Exceed Threshold?	No	No	No	No

Legend: NA = Not Applicable; NO_x = nitrogen dioxide; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter; SO_2 = sulfur dioxide; VOC = volatile organic compound

Total CO and PM_{10} air pollution emission estimates from the Full Implementation Alternative are provided in **Table 3.3-4**.

Table 3.3-4 CO and PM_{10} Emission Estimates in Tons for the Full Implementation Alternative

Activity	CO	PM_{10}
Truck Transport	0.76	0.56
Construction	2.98	0.46
Fugitive Dust	NA	11.92
Worker Trips	9.37	6.25
Total emissions	**13.11**	**19.19**

Legend: CO = carbon monoxide; NA = Not Applicable; PM_{10} = particulate matter less than or equal to 10 microns in diameter

The design values are well below the NAAQS for all of the attainment pollutants; the emissions from the Full Implementation Alternative would not be enough to result in

a long-term change in the ambient air concentrations of CO or PM_{10} for the area, though short-term increases in the pollutants would be anticipated during the construction activity. Based on prevailing wind patterns from the south and southwest, the emissions would be transported to the north and northeast of the facility. As previously stated, sensitive populations that lie in the direction of the prevailing wind include the Shore Acres neighborhood, which includes Shore Acres Elementary School, and several day care facilities. Due to the proximity of the neighborhood, some minimal migration of air pollutants could occur, but the short durations of the individual projects and the non-continuous nature of the construction activities make it unlikely that any impacts would be lasting or significant.

There is one federal Class I area within 60 miles of MOTCO. The Point Reyes National Wilderness Area is located approximately 50 miles west of the project area. The General Conformity determination discussed above demonstrates that NO_x, VOC, or SO_2 emissions would not be significant, and the prevailing wind direction would transport emissions away from the Class I area. As a result, the emissions from the Full Implementation Alternative would not be considered impactful to the Class I area.

The air quality analysis demonstrates that even with the conservative estimates from considering all project activities occurring in a single year, none of the criteria pollutants would approach a level that would result in significant impacts.

The Full Implementation Alternative would contribute directly to emissions of GHGs from the combustion of fossil fuels and would generate approximately 7,599 tons of CO_2e (see detailed calculations in **Appendix B**).

Following proposed construction, operational emissions would remain largely consistent with the No Action Alternative as few, if any new sources of emissions are anticipated. The locations of mobile source emissions within the fence line would change somewhat with the addition of new rail lines and new roads. If stationary sources such as boilers and emergency generators would be required as a result of the Proposed Action, then these would require regulatory evaluation and result in modifications to the facility's operating permit.

3.3.2.2 Partial Implementation Alternative

Total VOC, NO_x, SO_2, and $PM_{2.5}$ air pollution emission estimates from the Partial Implementation Alternative are provided in **Table 3.3-5**. The sources of emissions would be identical to the Full Implementation Alternative for the projects included. Additional details on calculations can be found in **Appendix B**.

Table 3.3-5 VOC, NO_x, SO_2 and $PM_{2.5}$ Emission Estimates in Tons for the Partial Implementation Alternative Compared to General Conformity *de Minimis* Thresholds

Activity	VOCs	NO_x	SO_2	$PM_{2.5}$
Truck Transport	0.14	1.35	0.00	0.14
Construction	0.50	8.09	0.36	0.44
Fugitive Dust	NA	NA	NA	1.13
Worker Trips	0.09	0.27	0.01	0.93
Total Emissions	**0.73**	**9.71**	**0.37**	**2.64**
De Minimis Threshold	100	100	100	100
Exceed Threshold?	No	No	No	No

Legend: NA = Not Applicable; NO_x = nitrogen dioxide; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter; SO_2 = sulfur dioxide; VOC = volatile organic compound

The anticipated emissions from the Partial Implementation Alternative are below the *de minimis* thresholds for NO_x, VOC, SO_2, and $PM_{2.5}$, so the general conformity applicability analysis is complete, and the proposed emissions would be exempt from General Conformity. A Record of Non-Applicability is included in **Appendix B**.

Total CO and PM_{10} air pollution emission estimates from the Partial Implementation Alternative are provided in **Table 3.3-6**.

Table 3.3-6 CO and PM_{10} Emission Estimates for the Partial Implementation Alternative in Tons

Activity	CO	PM_{10}
Truck Transport	0.75	0.54
Construction	2.92	0.45
Fugitive Dust	NA	11.34
Worker Trips	9.24	6.16
Total emissions	**12.91**	**18.49**

Legend: CO = carbon monoxide; PM_{10} = particulate matter less than or equal to 10 microns in diameter

The effects of the Partial Implementation Alternative would be similar but less than those evaluated for the Full Implementation Alternative.

Implementation of the Partial Implementation Alternative would contribute directly to emissions of GHGs from the combustion of fossil fuels and would generate approximately 7,511 tons of CO_2e (see detailed calculations in **Appendix B**). The Partial Implementation Alternative would generate slightly lower CO_2e emissions than the Full Implementation Alternative, due to not completing Project 4, Mt Diablo Creek Flood Control.

3.3.2.3 No Action Alternative

Under the No Action Alternative, MOTCO would not implement the real property master planning actions proposed. Ongoing maintenance and repair would continue, and individual projects could be implemented, subject to completion of project-specific NEPA and other required compliance. Air emissions from individual projects would be evaluated as part of the overall NEPA analysis for the projects, and any necessary mitigations would be implemented to ensure no significant effects to air quality would occur.

3.3.3 Reasonably Foreseeable Actions and Environmental Trends

The present and reasonably foreseeable future projects identified in **Table 3.2-1** have the potential to contribute to air emissions during construction. The majority of the cumulative effects would be short-term construction effects from projects occurring during the same time period as the Proposed Action. Either alternative would result in emissions that are well below the *de minimis* for $PM_{2.5}$, as well as the O_3 precursors VOC and NO_x. As a result, when considered cumulatively, the present and reasonably foreseeable future projects are not anticipated to have emissions that would exceed *de minimis* for these pollutants. PM_{10} and CO emissions from the Proposed Action are minimal and of short duration. Therefore, implementation of the Full Implementation Alternative or the Partial Implementation Alternative, combined with present and reasonably foreseeable future actions, would not result in significant cumulative air quality effects.

3.4 GEOLOGICAL RESOURCES

3.4.1 Affected Environment

3.4.1.1 Geology

MOTCO is in the Coast Ranges geological province of west-central California, which consists of deep alluvial materials underlain by basement rock of the Sierran Block province. Non-marine sedimentary rocks compose the northern slope of the Los Medanos Hills and the lowermost reaches of the Administrative District (USACE 2023).

MOTCO's natural landscape is characterized by a flat, low-lying marsh at the northern half of the Mission District, and hills that rise sharply to approximately 626 feet above mean sea level within the south half of this area (MOTCO 2023). Most of the Mission District's manmade landscape consists of fill material deposited during the construction of the installation. No geographic features protected by the Historic Sites Act of 1935 are present at MOTCO (MOTCO 2023).

3.4.1.2 Soils

The U.S. Department of Agriculture (USDA), Natural Resources Conservation Service has mapped 20 soil types at MOTCO. The predominant soil types underlying MOTCO include Altamont-Fontana, Antioch Loam, and Joice Muck (USDA 2025). These soil types are characterized as poorly drained and range from moderately deep to very deep (MOTCO 2021). The majority of soils at MOTCO have been heavily developed and natural soil series do not occur in these previously disturbed and developed areas (USDA 2025).

The Administrative District is composed mainly of soils belonging to the Altamont Diablo-Fontana Association which is characterized as moderately deep. This Association is composed of varying degrees of Altamont clay and Fontana silty clay loam, depending on the degree of slope. On bare soil, runoff is medium to high and erosion hazard is moderate to high.

The Mission District of MOTCO is composed mainly of the muck soils of the Joice-Reyes Association which is characterized as being poorly drained and very deep. These soils consist of silty clays and saline mucks. The Joice mucks form uniform wetlands that are subject to saltwater inundation, most commonly at high tide. Because these soils have poor drainage, they are also subject to freshwater flooding and ponding following heavy rainfall and surface runoff from the adjacent inlands (MOTCO 2023).

3.4.1.3 Mineral Resources

Approximately 65 percent of the Mission District (including all seven offshore islands) is under split estate rather than fee simple ownership. For these split estate lands, the surface estate is federally owned, and the subsurface mineral estate is privately owned by others (MOTCO 2021).

3.4.1.4 Seismic Conditions

MOTCO lies within one of the most seismically active regions of the U.S. with multiple major faults and fault zones that lie in proximity. MOTCO is in a Seismic Risk Zone 4, identified in the U.S. Seismic Zones Map published by the Federal Emergency Management Agency (Federal Emergency Management Agency 2025). The Concord-Green Valley Fault, which runs in a north-northwest to south-southeast direction through the Concord Area, is located approximately 2.5 miles west of MOTCO. Beyond causing

bodily injury and property damage, seismic activity along faults can also lead to geologic hazards such as liquefaction and landslides.

Liquefaction is the process when water-saturated sand and silt change from a solid to a liquid state due to intense ground shaking. When this process occurs, it creates a quicksand effect, and the soil can no longer support structures or other infrastructure. The potential for liquefaction at MOTCO is high in portions of the Mission District containing artificial fill. The liquefaction potential is low in the upland Los Medanos Hills and Administrative District (U.S. Geological Survey 2006).

3.4.2 Environmental Consequences

3.4.2.1 Full Implementation Alternative (Preferred Alternative)

The Full Implementation Alternative would cause both temporary and permanent impacts to earth resources at MOTCO. However, most of the proposed construction and renovation projects would take place within previously disturbed and developed portions of the Mission and Administrative Districts and are therefore unlikely to result in long-term effects on geological resources.

Geology

Under the Full Implementation Alternative, the area of disturbance for the proposed projects would be up to 100 acres of ground disturbance. However, no construction would significantly alter the topography or geological resources of either District since most of the impact area has already been disturbed or developed, and therefore no significant impacts to geology would be expected with implementation of the Full Implementation Alternative.

Soils

The Full Implementation Alternative would occur on varying types of clay, loam, and muck soils (see **Section 3.4.1**). The muck soils found in the Mission District along the marshes are less susceptible to erosion; however, during construction, temporary erosion could occur from digging, minor trenching, and excavating activities. Additionally, some soil compaction could occur from the use of heavy equipment and trucks. The soils found in the Administrative District are prone to erosion. Construction and modification activities would adhere to the Construction General Permit which would include a site-specific and detailed Storm Water Pollution Prevention Plan (SWPPP) that coordinates the timing of soil disturbing activities with the installation of BMPs such as soil erosion and runoff controls. BMPs could include the use of effective wind erosion controls, stabilization for all disturbed soils prior to storm events, maintaining effective perimeter controls and stabilizing site entrances and exits. Post-construction BMPs, as outlined in the MOTCO SWPPP (MOTCO 2024) would minimize erosion during operations. Additionally, implementation of Project 4, Mt Diablo Creek Flood Control, would incorporate soil and bank stabilization into the design to prevent further erosion from channelizing Mt Diablo Creek. Implementation of these measures, as necessary and appropriate, would ensure that impacts on soils would not be significant.

Mineral Resources

Construction and renovation activities would not include substantial excavations that could affect mineral resources in split estate areas. Therefore, no impacts to mineral resources would occur under the Full Implementation Alternative.

Seismic Conditions

All new design and construction would adhere to California seismic standards to minimize hazards associated with earthquakes and fault rupture. Implementation of, and adherence to, safety procedures and BMPs would minimize the impacts of potential seismic events. Because design standards and safety measures would be followed, construction would not increase risks related to seismic conditions.

3.4.2.2 Partial Implementation Alternative

Impacts to geological resources under the Partial Implementation Alternative would be expected to be less than the Full Implementation Alternative. Under the Partial Implementation Alternative, Project 4, Mt Diablo Creek Flood Control, would not be implemented and would not impact 2,400 LF of creek channel. Implementation of this alternative would be expected to result in less than significant impacts on geological resources compared to the Full Implementation Alternative.

3.4.2.3 No Action Alternative

Under the No Action Alternative, MOTCO would not implement the real property master planning actions proposed. Geological resources would be expected to remain as described under existing conditions in **Section 3.4.1**. Ongoing maintenance and repair would continue, and individual projects could be implemented, subject to completion of project-specific NEPA and other required compliance. Geological impacts from individual projects would be evaluated as part of the overall NEPA analysis for the projects and any necessary mitigations would be implemented to ensure no significant effects to geological resources would occur.

3.4.3 Reasonably Foreseeable Actions and Environmental Trends

Cumulative projects in conjunction with implementation of the Proposed Action would not be expected to significantly impact geological resources. Ground-disturbing activities associated with the cumulative projects and the proposed projects would be localized and would not have major impacts on sensitive geologic features. Potential erosion that could occur during construction would be handled according to the BMPs outlined in the Construction General Permit and associated SWPPP. The use of such BMPs would substantially reduce the potential for erosion and even potential soil compaction. Therefore, no significant cumulative impacts to geological resources would occur.

3.5 WATER RESOURCES

3.5.1 Affected Environment

3.5.1.1 Surface Water

MOTCO is located on the south shore of Suisun Bay (**Figure 3.5-1**). Surface freshwater features at MOTCO all flow into Suisan Bay via natural creeks and artificial ditches, sloughs, and canals. These flows pass through numerous culverts, tide gates, and water control structures present throughout the Mission District (USACE 2023). The source of surface freshwater at MOTCO is from either precipitation or groundwater springs in the Los Medanos Hills and the Mt Diablo drainage. Surface water in the shoreline Mission District is generally brackish, from the mixing of salt water from the

Pacific Ocean and freshwater from the Sacramento-San Joaquin Delta. Several freshwater ponds occur west of Mt Diablo Creek (**Figure 3.5-1**).

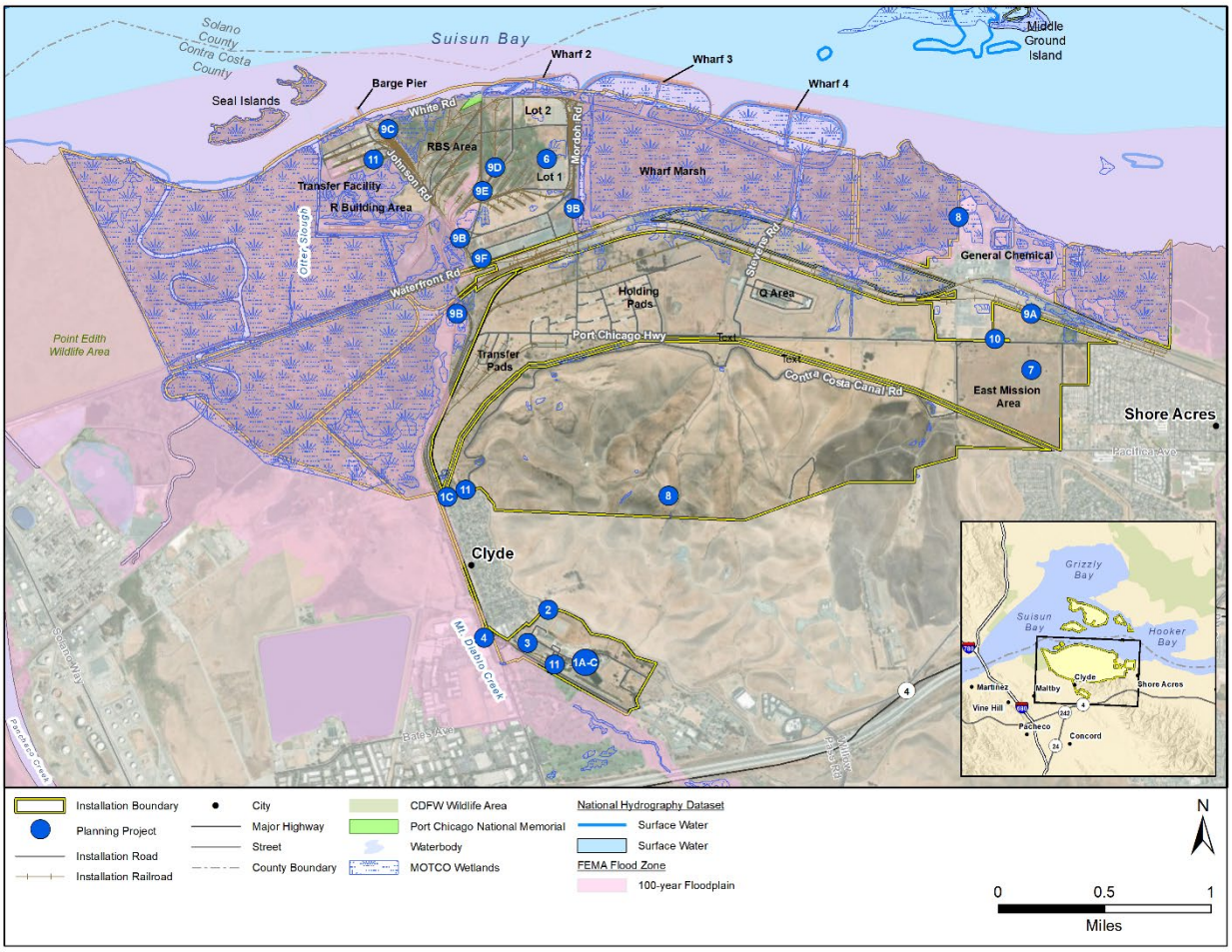


Figure 3.5-1 Surface Water, Wetlands, and Floodplains at MOTCO

The Contra Costa Canal and Mt Diablo Creek run through MOTCO, and small sloughs are found throughout the Mission District (see **Figure 3.5-1**). Mt Diablo Creek regularly experiences flooding from heavy precipitation events.

MOTCO holds a General Permit for Discharges of Storm Water Associated with Industrial Activities (General Permit No. CAS000001, effective July 1, 2015; renewed July 1, 2020) and has prepared an installation-wide SWPPP (MOTCO 2024) to address compliance with the General Permit. The installation-wide SWPPP addresses individual National Pollutant Discharge Elimination System (NPDES) permit requirements for ongoing activities at MOTCO.

3.5.1.2 Groundwater

Groundwater in the vicinity of MOTCO is used for irrigation, drinking water, and industrial processing. Due to the proximity to saltwater, coastal groundwater resources are often degraded from saltwater intrusion. MOTCO does not operate or maintain groundwater wells for industrial use or potable drinking water. Water is supplied to MOTCO from private utility water systems.

3.5.1.3 Wetlands

The State of California has a policy of no net loss of wetlands and requires that all impacts on wetlands be mitigated under Section 401, State of California Water Quality Certification of USACE permits, of the Clean Water Act (CWA). The USACE has jurisdiction over all waters of the U.S., including MOTCO's wetlands that are hydrologically connected to Suisun Bay. The USACE requires Section 404 permitting prior to placing dredged or fill material into waters of the U.S., including jurisdictional wetlands. In addition to Section 404 permitting, a permit pursuant to Section 10 of the Rivers and Harbors Act would be required for any structures or work in, under, or over navigable waters below the high-tide line.

Both estuarine and palustrine wetlands are located at MOTCO. **Figure 3.5-1** shows mapped wetlands at MOTCO. USACE jurisdictional wetlands on MOTCO are delineated on a project-by-project basis, and formal jurisdictional delineation would be required prior to permitting or construction.

3.5.1.4 Floodplains

A portion of MOTCO is located in or near the 100-year floodplain (see **Figure 3.5-1**). The 100-year floodplain represents areas that may be inundated in the event of a high-water event that is expected to occur every 100 years from a combination of heavy rainfall, high tides, and storm surges. EO 11988 directs federal agencies to provide leadership in avoiding direct or indirect development of floodplains, as well as to restore and preserve the natural and beneficial values of floodplains. No buildings at MOTCO are located within the 100-year floodplain but are located adjacent.

3.5.2 Environmental Consequences

3.5.2.1 Full Implementation Alternative (Preferred Alternative)

Surface Water

Projects under the Full Implementation Alternative would have minimal effect on surface water at MOTCO. Slight increases in freshwater runoff may occur from increases in impervious surfaces due to construction of sidewalks, roads, parking lots, buildings, rail lines, and switches. These increases are detailed in **Table 3.5-1**.

Table 3.5-1 Net New Impervious Surfaces by Project

Project	Increase in Impervious Surfaces (acres)
Project 1	1.07
Project 2	4.73
Project 3	0.77
Project 4	0.54
Project 6	11.98
Project 7	9.38
Project 8	12.26
Project 9	36.04
Project 10	11.38
Project 11	1.44
Total	**89.59**

The projects would result in an overall net gain of 89.6 acres of impervious surface. In accordance with UFC 3-210-10, *Low Impact Development (LID)* and Energy

Independence and Security Act (EISA) Section 438, any increase in surface water runoff because of new impervious surfaces would be attenuated using permanent drainage management features (MOTCO 2024). Under these requirements, federal facility projects with over 5,000 SF (0.11 acre) of new impervious surface must maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property regarding the temperature, rate, volume, and duration of flow. LID strategies would be implemented as required to accommodate runoff due to increased impervious surfaces.

Additionally, improvements and repairs to the wastewater system (Project 5) would reduce potential for leaks or other potential introduction of pollution to surface water on MOTCO and therefore may improve surface water conditions.

Construction and demolition of the various buildings, fences, rail lines, and other infrastructure may temporarily increase runoff and pollutants from dust and debris generated during construction. MOTCO must obtain coverage under the General Permit for Discharges of Stormwater Associated with Construction and Land Disturbance Activities (General Permit Order 2022-0057-DWQ) prior to implementation of the proposed individual projects listed in **Section 2.4.1**. Construction activities subject to this permit include clearing, grading, and disturbances to the ground such as stockpiling, trenching, or excavation. Site-specific SWPPPs would be prepared in compliance with the Construction General Permit. To minimize potential impacts associated with erosion, runoff, and sedimentation, BMPs identified in the site-specific SWPPPs would be implemented during and following the construction period. These measures could include straw bales, sandbags, silt fencing, earthen berms, tarps or water spraying, soil stabilization, temporary sedimentation basins, and re-vegetation with native plant species where possible, to decrease erosion and sedimentation. Following construction, disturbed areas not covered with impervious surface would be reestablished with appropriate vegetation and native seed mixtures and managed to minimize future erosion potential. No significant impacts to surface water would be expected.

Project 4, the Mt Diablo Creek Flood Control, would address consistent flooding issues with Mt Diablo Creek. Implementation of Project 4 would alter the natural drainage of Mt Diablo Creek. However, channelization of the creek would reduce flooding during storm surges, which in turn would reduce potential for runoff into other surface waters at MOTCO and erosion of streambanks and surrounding areas.

MOTCO is in compliance with the General Permit for Discharges of Storm Water Associated with Industrial Activities (General Permit No. CAS000001), and the 2024 SWPPP would be amended when there is a change in facility design, construction, operation, or maintenance which affects the potential to discharge hazardous or non-storm water into jurisdictional surface waters.

Groundwater

Groundwater impacts from the Full Implementation Alternative would not be expected to occur. Slight increases in runoff, as described above, would result in negligible impacts on the quality or quantity of groundwater at MOTCO.

Wetlands

Table 3.5-2 shows the acreage of wetlands within the project footprints by project number, as well as the total acreage.

Table 3.5-2 Impacts to Wetlands under the Full Implementation Alternative

Project Number	Project Feature	Acreage
2	Proposed Road	0.07
4	Flood Control	0.02
8	Proposed Perimeter Road and Fence	2.16
9A	Renovate Rail Segment	0.46
9B	New Construction	0.01
9C	Renovate Rail Segment	0.72
10	Proposed Communications	0.36
Total		**3.8**

The project with the largest overlap of wetlands (2.2 acres) would be Project 8, which consists of the proposed perimeter road and associated fencing. The remaining projects overlap less than 1 acre of wetlands total.

As discussed above, a formal jurisdictional delineation would be required prior to permitting or construction for projects that are located within wetlands and waters of the U.S. Any impacts to wetlands require permitting through the CWA Section 404 and State of California CWA Section 401. No net loss of wetlands is required by the State of California and therefore. impacts to wetlands would be mitigated in compliance with these requirements. The Army would mitigate through habitat restoration at MOTCO.

Floodplains

Floodplains would not be significantly affected by the Full Implementation Alternative. Projects 4, 8, and 9B would occur in the 100-year floodplain (see **Figure 3.5-1**). These projects would need to be constructed in compliance with the Federal Flood Risk Management Standard. To comply with the Federal Flood Risk Management Standard, the design of the proposed construction would adhere to one of the three options outlined in the standard to determine flood elevation. The proposed Projects 8 and 9B would not substantially alter drainage patterns or increase the potential for flooding or flood-related damage. However, Project 4, the Mt Diablo Creek Flood Control, would result in fewer flooding events due to the channelization of Mt Diablo Creek, which regularly floods in high precipitation events. Once full design for the channelization of Mt Diablo Creek is complete, floodplains would be reassessed for this portion of the creek as there could be an alteration of the extent of the floodplain once constructed. The development, issuance, and analysis provided in this EA constitutes compliance with EO 11988. This EO requires that agencies evaluate the potential effects of actions within a floodplain and avoid floodplains unless the agency determines there is no practicable alternative. Since the Proposed Action would involve construction in a floodplain, a FONPA will be prepared as part of this analysis.

3.5.2.2 Partial Implementation Alternative

Impacts from the Partial Implementation Alternative would be as described above for water resources, with the exception that Project 4, Mt Diablo Creek Flood Control, would not occur. Mt Diablo Creek would not be channelized under this alternative, and this would result in continuing flood issues from the creek during storm surges and the resulting runoff and erosion continuing. All other impacts as described above would be the same under this alternative as under the Full Implementation Alternative.

3.5.2.3 No Action Alternative

Under the No Action Alternative, MOTCO would not implement the real property master planning actions including flood mitigation. Water resources would be expected to remain as described under existing conditions in **Section 3.5.1**. Ongoing maintenance and repair would continue, and individual projects could be implemented, subject to completion of project-specific NEPA and other required compliance. Impacts to water resources from individual projects would be evaluated as part of the overall NEPA analysis for the projects and any necessary mitigations, including permitting, would be implemented to ensure no significant effects would occur.

3.5.3 Reasonably Foreseeable Actions and Environmental Trends

Construction and demolition associated with the cumulative projects would not have major impacts on surface water, groundwater, and wetlands. Potential erosion from construction that could result in runoff to water resources would be mitigated according to the BMPs and Standard Operating Procedures (SOPs) outlined in project-specific SWPPPs in compliance with the Construction Stormwater General Permit (CAS000002, effective September 1, 2023). The use of such BMPs would substantially reduce the potential for erosion and runoff. Minor increases in impervious surfaces could result in an increase in runoff, but this increase would likely be insignificant. Additionally, the channelization of Mt Diablo Creek would reduce flood events in that area and therefore, reduce runoff and erosion. Therefore, no significant cumulative impacts to water resources would occur.

3.6 BIOLOGICAL RESOURCES

This analysis focuses on animal and plant species that are known, or have potential to occur on MOTCO, and those species that are protected under federal or state law. These resources are commonly divided into the following categories: Plant Communities, Wildlife (including bird species protected under the Migratory Bird Treaty Act [MBTA] and EO 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*), and Special Status Species (plant and animal species that are listed, have been proposed for listing, or are candidates for listing as threatened or endangered under the federal Endangered Species Act [ESA] and other species of concern as recognized by state or federal agencies). MOTCO performs biological resource surveys in support of Integrated Natural Resources Management Plan (INRMP) updates, as well as project-specific surveys and protocol surveys for certain federally threatened and endangered species.

3.6.1 Affected Environment

3.6.1.1 Plant Communities

The plant communities at MOTCO consist of various types of marsh (tidal, subtidal, diked, managed, freshwater, brackish) near the coast, and non-native annual grassland in upland areas. Plant species known to occur are based on the recent INRMP (USACE 2023). The tidal marshlands at MOTCO support marsh vegetation such as California cordgrass (*Spartina foliosa*), hardstem tule (*Schoenoplectus acutus*), California bulrush (*Schoenoplectus californicus*), giant reed (*Phragmites australis*), three-square bulrush (*Schoenoplectus americanus*), alkali bulrush (*Schoenoplectus maritimus*), cattail (*Typha* spp.), saltgrass (*Distichlis spicata*), pickleweed (*Salicornia virginica*), San Francisco Bay

gumplant (*Grindelia stricta* var. *angustifolia*), and western goldenrod (*Euthamia occidentalis*), among others. Invasive plant species, including perennial pepperweed (*Lepidium latifolium*), may also be found in the marsh habitat at MOTCO (USACE 2023). Upland habitat at MOTCO consists of non-native annual grassland and developed/disturbed areas. The dominant plant species are non-native grass species including wild oats (*Avena fatua*), ripgut grass (*Bromus diandrus*), Mediterranean barley (*Hordeum murinum*), and Italian ryegrass (*Lolium multiflorum*), as well as the noxious weed yellow starthistle (*Centaurea solstitialis)* (USACE 2023). In developed areas, vegetation also consists of non-native planted trees, such as bluegum eucalyptus (*Eucalyptus globulus*), and various fruit, shade, and garden trees.

3.6.1.2 Wildlife

A diverse array of terrestrial wildlife is found at MOTCO due to the variation in habitat types, from tidal marshes, shallows on the offshore islands, to upland annual grasslands.

The MOTCO INRMP (USACE 2023) lists 163 bird species known or likely to occur at MOTCO. MOTCO is located in the San Francisco Bay-Delta area, which supports over 200 bird species and contains 18 Important Bird Areas (Audubon California 2025). MOTCO is important for breeding, migrating, and wintering songbirds, raptors, shorebirds, and waterfowl. All migratory birds found on MOTCO are protected by the MBTA. The great horned owl (*Bubo virginianus*), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), northern harrier (*Circus hudsonius*), American white pelican (*Pelecanus erythrorhynchos*), and the non-native mute swan (*Cygnus olor*), in addition to numerous other bird species, have all been recorded on MOTCO.

Mammal species with potential to occur at MOTCO include, but are not limited to, the salt marsh wandering shrew (*Sorex vagrans halicoites),* desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), deer mouse (*Peromyscus maniculatus*), red fox (*Vulpes vulpes*), badger (*Taxidea taxus*), and bobcat (*Lynx rufus*) (USACE 2023).

Amphibians and reptiles found on MOTCO include, but are not limited to, the California slender salamander (*Batrachoseps attenuates*), rough-skinned newt (*Taricha granulosa*), California toad (*Bufo californicus*), San Francisco alligator lizard (*Elgaria coerulea coerulea*), Gilbert's skink (*Plestiodon gilberti*), California king snake (*Lampropeltis getula californiae*), and Valley garter snake (*Thamnophis sirtalis fitchi*) (USACE 2023).

3.6.1.3 Special Status Species

Federally Listed Species

Based on a USFWS Information for Planning and Consultation web search, 14 federally listed species protected under the ESA have the potential to occur at MOTCO (USFWS 2025) (**Table 3.6-1**). No critical habitat occurs on base.

Table 3.6-1 Federally Listed Species with Potential to Occur in the Project Area

Common Name	Scientific Name	Federal/ State Status	Occurrence in the Project Area	Habitat/Regional Occurrence
Birds				
California least tern	*Sternula antillarum browni*	E / E	Unlikely	Colonial breeder on bare or sparsely vegetated sand beaches or alkali flats. Last observed on installation in 1982. Nesting colony approximately 10 miles northeast up the Delta in Montezuma Slough.
California Ridgway's rail	*Rallus obsoletus obsoletus*	E / E	Possible	Salt and brackish marshes. Rare in Suisun Bay. Considered secretive. No occurrences were found within or adjacent to the project action area during 2020 and 2021 species-specific surveys.
Reptiles				
Alameda whipsnake	*Masticophis lateralis euryxanthus*	T / T	Unlikely	Chaparral, northern coastal sage scrub, adjacent habitats, such as grasslands, oak savannas, and occasionally oak-bay woodlands. No previous occurrence on MOTCO.
Northwestern pond turtle	*Actinemys marmorata*	PT / SC	Possible	Permanent or near-permanent freshwater ponds. Recorded occurrence in 2020 in the Mission District on-installation in Otter Slough and Seal Creek Marsh.
Amphibians				
California red-legged frog	*Rana draytonii*	T / CE	Possible	Permanent freshwater ponds and marshes, and upland areas. Nearest known occurrences are in four ponds within the Navy BRAC Re-Use Area located on the other side of Highway 4. No occurrences were found in Action Area during 2020 USFWS protocol surveys.
California tiger salamander	*Ambystoma californiense*	T / CE	Possible	Permanent freshwater ponds and marshes. Nearest known occurrences are in four ponds within the Navy BRAC Re-Use Area. No occurrences were found in Action Area during 2021 USFWS protocol surveys.
Foothill yellow-legged frog	*Rana boylii*	T / -	Possible	Foothill and mountain streams, and vegetation types including valley-foothill riparian, mixed chaparral, and wet meadows.
Western spadefoot	*Spea hammondii*	PT / -	Possible	Can inhabit variety of environments, including hot and dry, by burrowing underground. Emerges during rain events between October and May.

Common Name	Scientific Name	Federal/ State Status	Occurrence in the Project Area	Habitat/Regional Occurrence
Fishes				
Delta smelt	*Hypomesus transpacificus*	T / -	Extremely unlikely	Larval, juvenile, and adult Delta smelt may all be found in Suisun Bay, including the shallow edges and backwater sloughs.
Longfin smelt	*Spirinchus thaleichthys*	E / E	Extremely unlikely	Found throughout the Bay-Delta, including Suisun Bay. Habitat includes low-salinity, freshwater, and ocean.
Insects				
Monarch butterfly	*Danaus plexippus*	PT / -	Possible	Numerous overwintering sites for the monarch butterfly are found around the Bay Area. The nearest overwintering site to the Project Area is in Vallejo. Monarchs may be found in any areas with milkweed or other flowering plants.
Crustaceans				
Vernal pool fairy shrimp	*Branchinecta lynchi*	T / -	Extremely unlikely	Vernal pools in Oregon and California; occasionally in artificial pools created by roadside ditches. No previous occurrence on MOTCO.
Vernal pool tadpole shrimp	*Lepidurus packardi*	E / -	Extremely unlikely	Vernal pools, clay flats, alkaline pools, ephemeral stock tanks, roadside ditches, and road ruts in California's Great Central Valley. No previous occurrence on MOTCO.
Flowering Plants				
Soft bird's-beak	*Cordylanthus mollis* ssp. *mollis*	E / R	Unlikely	Low marsh zone and eroding banks of Delta tidal brackish marshes. Occurrences found west of the chemical plant and southeast of Pier 4, the easternmost pier.

Legend: BRAC = Base Realignment and Closure; CE = California Endemic; E = Endangered; MOTCO = Marine Ocean Terminal Concord; PE = Proposed Endangered; PT = Proposed Threatened; R = Rare; SC = Special Concern; T = Threatened; USFWS = United States Fish and Wildlife Service
Sources: USACE 2023; USFWS 2025

Federally Listed Birds

The California least tern (*Sternula antillarum browni*) and California Ridgway's rail (*Rallus obsoletus obsoletus*) are the two federally endangered and state endangered bird species with potential to occur in the project area. California least terns nest in colonies on sandy beaches or islands, as well as coastlines and rivers and occasionally can be found in habitats such as agricultural fields and other human-made environments. California least terns have not been observed on MOTCO since 1982 and have not been recorded nesting on MOTCO. Avian surveys performed in 2021 resulted in no observations of California least terns (USACE 2023). There is a nesting colony approximately 10 miles northeast of MOTCO at Montezuma Slough. Due to lack of recent

observations of the California least tern at MOTCO, this species is unlikely to occur near the project area, but could occur transiently.

The California Ridgway's rail is extremely rare in Suisun Bay, with the USFWS 2009–2018 10-year average population estimate of 0 in the Suisun Bay Recovery Unit (USFWS 2020). No occurrences have been documented at MOTCO since the 1990s (USACE 2023). The California Ridgway's rail is found in salt and brackish marsh habitat, which does exist at MOTCO, and nests from late February through July. California Ridgway's rails generally occur sporadically and in low densities in tidal brackish marshes in Suisun Bay and are relatively secretive. Species-specific surveys as recent as 2021 have not resulted in observations of this species, but its secretive nature could result in lack of detection (USACE 2023). It is possible the California Ridgway's rail could occur in the project area.

Federally Listed Reptiles

The Alameda whipsnake (*Masticophis lateralis euryxanthus*) is federally and state threatened. The northwestern pond turtle (*Actinemys marmorata*) is proposed threatened federally and is classified as special concern in California. There is no previous record of the Alameda whipsnake on MOTCO, and this species is unlikely to occur in the project area (USACE 2023). The California Department of Fish and Wildlife (CDFW) Biogeographic Information and Observation System (BIOS) only reports a very small area in the foothills east of the Administrative District as patch habitat for the Alameda whipsnake (CDFW 2025). The northwestern pond turtle has been identified in the Mission District on MOTCO and in Otter Slough and Seal Creek Marsh and may also inhabit any permanent or near-permanent freshwater ponds on the installation (USACE 2023). Occurrence of the northwestern pond turtle in the project area is possible.

Federally Listed Amphibians

The federally listed amphibians with potential to occur in the project area are California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), foothill yellow-legged frog (*Rana boylii*), and the western spadefoot (*Spea hammondii*). The California red-legged frog and California tiger salamander are both federally threatened and are California Endemics. These species have similar habitats of permanent freshwater ponds and marshes, as well as uplands, and have been observed on MOTCO in the Navy Base Realignment and Closure Re-Use Area historically (USACE 2023). No occurrences were found as of 2020 (USACE 2023), but there is possibility of both of these species occurring in the project area as freshwater ponds and marshes are found throughout the Mission District of MOTCO. The CDFW BIOS reports medium-likelihood predicted habitat for the California red-legged frog throughout the upper Mission District and foothill area of MOTCO, and high-likelihood predicted habitat for the California tiger salamander in the upper Mission District and foothill area of MOTCO (CDFW 2025).

The foothill yellow-legged frog is federally threatened, and the western spadefoot is proposed threatened. Neither have state listing status. The foothill yellow-legged frog is found in foothill and mountain streams and wet meadows, which would be located in the foothills to the northeast of the Administrative District. The CDFW BIOS reports the foothill and upper Mission District at MOTCO as low-likelihood predicted habitat for the foothill yellow-legged frog (CDFW 2025). No occurrences of this species have been reported at MOTCO (USACE 2023). Western spadefoots utilize a variety of habitats, including grasslands, scrub, and woodland that also have aquatic breeding habitat

(USFWS 2023). Their range includes central and southern California, and they have not been identified on MOTCO but may occur (USACE 2023). The CDFW BIOS reports the upper Mission District and foothills at MOTCO as high-likelihood western spadefoot predicted habitat (CDFW 2025). This species spends 8–10 months underground as dormant adults and only emerges at night during winter and spring rains for breeding and foraging (USFWS 2023). It is possible that the western spadefoot could occur in the project area.

Federally Listed Fishes

The delta smelt (*Hypomesus transpacificus*) and longfin smelt (*Spirinchus thaleichthys*) are both found throughout Suisun Bay. Designated critical habitat for the delta smelt is located in Suisun Bay, which abuts the project area. There is proposed critical habitat for the longfin smelt in Suisun Bay. Delta smelts are federally threatened and have no state listing status, while the longfin smelt are federally and state endangered. The project area does not overlap with Suisun Bay and therefore these species would not be expected to occur in the project area.

Federally Listed Insects

The monarch butterfly (*Danaus plexippus*) is proposed threatened. Many overwintering sites for this species are found throughout the Bay Area and individuals are likely to occur on MOTCO, especially if flowering plants or milkweed are present.

Federally Listed Crustaceans

Vernal pool fairy shrimp (*Branchinecta lynchi*), federally threatened, and vernal pool tadpole shrimp (*Lepidurus packardi*), federally endangered, are both extremely unlikely to be found in the project area due to lack of habitat. No previous occurrence of these two species have been identified at MOTCO (USACE 2023).

Federally Listed Flowering Plants

Soft bird's-beak (*Cordylanthus mollis* ssp. *mollis*) is federally endangered and listed as Rare in the state of California. This plant species is found in low marsh zones and eroding banks of Delta tidal brackish marshes (USACE 2023) and has been identified at MOTCO (USACE 2023). The two locations of identification are the pickleweed (*Salicornia virginica*)-dominated marshes west of the chemical plant and southeast of Pier 4, the easternmost pier (USACE 2023).

Essential Fish Habitat

Essential fish habitat (EFH) is defined as those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity. Otter Slough and Suisun Bay, which abut the project area (see **Figure 3.5-1**), contain three EFH habitats: Chinook Salmon EFH, Groundfish EFH, and Coastal Pelagic EFH (National Oceanic and Atmospheric Administration 2025).

3.6.2 Environmental Consequences

3.6.2.1 Full Implementation Alternative (Preferred Alternative)

Impacts to biological resources would be the immediate result of project-related activities (e.g., direct mortality or disturbance of species, or removal of vegetation and habitat during construction). Impacts may be either temporary (reversible) or permanent (irreversible). Secondary effects may be caused by or result from project-related activities

but occur later in time or are spatially removed from the activities (e.g., shifts in vegetation composition or increased predation risk over time) and typically would extend beyond the immediate project footprint(s).

Plant Communities

Implementation of the Full Implementation Alternative would result in both temporary and permanent impacts to plant communities. Most of the proposed construction and renovation projects (see **Table 2.4-2**) would occur in developed and disturbed portions of the Administrative District and Mission District (see **Figure 2.4-1**). Marshland and grassland habitats may experience temporary and permanent impacts during construction activities, including temporary crushing during construction and permanent removal. Impacts to plant communities would be minimal due to the relatively small project footprint of the proposed roads and fences in these areas (see **Figures 2.4-1 through 2.4-10**). In addition, natural resources at MOTCO are managed in accordance with the INRMP (USACE 2023). Under the Full Implementation Alternative, management practices outlined by the INRMP, such as invasive weed control and restoration of temporarily impacted areas, would be implemented to minimize potential impacts to plant communities. Impacts to plant communities would not be significant under the Full Implementation Alternative due to the relatively small area of impact from project construction (up to 100 acres disturbance maximum including previously disturbed areas, compared to the 6,641 acres of onshore land at MOTCO).

Wildlife

As described above, the proposed construction and renovation projects under the Full Implementation Alternative would not represent a significant loss of valuable wildlife habitat (up to 100 acres of ground disturbance, including previously disturbed areas, compared to the 6,641 acres of onshore land at MOTCO). Impacts to wildlife from construction, renovation, and demolition activities would be minimal due to temporary nature of activities and because the area already experiences disturbance from rail, shipping, vehicles, and human activity. Noise associated with construction and demolition activities and an increase in human presence may cause wildlife to temporarily avoid or move away from project areas. However, ongoing human presence and noise associated with industrial operations already occurs near the project areas; therefore, the proposed projects would not be expected to contribute above the ambient noise levels over the long term. Noise from proposed construction activities would be temporary and localized. Wildlife may move into adjacent habitats and return to the project areas once activities have ceased.

Measures outlined in the existing INRMP would be implemented to avoid or reduce impacts to migratory birds. Building demolition should be limited to the non-breeding season (September–January), or buildings would be inspected for bird nests by a USFWS-approved biologist prior to demolition and construction. If active nests are found, MOTCO would coordinate with USFWS and CDFW on MBTA procedures and protocols for nest depredation and/or salvage (USACE 2023). Additionally, tree pruning and cutting would be limited to the non-breeding season (September–January) or trees would be inspected for active bird nests by a USFWS-approved biologist prior to pruning/cutting. If active nests are found, MOTCO would coordinate with USFWS and CDFW on MBTA procedures and protocols for nest depredation and/or salvage (USACE 2023).

Increases in impervious surfaces from construction may result in small increases in runoff.

Runoff may result in increased turbidity in waterbodies, which could have temporary, minor impacts to aquatic ecosystems and species. See **Section 3.5**, *Water Resources*, for further discussion. This would likely only occur after storm events, and effects would be temporary. Additionally, the channelization of Mt Diablo Creek would result in fewer flood events from this waterbody and therefore lower the amount of runoff and chance for increased turbidity as a result of Mt Diablo Creek flooding.

The implementation of the proposed construction and renovation projects could eliminate or displace wildlife from the project footprints and their vicinities. Individuals of smaller, less mobile, and burrowing species could be killed or injured by construction in new footprints, whereas mobile species (e.g., birds and larger mammal species), would disperse to surrounding areas, as discussed above. Any loss of or impacts to commonly occurring individuals would not represent a noticeable portion of the population. Therefore, impacts to wildlife would not be significant under the Full Implementation Alternative.

Special Status Species

Federally Listed Species

The California least tern and California Ridgway's rail could experience temporary and brief disturbance from the construction and demolition under the Proposed Action if they were to pass through MOTCO. These bird species could be temporarily disturbed and leave the area during construction. Due to lack of identification of breeding and non-breeding individuals at MOTCO during recent surveys, breeding success would not be impacted. No significant habitat impacts would occur from the proposed projects due to the small footprint of proposed construction. Therefore, the Proposed Action may affect, but is not likely to adversely affect the California least tern and California Ridgway's rail. Additionally, the INRMP outlines conservation measures required for the California least tern and California Ridgway's rail that would further reduce potential for impacts to these species. These are described below, in *Conservation Measures.*

Due to lack of previous occurrence and lack of predicted habitat, the Alameda whipsnake would experience no effect from the Proposed Action. Additionally, project construction in potential habitat (chaparral, grasslands, etc.) would be minimal, with only fencing and perimeter road proposed. No significant habitat impacts to this species would occur.

The northwestern pond turtle is found primarily near freshwater ponds, of which the Proposed Action would not impact. This species does occur in Otter Slough, which is adjacent to Project 9 (see **Figure 3.5-1**). The northwestern pond turtle may experience temporary noise disruptions and construction could result in small increases in runoff into Otter Slough. Mitigation measures outlined in **Section 3.5**, *Water Resources*, would be implemented to avoid or minimize impacts to water resources, which would avoid or minimize impacts to the northwestern pond turtle. Therefore, the Proposed Action may affect, but is not likely to adversely affect the northwestern pond turtle.

The California red-legged frog and California tiger salamander have similar habitats (permanent freshwater ponds and marshes), and these types of habitats would not be impacted by the Proposed Action. These species would experience no effect from the Proposed Action. Additionally, the INRMP outlines conservation measures required

for the protection of these species, and these are described below in *Conservation Measures.*

The foothill yellow-legged frog is found in foothill and mountain streams and foothill riparian and wet meadows. These types of habitats would experience limited impact from Project 5, which would construct a perimeter road and fence that may pass through habitat for this species. Temporary disturbance or destruction of very small amounts of habitat are possible. Conservation measures for this species are listed below and would include pre-construction surveys and construction monitoring by qualified biologists in potential foothill yellow-legged frog habitat. If individuals are identified, USFWS and CDFW would be contacted and conservation measures, such as avoidance or relocation, would be developed in partnership with these agencies. With implementation of conservation measures, the Proposed Action may affect, but is not likely to adversely affect this species.

The western spadefoot occurs in a variety of habitats, especially near aquatic resources. Temporary disturbance and small amounts of habitat destruction could be possible under the Proposed Action, specifically Project 8. Western spadefoots have not been recorded at MOTCO. Conservation measures for this species are listed below and would include pre-construction surveys and construction monitoring by qualified biologists in potential western spadefoot habitat. If individuals are identified, USFWS and CDFW would be contacted and conservation measures, such as avoidance or relocation, would be developed. With these measures, the Proposed Action may affect, but is not likely to adversely affect the western spadefoot.

The delta smelt and longfin smelt occur in Suisun Bay. No projects under the Proposed Action would occur in Suisun Bay. Adjacent construction projects, such as Project 9C and 11, are unlikely to result in any impacts to the aquatic habitat of Suisun Bay. Therefore, these species would experience no effect from the Proposed Action, and the designated and proposed critical habitats in Suisun Bay would not be affected.

The monarch butterfly may experience disruption and small amounts of potential destruction of habitat with the construction of new impervious surfaces, if these areas contained milkweed or other flowering plants. Pre-construction surveys for milkweed would occur, and if monarch eggs, larvae, or ovipositing adults were located, USFWS and CDFW would be contacted. Overwintering sites would not be affected. Therefore, the Proposed Action may affect, but is not likely to adversely affect the monarch butterfly.

Vernal pool fairy shrimp and vernal pool tadpole shrimp habitat is generally lacking at MOTCO. No previous occurrence has been identified. The Proposed Action would have no effect on these species.

Soft bird's-beak is located west of the chemical plant at MOTCO. Project 8 (fencing) would be installed east of known occurrences of this plant but would not cause destruction to individuals of this species, or cause loss of habitat. Therefore, this species would experience no effect from the Proposed Action.

Essential Fish Habitat

EFH would not be impacted by the Proposed Action. **Section 3.5**, *Water Resources* discussed impacts to water quality, which are minimal.

Conservation Measures

Because the project would occur within listed species habitat, protective measures would be implemented, as appropriate, to reduce any impacts to listed species. These measures include:

1. To minimize or avoid the loss of individual California Ridgway's rails, activities within or adjacent to California Ridgway's rail habitat will not occur within 2 hours before or after extreme high tides (6.5 feet or above, as measured at the Golden Gate Bridge), when the marsh plain is inundated, because protective cover for California Ridgway's rails is limited and activities could prevent them from reaching available cover.
2. To minimize or avoid the loss of individual California Ridgway's rails, activities within or adjacent to tidal marsh areas will be avoided during the California Ridgway's rail breeding season from 1 February through 31 August each year unless surveys are conducted to determine California Ridgway's rail locations and California Ridgway's rail territories can be avoided or the marsh is determined to be unsuitable breeding habitat by a qualified biologist. If breeding California Ridgway's rails are determined to be present, activities will not occur within 700 feet of an identified calling center. If the intervening distance across a major slough channel or across a substantial barrier between the California Ridgway's rail calling center and any activity area is greater than 200 feet, then it may proceed at that location within the breeding season.
3. No activities will be performed within 300 feet of an active least tern nest during the California least tern breeding season, 15 April to 15 August (or as determined through surveys).
4. California red-legged frog and California tiger salamander will be included in pre-construction environmental awareness training of construction contractors.
5. In areas of vegetation and soil disturbance, a Service-approved biologist with California red-legged frog and California tiger salamander experience will inspect the site to determine if occupied habitat is found.
6. A Service-approved biologist will be present and monitor for the presence of listed species during initial ground disturbance and vegetation removal. The biological monitor will also sporadically observe the construction site for California red-legged frog and California tiger salamander within 24 hours following a rainfall event, if that time period falls under a scheduled workday.
7. If work is to continue during rain events, a Service-approved biologist will survey the project area for presence of listed species prior to the day's work activities and periodically during the day.
8. If a California red-legged frog or California tiger salamander is found anywhere on the project site, immediate measures will be taken to avoid take, and USFWS will be contacted immediately to discuss the potential for avoidance measures.
9. Vehicle speeds will be reduced to 15 miles per hour during rain events.
10. Pre-construction surveys for monarchs would occur, and if monarch eggs, larvae, or ovipositing adults were located, USFWS and CDFW would be contacted.

3.6.2.2 Partial Implementation Alternative

Impacts to biological resources under the Partial Implementation Alternative would be identical to the Full Implementation Alternative, with the exception that Project 4, Mt

Diablo Creek Flood Control, would not be implemented. No channelization of 2,400 LF of creek along Port Chicago Highway would occur. Impacts to biological resources would not be significant.

3.6.2.3 No Action Alternative

Under the No Action Alternative, MOTCO would not implement the real property master planning actions. Biological resources would be expected to remain as described under existing conditions in **Section 3.6.1**. Ongoing maintenance and repair would continue, and individual projects could be implemented, subject to completion of project-specific NEPA and other required compliance. Effects from individual projects would be evaluated as part of the overall NEPA analysis for the projects and any necessary mitigations would be implemented to ensure no significant effects would occur.

3.6.3 Reasonably Foreseeable Actions and Environmental Trends

Construction and demolition associated with the cumulative projects outlined in **Table 3.2-1** would not have major impacts on wildlife habitat and would not cause significant effects to threatened and endangered species. Wildlife may experience temporary noise disruptions during construction and demolition, and small areas of habitat may be impacted by site-specific proposed projects. Therefore, no significant cumulative impacts to biological resources would occur.

3.7 CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and as implemented by 36 CFR part 800, requires federal agencies to consider the effects of their actions on historic properties before undertaking a project. A historic property is defined as any cultural resource that is included in, or eligible for inclusion in, the National Register of Historic Places (NRHP). The NRHP, administered by the NPS, is the official inventory of cultural resources that are significant in American history, prehistory, architecture, archaeology, engineering, and culture. The NRHP also includes National Historic Landmarks. In consideration of the NHPA, federal agencies are required to initiate consultation with the SHPO informing them of the planned action and requesting their comments or concerns.

Several federal laws and regulations have been established to manage cultural resources, including the NHPA (1966), the Archaeological and Historic Preservation Act (1974), American Indian Religious Freedom Act (1978), the Archaeological Resources Protection Act (1979), and Native American Graves Protection and Repatriation Act (1990). In addition, coordination with federally recognized American Indian Tribes must occur in accordance with EO 13175, *Consultation and Coordination with Indian Tribal Governments*.

On November 27, 1999, the DoD promulgated its Annotated American Indian and Alaska Native Policy, which emphasizes the importance of respecting and consulting with Tribal governments on a government-to-government basis. This Policy requires an assessment, through consultation, of the effect of proposed DoD actions that may have the potential to significantly affect protected Tribal resources, Tribal rights, and Indian lands before decisions are made by the respective services (DoD American Indian/Alaska Native Policy), as does DoD Instruction 4710.02, *Interaction with Federally Recognized Tribes* (September 14, 2006).

3.7.1 Affected Environment

The area of potential effects (APE) for cultural resources is the geographic area or areas within which an undertaking (project, activity, program, or practice) may cause changes in the character or use of any historic properties present. The APE is influenced by the scale and nature of the undertaking and may be different for various kinds of effects caused by the undertaking. For this Proposed Action, the Army determined that the APE includes up to 100 acres where ground-disturbing activities would occur (see **Figure 2.4-1**). The APE encompasses the U.S. Naval Magazine Port Chicago Historic District (PC Historic District) and extends beyond the district boundaries to the east and west. The APE delineated considers both direct and indirect effects to the district. Further, the APE was defined to allow for a construction buffer around areas of direct effect. The buffer would allow for equipment maneuvering and potential, short-term material/equipment storage. Access to and from the APE would occur on numerous, established paved roads within the Tidal Area. The Army is consulting with the California SHPO on its finding of effect for the Proposed Action.

3.7.1.1 Archaeological Resources

A total of 34 archaeological surveys have been completed at MOTCO since 1976. Approximately 958 acres of land within MOTCO have been previously surveyed for archaeological resources. Three archaeological sites have been recorded within MOTCO, all are historical archaeological sites located within the Mission District. Two sites, the Nichols School (P-07-000402 or CA-CCO-638H) and the Getty Oil Site (P-07-000403 or CA-CCO-639H), have been determined not eligible for listing in the NRHP and received SHPO concurrence in 2002. The Port Chicago Naval Magazine Explosion Site, an underwater archaeological site, is the only NRHP-eligible archaeological site inland present at MOTCO. No archaeological sites have been identified in the Administrative District or on the seven islands (MOTCO 2018a).

An archaeological sensitivity survey was conducted in 2002 which identified areas with high, moderate, and low surface archaeological potential. Areas with high or moderate archaeological potential at MOTCO consist of the historic marsh boundaries in the Mission District and near the current and former path of Mt Diablo Creek. Areas previously surveyed for archaeology that have produced negative results were considered to have low potential for archaeological sites. Low potential areas also include most of the steep slopes of the hills at the southeast area of the Mission District, and portions of the Mission District where the former marshland was filled during the construction of the installation in 1942 (MOTCO 2018a).

3.7.1.2 Architectural Resources

Six architectural property inventories and assessments have been conducted at MOTCO since 1993. All MOTCO buildings and structures built prior to 1990 have been previously evaluated and determined not eligible for listing in the NRHP as a result of surveys in 1993, 1998, 2009, and 2012. Resources less than 50 years of age at the time of the 1998 evaluation were evaluated under Criteria Consideration G for buildings and structures less than 50 years of age that possess exceptional significance. None of the less-than-50-year-old buildings were determined to be significant under Criteria Consideration G (MOTCO 2018a).

Fifty-three railroad ammunition storage areas have been identified as eligible for listing in the NRHP for the purposes of a Program Alternative. This Program Alternative refers to the Advisory Council for Historic Preservation's 2006 "Program Comment for World War II and Cold War Era (1939-1974) Ammunition Storage Facilities," which applies to all DoD ammunition storage facilities built before 1975, including those at MOTCO. Under these Program Comments, the DoD, in coordination with the Advisory Council on Historic Preservation, has mitigated these eligible facilities as part of a nationwide mitigation for eligible ammunition storage and production facilities. The Program Comment serves as the Army's Alternative procedures to mitigate Section 106 undertakings and the effects on ammunition storage facilities that are managed or owned by the Army. Undertakings covered by the Program Comment include management actions such as ongoing operations, maintenance and repair, rehabilitation, renovation, mothballing, cessation of maintenance, new construction, demolition, deconstruction and salvage, remediation activities, and transfer, sale, lease, and closure of such facilities. Therefore, under this Program Alternative, the Army does not need to consult on undertakings for pre-1975 ammunition storage facilities at MOTCO (MOTCO 2018a).

MOTCO contains one historic district. The U.S. Naval Magazine PC Historic District at MOTCO was listed in the NRHP in 2022 and includes 41 contributing structures, 1 noncontributing building, and 1 noncontributing site (Schultz and Farr 2022). The PC Historic District is NRHP eligible at the national level of significance under Criterion A in the areas of Ethnic Heritage: Black, and Military, for the role the property played in the desegregation of the U.S. Armed Forces following World War II with a period of significance from 1944 to 1945. The SHPO concurred that the PC Historic District is eligible for NRHP listing. Thirty-eight RBS Area and associated railroad trackage were constructed during the World War II build up at the installation to house railroad boxcars loaded with munitions. The 38 RBS, along with railroad trackage, roads, and the remains of a wooden pier (Pier 1), compose the NRHP-eligible PC Historic District. The PC Historic District is not yet officially listed by the Keeper of the NRHP, but the nomination received concurrence from the California SHPO on March 10, 2022. The PC Historic District includes the NPS-administered Port Chicago Naval Magazine National Memorial, although the Port Chicago Naval Magazine National Memorial is considered a non-contributor to the PC Historic District.

3.7.1.3 Traditional Cultural Places

A Sacred Lands file search was conducted on March 14, 2017, by the California Native American Heritage Commission to identify known sacred sites within MOTCO. No sacred sites were identified in this search. Additionally, neither the California Historical Resources Information System file search nor the California Native American Heritage Commission's file search has identified known Traditional Cultural Places within MOTCO. Five federally recognized Tribal Nations and Tribal groups have potential interest in MOTCO and include Bay Miwok, Ohlone/Constanoan, Plains Miwok, Northern Valley Yokuts, and Patwin/Wintun (MOTCO 2018a). Following the public review period of the Draft EA, **Appendix A** will be updated to include all Section 106 correspondence.

3.7.2 Environmental Consequences

Effects analysis for cultural resources focuses on assessing whether the Proposed Action or No Action Alternative have the potential to affect cultural resources that are

eligible for listing in the NRHP (known as historic properties that include traditional cultural places) or have traditional significance for Native American groups. Under Section 106 of the NHPA, the lead agency is responsible for determining whether any historic properties are located in the area, assessing whether the proposed undertaking would adversely affect the resources, and notifying the SHPO or Tribal Historic Preservation Officer of any adverse effects.

An adverse effect is any action that may directly or indirectly change the characteristics that make the historic property eligible for listing in the NRHP. If an adverse effect is identified, the federal agency consults with the SHPO/Tribal Historic Preservation Officer, federally recognized Tribal Nations, and if applicable, the Secretary of the Interior to develop measures to avoid, minimize, or mitigate the adverse effects of the undertaking.

Analysis of potential adverse effects on historic properties, including traditional cultural places/sacred sites, is based on the following considerations: (1) physically altering, damaging, or destroying all or part of a resource; (2) altering characteristics of the surrounding environment that contribute to resource significance; (3) introducing visual, audible, or atmospheric elements that are out of character with the property or alter its setting; or (4) neglecting the resource to the extent that it deteriorates or is destroyed. The potential to directly disturb historic properties can be assessed by identifying the type and location of the Proposed Action.

3.7.2.1 Full Implementation Alternative (Preferred Alternative)

Archaeological Resources

The Full Implementation Alternative consists of new construction, infrastructure and wastewater system repairs and improvements, and building repairs and renovations, resulting in up to 100 acres of ground disturbance. There are no NRHP-eligible archaeological sites within any of the project areas. Projects 1, 2, 3, 4, 5, 6, 8, 9, 10, and 11 are in areas determined to have low archaeological potential. Project Area 7, which is in an area of high archaeological potential, has been previously surveyed and no sites were identified. Project Area 8 has also been previously surveyed and two sites were identified; however, both were determined not eligible for listing in the NRHP (MOTCO 2018a).

In the event of an unanticipated discovery during ground-disturbing operations, the construction contractor would cease work and notify the MOTCO Environmental Chief. The Environmental Coordinator would continue to follow SOP 5: *Inadvertent Discovery of Archaeological Deposits/Cultural Material* from the Integrated Cultural Resources Management Plan (ICRMP) (MOTCO 2018a).

Under these conditions, there would be no significant impacts to archaeological resources under the Full Implementation Alternative.

Architectural Resources

The Full Implementation Alternative includes the repair and/or renovation of five buildings: Buildings 177, 542, 605, 607, and 608. Buildings 542 through 608 were built after 1999 and are not eligible for listing in the NRHP. Building 177, built in 1967, is eligible for the purposes of a Program Alternative. As such, renovation and/or repair activities to Building 177 are covered by the Advisory Council on Historic Preservation's 2006 "Program Comment for World War II and Cold War Era (1939-1974) Ammunition Storage Facilities," and no additional consultation or mitigation is required (MOTCO 2018a).

Project 9D would demolish and/or repair railroad tracks in the RBS Area. The proposed project will result in the physical destruction of the RBS, magazines, and track that will remove contributing features to the PC Historic District, resulting in a loss of historic integrity. RBS are contributing resources to the PC Historic District. In accordance with 36 CFR Section 800.5(a)(2), the project will result in an adverse effect. Additionally, MOTCO proposes to abandon-in-place 14 of the RBS. Abandonment will result in continued lack of upkeep and maintenance of these district elements. Although the RBS are structurally sound and will remain largely unchanged without regular upkeep well into the future, ultimately the lack of maintenance will lead to demolition by neglect through their continued deterioration. This will also diminish the viewsheds of and from the existing elements of the PC Historic District. RBS are contributing resources to the PC Historic District To resolve the adverse effects consistent with 36 CFR 800.6(c) and ensure impacts remain less than significant, MOTCO consulted with the California SHPO, NPS, and Advisory Council on Historic Preservation to execute a Programmatic Agreement (PA). The PA stipulates that MOTCO will do the following:

- All design work planned and executed will be undertaken in close coordination between NPS and MOTCO and will be reviewed by SHPO. MOTCO and NPS will consult and collaborate at all steps in the design process to ensure that constructed features will meet NPS design standards and themes for the Port Chicago Naval Magazine National Memorial and that features meet MOTCO's safety and security requirements.
- There are 27 historic-era, steel-clad railroad boxcars at MOTCO. NPS owns two historic-era, steel-clad railroad boxcars and the rest are owned by MOTCO. MOTCO will transfer ownership of three railroad boxcars to the NPS, thus allowing the boxcars to be staged on the railroad lines either fully, or partially within RBS 138 to further improve interpretive opportunities and enhance visitor experience. Additionally, MOTCO will also transfer ownership of four boxcars to East Bay Regional Park District. MOTCO will not relocate or provide funding to relocate the boxcars offsite. MOTCO will consult with NPS to determine which three boxcars will be transferred to NPS and which four boxcars will be transferred to East Bay Regional Park District. NPS may elect to move the three boxcars into RBS 138, replacing the two that are currently present in the RBS. In coordination with NPS, MOTCO will facilitate rail-based movement of the NPS boxcars within the PC Historic District.
- In order to ensure visitor safety, MOTCO will abate asbestos present in two of the seven boxcars' ceiling insulation prior to transferring ownership. In addition, MOTCO will weld shut the other five of the seven boxcars to prevent entry to the boxcar. MOTCO will consult with NPS to determine which two boxcars will receive abatement and which five will be welded shut. MOTCO will not provide abatement or weld shut the two boxcars currently owned by NPS.
- With the retention of the RBS and boxcars, the NPS plans to pursue accessible boxcar exhibits through the construction of a well-designed, well-integrated, Americans with Disabilities Act/Architectural Barriers Act Accessibility Standard compliant wheelchair access ramp into one or more boxcars, as well as design and install new interactive and multi-media exhibits within and around the boxcars. Once installed, NPS will be responsible for upkeep and maintenance.

- MOTCO will ensure completion of one Historic American Engineer Record that will document the RBS within the PC Historic District. Documentation will be prepared according to Level II of the Secretary of the Interior Standards and Guidelines for Architectural and Engineering Documentation. The package will include large-format black-and-white archival quality photographic prints and negatives, written descriptive and historical data, and, where available, historic photographs.
- As design elements of the project-specific activities are finalized, MOTCO will ensure continued compliance with Section 106 of the NHPA.
- MOTCO will ensure archaeological monitoring for all ground-disturbing activities.
- If the monitor(s) encounter a previously unidentified property that may be eligible for the NRHP during construction or if it appears that a known historic property will be affected in an unanticipated manner, MOTCO will follow Stipulation IV.B, *Discoveries and Unanticipated Effects* in the PA.

Under these conditions, there would be no significant impacts to architectural resources under the Full Implementation Alternative.

Traditional Cultural Places

No traditional cultural places have been identified at MOTCO. Government-to-government consultation between MOTCO and each federally recognized Tribal Nation or group with interest in MOTCO is being conducted for this action in recognition of their status as sovereign nations, to provide information regarding Tribal concerns per Section 106 of the NRHP, as well as information on traditional resources that may be present on or near MOTCO. Following the public review period of the Draft EA, **Appendix A** will be updated to include all Section 106 correspondence.

The Full Implementation Alternative would not result in significant impacts on traditional cultural resources. Overall, implementation of the Full Implementation Alternative would not result in significant impacts to cultural resources.

3.7.2.2 Partial Implementation Alternative

Impacts to cultural resources under the Partial Implementation Alternative would be identical to the Full Implementation Alternative, with the exception that Project 4, Mt Diablo Creek Flood Control, would not be implemented. Therefore, the Partial Implementation Alternative would not result in significant impacts to cultural resources.

3.7.2.3 No Action Alternative

Under the No Action Alternative, MOTCO would not implement the real property master planning actions as described. Cultural resources would be expected to remain as described in **Section 3.7.1**. Ongoing maintenance and repair would continue, and individual projects could be implemented, subject to completion of project-specific NEPA and other required compliance. Cultural resources effects from any individual projects would be evaluated as part of the overall NEPA analysis for the projects and necessary mitigations would be implemented to ensure no significant effects would occur.

3.7.3 Reasonably Foreseeable Actions and Environmental Trends

Impacts on cultural resources are not likely to occur with the implementation of past, present, and reasonably future actions identified in **Table 3.2-1**. Future ground-disturbing activities identified are in areas of low archaeological potential. Adherence to

SOP 5: *Inadvertent Discovery of Archaeological Deposits/Cultural Material* from the ICRMP would minimize the possibility of adverse impacts. None of the projects identified in **Table 3.2-1** involve NRHP-eligible architectural resources. Additional rail infrastructure modernization are mitigated through the executed PA. Therefore, cumulative impacts on cultural resources would not be significant.

3.8 HAZARDOUS MATERIALS, HAZARDOUS WASTE, TOXIC SUBSTANCES, AND CONTAMINATED SITES

3.8.1 Affected Environment

3.8.1.1 Hazardous Materials

Hazardous materials are generally used at MOTCO for the maintenance of buildings, facilities, vehicles, and equipment. To fulfill its mission, MOTCO also stores and transports hazardous materials, including munitions, as required by activities in support of the Army's mission. Large quantities of oils and other hazardous substances are processed and handled by private parties on adjoining properties. Common hazardous substances used on the installation include petroleum, oil, and lubricants such as motor oils, hydraulic fluids, diesel fuel, and gasoline; paints; sealants; solvents; antifreeze; and batteries. The petroleum, oil, and lubricants products are stored in a variety of containers including aboveground storage tanks, 55-gallon drums, and backup generators (MOTCO 2016).

Individual storage tanks/containers equal to or greater than 55 gallons and their location, contents, capacity, tank materials, and installation date are described in detail in the MOTCO *Spill Prevention, Control, and Countermeasures (SPCC) Plan*. MOTCO governs the handling of hazardous materials and hazardous waste through the *Installation Hazardous Material, Hazardous Waste, and Solid Waste Management Plan* (MOTCO 2014).

3.8.1.2 Hazardous Waste

MOTCO is regulated as a Small Quantity Generator of hazardous waste as defined under the Resource Conservation and Recovery Act. MOTCO's overall waste stream, including hazardous waste from operations, is rather unusual due to its mission (MOTCO 2017a).

Typically, the common hazardous waste generated at MOTCO includes hydrocarbon solvents, waste oil, latex waste, and off-specification organics, and other organic solids. Hazardous waste generated on site does fluctuate substantially due to vessel traffic at the terminal (MOTCO 2017a). Defense Logistics Agency Disposition Services is contracted to manage and dispose of hazardous waste at the installation.

The Department of Toxic Substances Control provides guidance on the proper management and disposal of creosote—an oil-based wood preservative commonly used to protect utility poles, railroad ties, and marine infrastructure (Department of Toxic Substances Control 2025). At MOTCO, pressurized-creosote-treated wood has been used to reinforce timber pilings in various structures. When large vessels dock, they can damage pilings and decking, necessitating repairs that may involve the removal of creosote-treated materials. However, the majority of the wooden piles are currently being removed, resulting in a decrease in in-water creosote materials. Additionally, maintenance of railroad tracks generates small amounts of pressure-creosote-treated railroad ties yearly that require disposal.

Creosote-treated wood may be presumed hazardous, though laboratory testing can be conducted to confirm its classification. It is the generator's responsibility to determine whether the wood qualifies as hazardous waste and to manage it accordingly. In California, hazardous treated-wood waste must be transported either to a Class I hazardous waste landfill or to an authorized out-of-state facility for proper disposal (MOTCO 2017a).

The Pollution Prevention Plan describes the processes that generate routine hazardous waste and materials at MOTCO and how to address the generation of waste (MOTCO 2017a). The MOTCO SPCC contains the governing regulation for spill preventions and describes specific protocols for preventing and responding to releases, accidents, and spills involving oils and hazardous materials (MOTCO 2016). The *Installation Hazardous Material, Hazardous Waste and Solid Waste Management Plan* outlines procedures at MOTCO to ensure that hazardous materials and hazardous waste are handled and managed in full accordance with applicable federal, state, and local regulations (MOTCO 2014).

3.8.1.3 Toxic Substances

Toxic chemical substances regulated by EPA under the Toxic Substances Control Act and typically associated with buildings and facilities include asbestos, lead, mercury, and polychlorinated biphenyls (PCBs). The MOTCO Department of Public Works Environmental Division provides guidance for the location, condition, and recommended methods of managing toxic substances found throughout the installation. Buildings and suspect materials and fixtures are screened for toxic materials prior to demolition and disposal. Buildings are tested for lead-based paint and PCBs, as well as asbestos and mercury, as applicable, before maintenance or demolition, especially if they were built prior to 1978 when the federal government banned consumer uses of lead and PCBs in paint.

Construction work, renovation, and demolition of structures at MOTCO may expose asbestos and lead hazards. If these hazards are identified during project construction or renovation, surveys and sampling are conducted and the hazard treated in accordance with the *Asbestos and Lead Hazard Management Plan* (MOTCO 2018b). MOTCO uses the *Asbestos and Lead Hazard Management Plan* as guidance for handling, monitoring, and removing these toxic substances (MOTCO 2018b).

3.8.1.4 Contaminated Sites

The Defense Environmental Restoration Program (DERP) was developed by the DoD pursuant to legislation codified at 10 U.S.C. section 2700 et seq., to identify, investigate, and remediate potentially hazardous material disposal sites on DoD property. As part of DERP, the DoD has created the Installation Restoration Program (IRP) and the Military Munitions Response Program (MMRP). The purpose of the IRP is to locate and clean up hazardous substances in the environment at military installations. The MMRP addresses the challenges presented at sites called munitions response sites (MRSs) that are not on operational ranges (MOTCO 2018c). MRSs are response actions taken that address the explosives safety, human health, or environmental risks presented by MEC. The DERP is implemented using the process developed for cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) legislation, including a series of eight steps that begin with a site investigation and, if necessary, end in the remediation/cleanup of the site. Land use controls are often

established at terrestrial IRP and MMRP sites, and navigation controls at water sites, to afford continuous or interim protection at a site as DERP steps are implemented to reduce risks to human health and the environment (MOTCO 2018c).

Installation Restoration Sites

There are 12 CERCLA sites identified as IRP sites under MOTCO's IRP, as shown in **Figure 3.8-1**. All 12 IRP sites are the responsibility of MOTCO to remediate and conduct long-term monitoring (LTM) (MOTCO 2018c). The proposed project sites fall within the boundaries of Sites 3, 31, 32, and 40.

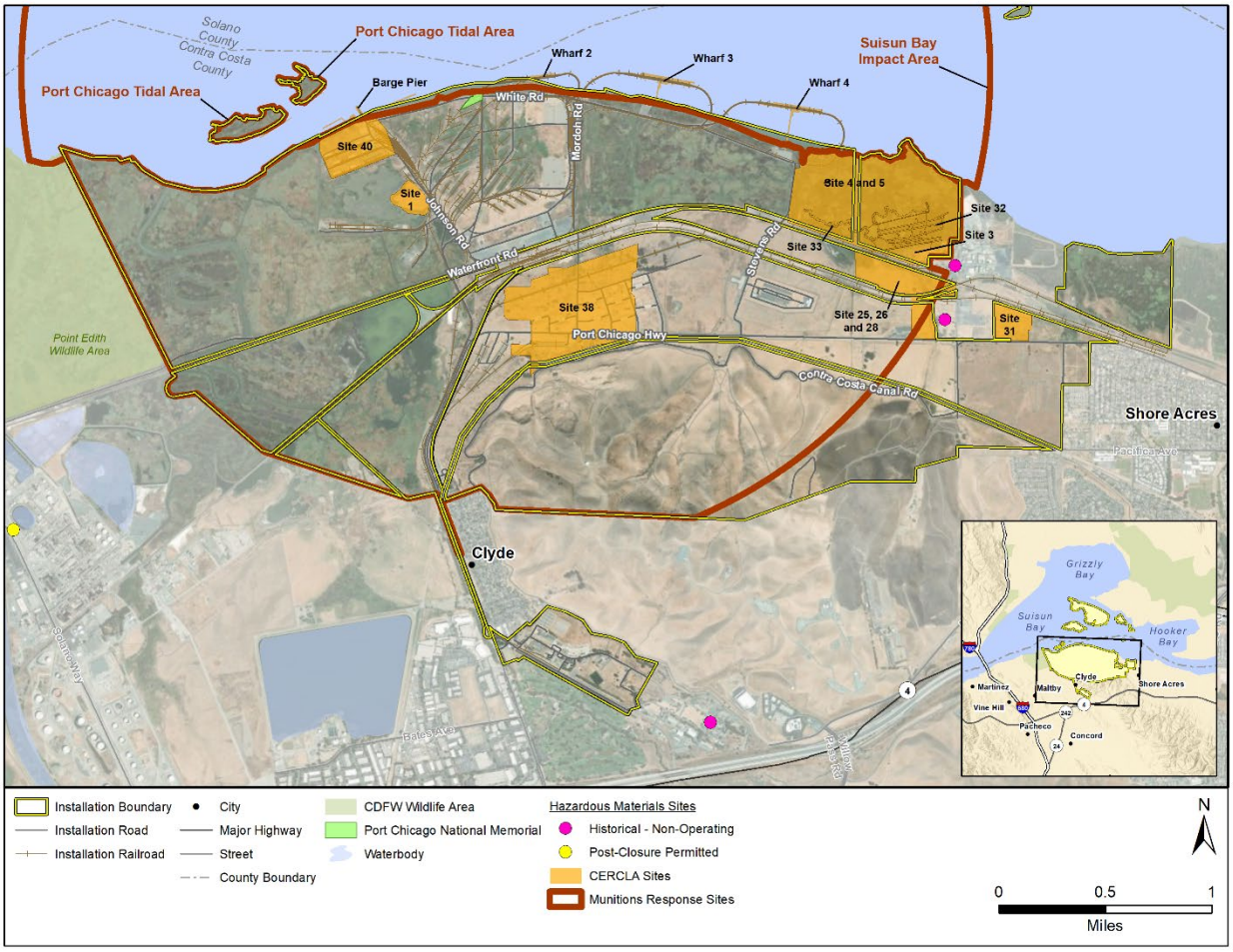


Figure 3.8-1 IRP Sites and MRSs at MOTCO

Site 3 was acquired in the late 1960s by the Navy as a buffer for munitions loading in the Mission District. Contaminated with heavy metals from prior waste disposal, the Navy sued the former owners and reached a settlement assigning cleanup responsibilities. This parcel, now called the "Litigation Area," includes tidal marshes, upland grasslands, and riparian zones, and supports sensitive species (see **Section 3.6.1**). The Navy removed contaminated soils and implemented LTM plans and in situ capping. The Litigation Area site is currently still under post-remediation monitoring (MOTCO 2018c).

Site 31, in the northeastern Mission District, housed a fertilizer plant until the Navy acquired it in 1983 as a safety buffer for munitions operations. Soil sampling during a proposed pump station project revealed contamination with lead, mercury, and selenium.

About 35,000 cubic yards of contaminated soil were excavated and removed. The site remains in the remedial design phase of the CERCLA process (MOTCO 2018c).

Site 32 lies within a 300-acre brackish marsh with sloughs, tributaries, and mosquito abatement ditches. Contaminated by off-site sources, Site 32 includes mosquito ditches in the southeast marsh. Following the same CERCLA process as the Litigation Area, in situ capping using Bay Mud dredged from Martinez Marina was completed in December 2015. Remedy success is monitored through annual LTM and 5-year reviews (MOTCO 2018c).

Site 40, centered on the historic Seal Bluff Landing, has a legacy of industrial use, including a copper smelter and shipbuilding, leading to metal and hydrocarbon contamination in soil. Excavation has been conducted in targeted areas to remove surface and subsurface soils where elevated concentrations of metals and hydrocarbon compounds posed unacceptable risks to human and environmental receptors (MOTCO 2018c). Additional removal of contaminated soil was scheduled for 2022 but has not occurred to date.

Munitions Response Sites

There are three MMRP MRSs at MOTCO. For the MRSs, land use restrictions include the prohibition or otherwise careful management of required excavation activities and the restriction of daycare, hospital, schools, or residential use in these areas. The *Land Use Control and Implementation Plan* includes the requirement to obtain dig permits and coordinate with the *MOTCO Area Development Plan and Area Development Execution Plan* (MOTCO 2021). MRS Site 7 was previously used for emergency explosive ordnance disposal operations in 1947. Although it is currently considered inactive, it remains a permitted area for munitions disposal and demolition activities. MRS Sites 8 and 10 encompass the locations of the Port Chicago Terrestrial Explosion Area and the impacted Suisun Bay Impact Area. These sites were affected by a historic explosion that propelled debris more than 2 miles from the point of detonation (MOTCO 2018c).

All construction activities that involve intrusive activities require UXO Construction Support in clearance of construction footprints, whether it is a building, roadway, or utility on the installation, prior to the construction activity taking place. An exception is provided when construction activities occur in an area where clearance activities have already been performed. In such cases, UXO Standby Support is used during construction activities. This includes providing UXO awareness training to construction personnel to recognize general hazards, as well as onsite construction support personnel to investigate any potential UXO found during construction activities.

3.8.2 Environmental Consequences

3.8.2.1 Full Implementation Alternative (Preferred Alternative)

Hazardous Materials and Waste

Construction activities could produce minor increases in handling, storage, use, and transportation of hazardous materials and waste. Additional construction vehicles and equipment would increase consumption of operating fluids and fuel; however, post construction there would be no long-term impacts. Any hazardous waste generated would be managed by contractors in accordance with the relevant requirements of the MOTCO *Installation Hazardous Material, Hazardous Waste, and Solid Waste Management Plan* and applicable federal, state, and local regulations.

In the event of a spill, installation personnel are trained to isolate and clean up releases in accordance with contingency plans and spill response procedures outlined in the SPCC. Any spill of hazardous materials on MOTCO property would be immediately reported to the MOTCO Fire Department, Department of Public Works, and Environmental Compliance Division. Therefore, there are no expected impacts with respect to hazardous materials and waste under the Full Implementation Alternative.

Toxic Substances

Under the Full Implementation Alternative, negligible impacts from encountering toxic substances would occur. No new toxic substances would be used or stored under the Full Implementation Alternative. Procedures for managing toxic substances would continue to be followed during construction and operational activities. Where lead-based or PCB paint, or asbestos is present, required abatement and waste management planning and control measures would be implemented in accordance with federal and California regulations, as well as the MOTCO *Asbestos and Lead Hazard Management Plan*. Therefore, no expected impacts with respect to toxic substances would occur under the Full Implementation Alternative.

Contaminated Sites

Installation Restoration Program Sites

Four IRP sites (Sites 3, 31, 32, and 40) overlap with or are adjacent to some of the proposed renovation and/or construction projects under the Full Implementation Alternative as shown in **Figure 3.8-2**. IRP Sites 3 and 32 overlap with Project 8 which involves the construction of the perimeter road and fencing. IRP Site 31 overlaps with Project 9A and Project 10 which involve repairing industrial lead connections to UP Line and constructing the Network Enterprise Center. IRP Site 40 overlaps with Projects 9C and 11 which include expanding Class Yard 1 and repairing/renovating Buildings 542, 605, 607, 608, and 177. IRP Sites 3 and 32 have completed their remediation efforts and are currently in the LTM and 5-year plan phases, while IRP Sites 31 and 40 remain active and are still undergoing remediation under the CERCLA process. Prior to any excavation or construction at the proposed project sites, and in accordance with applicable BMPs, contractors are required to develop site-specific health and safety plans. These plans must outline the engineering and administrative controls to be implemented, as well as the personal protective equipment to be used, to safeguard human health and the environment. With adherence to applicable health and safety plans, impacts associated with IRP sites are considered minor.

Munitions Response Sites

The Full Implementation Alternative includes 13 project sites within the limits of MRS 8, Port Chicago Terrestrial Explosion Area.

Due to the 1944 Port Chicago Disaster, there may be UXO and other MECs located in the footprints of the proposed demolition and construction projects. Demolition and construction contractors would follow all scheduling, coordination, security, safety, permitting, and other matters pertinent to work accomplishment in accordance with DoD Manual 6055.09, *DoD Ammunition and Explosives Safety Standards*, UXO Standby Support, and as directed by the Explosive Safety Submission. As part of the Proposed Project, clearance of MEC would occur within the project footprint.

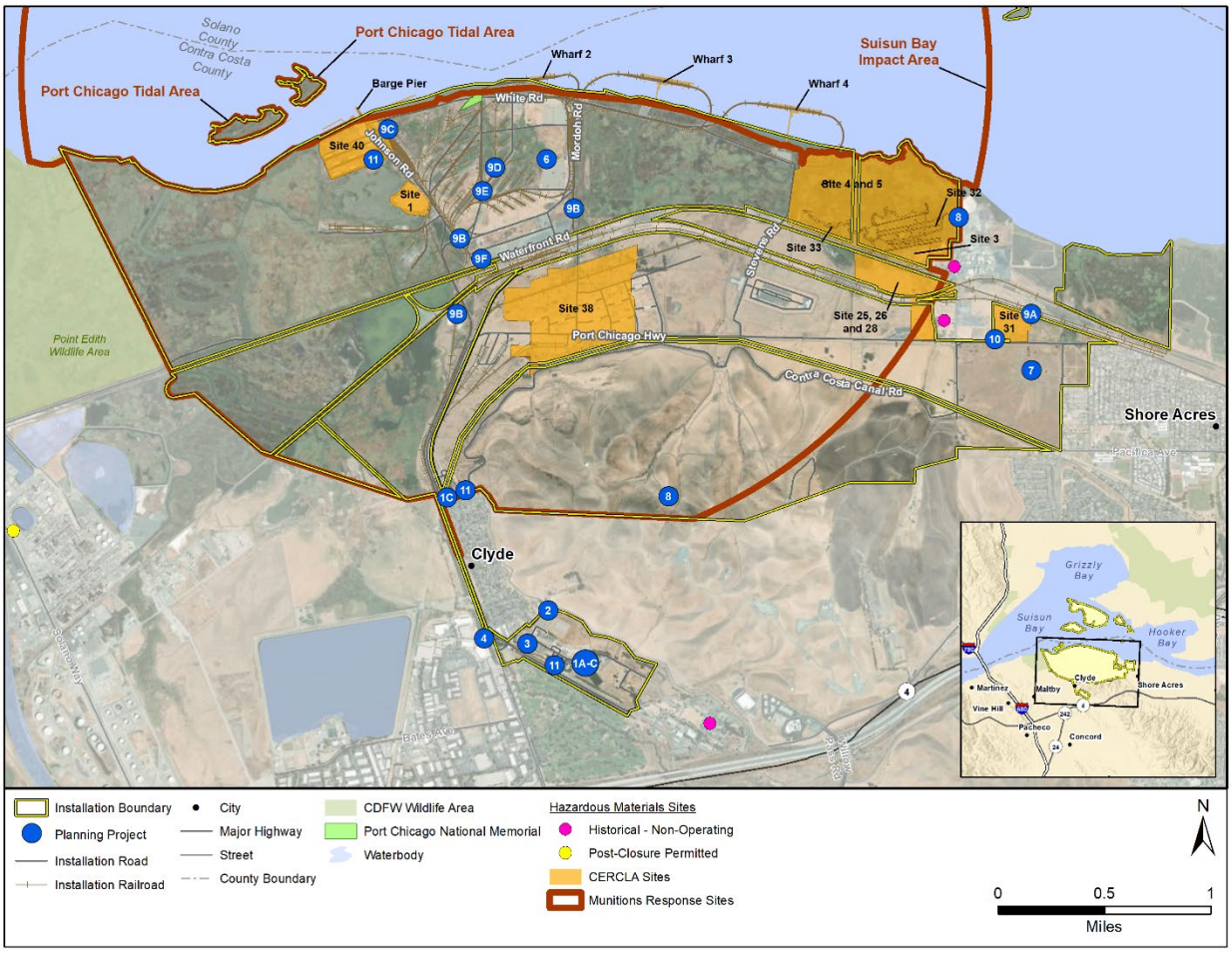


Figure 3.8-2 Full Implementation Alternative and IRP Sites and MRSs

With adherence to the Explosive Safety Submission and potentially additional required plans and procedures, impacts associated with MMRP MRSs would be minor.

3.8.2.2 Partial Implementation Alternative

Impacts to hazardous materials, hazardous waste, toxic substances, and contaminated sites under the Partial Implementation Alternative would be identical to the Full Implementation Alternative, with the exception that Project 4, Mt Diablo Creek Flood Control, would not be implemented. Therefore, the Partial Implementation Alternative would not result in significant impacts with respect to hazardous materials and waste.

3.8.2.3 No Action Alternative

Under the No Action Alternative, MOTCO would not implement the real property master planning actions as described. Hazardous materials, hazardous waste, toxic substances, and contaminated sites would be expected to remain as described in **Section 3.8.1**. Ongoing maintenance and repair would continue, and individual projects could be implemented, subject to completion of project-specific NEPA and other required compliance. Hazardous substances effects from any individual projects would be evaluated as part of the overall NEPA analysis for the projects and necessary mitigations would be implemented to ensure no significant effects would occur.

3.8.3 Reasonably Foreseeable Actions and Environmental Trends

There would be similar types of hazardous materials and waste generated from the proposed cumulative projects as described above in **Section 3.8.2**. Hazardous materials and waste would continue to be managed in accordance with MOTCO's *Installation Hazardous Material, Hazardous Waste, and Solid Waste Management Plan* and all applicable federal, state, and local regulations. The *Pollution Prevention Plan* will also continue to be utilized to prevent inaccurate handling of hazardous waste. Additionally, no changes to the installation's Small Quantity Generator status would be expected from projects listed in **Table 3.2-1**. In addition, any projects proposed for renovation, demolition, or construction would be inspected for asbestos or lead according to the *Asbestos and Lead Hazard Management Plan*.

If any of the cumulative project sites overlap with any IRP sites or MRSs, contractors would be required to develop site-specific health and safety plans. These plans must outline the engineering and administrative controls to be implemented, as well as the personal protective equipment to be used, to safeguard human health and the environment. Therefore, implementation of the proposed cumulative projects in conjunction with the Proposed Action would have no significant impacts with respect to hazardous materials, hazardous waste, toxic substances, and contaminated sites at MOTCO.

3.9 LAND USE AND COASTAL ZONE MANAGEMENT

3.9.1 Affected Environment

MOTCO is composed of an approximately 4,197-acre Mission District and an approximately 115-acre Administrative District, which are connected by a stretch of Port Chicago Highway (MOTCO 2021). The MOTCO ADP characterizes the intended purposes and land uses in both the Mission and Administrative districts. The Mission District primarily supports MOTCO's core operations, while the Administrative District contains a greater concentration of office space. The developed area in the Mission District contains infrastructure such as wharves, holding pads, transfer facilities, warehouses, and maintenance facilities to aid ammunition holding, waterfront operations, and staging operations (MOTCO 2021). The Administrative District supports administrative uses, as well as maintenance, safety, and security functions.

The proposed project sites are situated within both the Administrative and Mission Districts of MOTCO, except for Project 4, Mt Diablo Creek Flood Control, which is located between the two districts, in the unincorporated community of Clyde on the eastern side of Port Chicago Highway (MOTCO 2021).

There are a mix of land uses adjacent to MOTCO including heavy and light industrial, recreation, high-, medium-, and low-density residential (mostly single family with some multi-family), agricultural, resource conservation areas, and public/semi-public lands as seen in **Figure 3.9-1** (MOTCO 2023). General Chemical West, LLC, operates a chemical manufacturing facility on Nichols Road in Bay Point, an area bounded to the east, west, and south by MOTCO and to the north by Suisun Bay (MOTCO 2021).

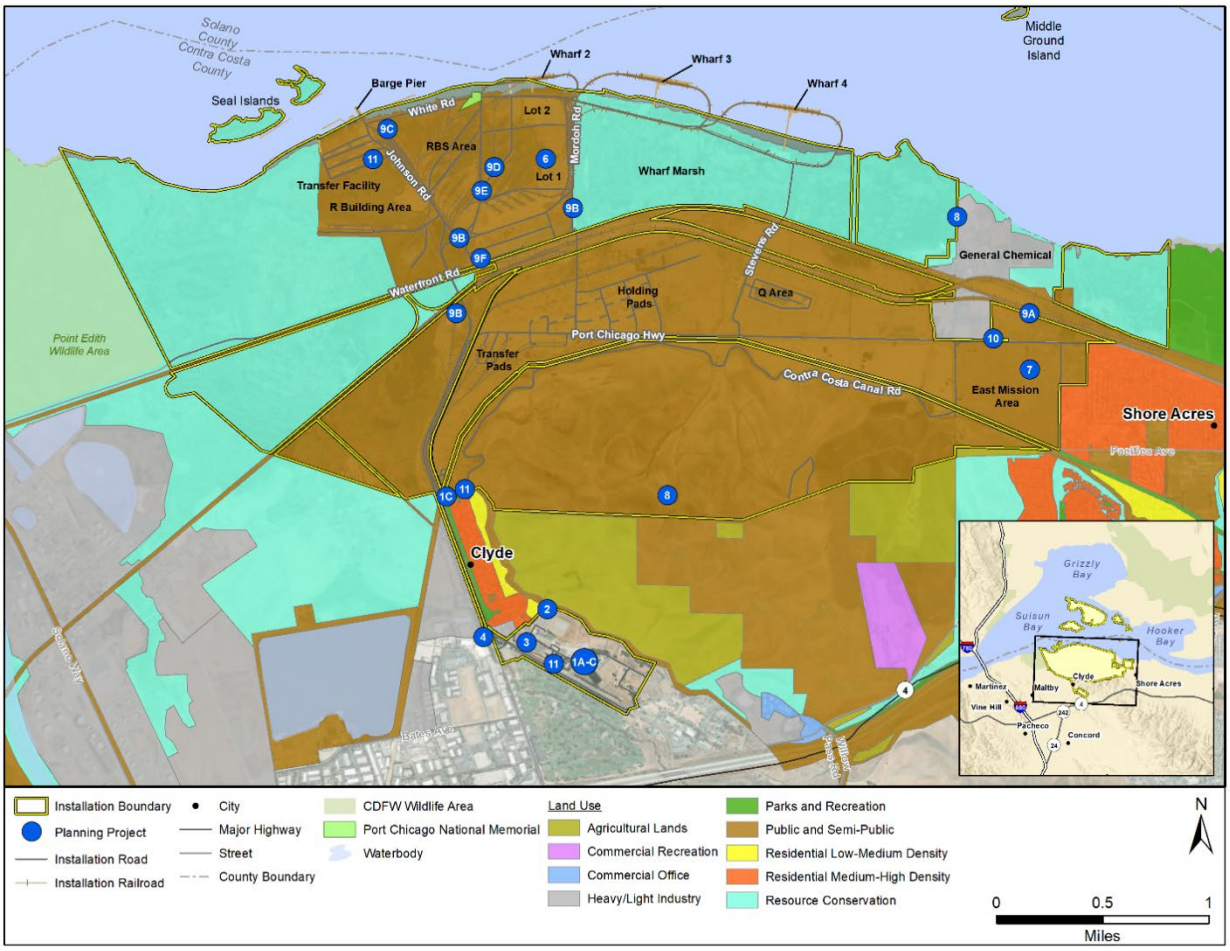


Figure 3.9-1 Land Uses Surrounding MOTCO

3.9.2 Coastal Zone Management

In accordance with Section 307 of the Coastal Zone Management Act (CZMA) and 15 CFR part 930, Subpart C, federal agency activities affecting a land or water use or natural resource of a state's coastal zone must be "consistent to the maximum extent practicable" with the enforceable policies of the state's coastal management program.

To implement the provisions of the CZMA, federal agencies must make "consistency determinations" on their proposed activities. The Army has determined that the Proposed Action would not adversely affect coastal resources or uses within the coastal zone because all projects of the Proposed Action are located outside the shoreline band. Therefore, the Army has concluded that a Coastal Consistency Determination is not required and has prepared a Coastal Consistency Negative Determination in compliance with the Ocean and Coastal Resource Management regulations (15 CFR section 930.35) and San Fransico Bay Plan as administered by BCDC (**Appendix E**).

Correspondence from BCDC regarding the Coastal Consistency Negative Determination will be added, once received, to the Final EA and will be included in **Appendix E**.

3.9.3 Environmental Consequences

3.9.3.1 Full Implementation Alternative (Preferred Alternative)

The Full Implementation Alternative would not alter overall land use at MOTCO and would support the continuation of mission operations. The proposed project sites are located within previously disturbed areas of the Mission and Administrative Districts, and the resulting land use remains consistent with current uses. The Full Implementation Alternative would not affect the intended functions of either district. Instead, the proposed projects aim to enhance operational efficiency through improvements such as modernizing rail infrastructure, expanding parking facilities, and increasing security measures. Land uses at MOTCO would remain unaffected by the proposed construction and renovation activities at the installation. Project 4, located outside of the MOTCO boundary, would not alter existing designated land uses, as this project would channelize part of the existing creek to enhance flood control in the area. Overall, land uses would be consistent with current functions on the installation and all facilities would be designed and sited to be compatible with existing land uses and safety guidelines. Therefore, no significant impacts to land use would occur under the Full Implementation Alternative.

3.9.3.2 Partial Implementation Alternative

Impacts to land use under the Partial Implementation Alternative would be identical to the Full Implementation Alternative, with the exception that Project 4, Mt Diablo Creek Flood Control, would not be implemented. All proposed project sites would occur on either the Mission or the Administrative District and no significant impacts to land use would occur under the Partial Implementation Alternative.

3.9.3.3 No Action Alternative

Under the No Action Alternative, MOTCO would not implement the real property master planning actions as described. Land use would be expected to remain as described in **Section 3.9.1**. Ongoing maintenance and repair would continue, and individual projects could be implemented, subject to completion of project-specific NEPA and other required compliance. Land use effects from individual projects would be evaluated as part of the overall NEPA analysis for the projects and any necessary mitigations would be implemented to ensure no significant effects would occur.

3.9.4 Reasonably Foreseeable Actions and Environmental Trends

The past, present, and reasonably future actions identified in **Table 3.2-1** would result in no changes to land use at MOTCO. The existing land use designations in both the Mission and Administrative Districts would remain the same as described in **Section 3.9.1**. Furthermore, the proposed cumulative projects would align with the ADP. Therefore, implementation of the proposed cumulative projects in conjunction with the Proposed Action would have no significant impacts on land use.

3.10 UTILITIES AND SERVICE SYSTEMS

3.10.1 Affected Environment

3.10.1.1 Sanitary Sewer

The MOTCO sanitary sewer system is comprised of approximately 5.25 miles of collection mains and 1 mile of service laterals (MOTCO 2021). The sanitary sewer infrastructure in the Mission District releases domestic wastewater and minor quantities of industrial wastewater to the Delta Diablo Sanitation District (MOTCO 2017a). In FYs 2023–2024, Delta Diablo treated 14.3 million gallons per day (mgd); the plant has a capacity of treating up to 19.5 mgd (Delta Diablo 2024). The Administrative District of MOTCO discharges domestic wastewater and small amounts of industrial wastewater to the Central Contra Costa Sanitation District (MOTCO 2017a). In FYs 2023–2024, the Contra Costa Sanitation District reported treating 43.5 mgd, with the plant operating below its full capacity of 53.8 mgd (Central Contra Costa Sanitary District 2024).

3.10.1.2 Potable Water

The Contra Costa Water District (CCWD) supplies potable water to MOTCO for both the Mission and Administrative Districts. All major facilities at MOTCO are connected to the potable water lines, as well as the three wharves. Water for MOTCO is treated at the Bollman Water Treatment Plant located in the city of Concord and owned and operated by the CCWD (MOTCO 2021). The Bollman Plant has a total capacity of 75 mgd (Ralph D. Bollman Water Treatment Plant 2025). The CCWD owns and operates a second water treatment plant, Randall-Bold Treatment Facility, which has a total capacity of 50 mgd (Randall-Bold Water Treatment Plant 2025). In addition, the Mission District at MOTCO has the capacity to receive water from the East Bay Municipal Utility District, which provides a source of non-potable water (MOTCO 2021).

3.10.1.3 Electricity

Electricity at MOTCO is provided by Pacific Gas and Electric (PG&E) and delivers it to substations in both the Mission and Administrative Districts. Marin Clean Energy, a subcontractor, also supplies clean energy to the installation (MOTCO 2021). The Mission District receives electricity through 12-kilovolt transmission lines and these lines typically branch out to 4 kilovolt transmission lines, with the exception of the wharves, which are served by the 12-kilovolt lines. The southeast portion of the Mission area is not equipped with electrical lines. The Mission District has four substations, owned by PG&E (MOTCO 2021). The Administrative District also receives electricity through 12-kilovolt transmission lines and has one substation located just outside the Administrative District.

3.10.1.4 Natural Gas

PG&E supplies natural gas to the city of Concord, which in turn provides natural gas service to MOTCO (MOTCO 2021). All major administrative buildings at MOTCO are connected to the natural gas lines. The gas meter for MOTCO is located north of the intersection between Port Chicago Highway and California Highway 4 (MOTCO 2021).

3.10.1.5 Solid Waste

Solid waste generated at MOTCO is collected by Concord Disposal Services and Mt Diablo Recycling (MOTCO 2017b). Concord Disposal Services collects solid waste

from the two dumpsters located in the Mission District and sorts the remaining recyclables before transferring to the permitted county landfill—Portero Hills Landfill. Portero Hills Landfill has a maximum permitted throughput of 4,330 tons per day and total permitted capacity of approximately 20 million tons (CalRecycle 2025a). The management of solid waste generation and disposal at MOTCO is handled by the *Integrated Solid Waste Management Plan* (ISWMP) (MOTCO 2017b).

California's Green Building Standards Code (CALGreen; Sections 4.408 and 5.408) requires the diversion of at least 50 percent of the nonhazardous waste generated during most new construction projects (CalRecycle 2025b). The City of Concord has adopted a local construction and demolition materials ordinance requiring that at least 65 percent of the nonhazardous waste materials and at least 75 percent of all nonhazardous inert debris (such as concrete and asphalt) generated by construction or demolition projects be diverted from landfills (City of Concord 2025). Pursuant to 42 U.S.C. 6961, agencies must comply with federal, as well as state, interstate, and local, requirements for management and disposal of nonhazardous solid waste.

3.10.1.6 Telecommunications

The telecommunication system at MOTCO consists of four elements: voice, data, security (closed-circuit television cameras and access control equipment), and fire alarms. A manhole and trenched system were constructed in 2006 as part of the Tidal Basin Security Upgrade project, which placed cabling underground in certain areas. Both the Mission and the Administrative Districts have sufficient capacity to support existing demand at MOTCO (MOTCO 2021). Telecommunications services are provided by AT&T via pole lines and underground conduit communications ducts for voice and data services.

3.10.2 Environmental Consequences

3.10.2.1 Full Implementation Alternative (Preferred Alternative)

Under the Full Implementation Alternative, utility systems may experience temporary disruption to existing levels of service or temporary change in demand for energy or water resources during proposed construction activities. During demolition and construction, the contracting team would work closely with utility agencies to ensure disruptions to customers would be brief and customers would be forewarned of any disruptions to utility services.

The Full Implementation Alternative would include new utility construction or existing utility improvements for Projects 1C, 2, 5, 7, 9B, 10, and 11. Project 1C would involve minor trenching to connect each electric vehicle charging station to existing electrical lines within the Administrative District and the northern portion of the Mission District. A total of six charging stations would be installed, all of which would be integrated into the MOTCO electrical grid. Project 2 would require the construction of light poles along the new bypass road in accordance with UFC requirements. Project 5 would involve upgrades to the wastewater system located in the Mission District, which would discharge to the Delta Diablo Sanitation District. These improvements aim to address existing deficiencies, including leakage and aging pipes. Project 7 would involve the construction of an MHE parking lot in the eastern Mission District, featuring a wash rack, new electrical connections, a new water valve, and connections to the existing oil-water separator. Project 9B would require construction of railcar inspection stations which would require

trenching to install new electrical lines to support these inspection stations. New construction under Project 10 would require extending utility connections to the eastern Mission District. Finally, Project 11 would include upgrades to aging utilities within the buildings to be renovated/upgraded. Specifically, the project would include installing new electrical lines, storm drainage systems, natural gas connections, potable water valves, and communication lines. The Full Implementation Alternative would not be expected to result in significant impacts and overall would result in beneficial impacts to utility infrastructure and service systems at MOTCO.

Construction and demolition activities would generate debris that would require landfill disposal. The disposal of project-derived waste would be in accordance with local and state requirements and is not anticipated to adversely affect solid waste collection and disposal services currently provided in the region. Post construction, solid waste would continue to be managed by the sitewide ISWMP. Therefore, the Full Implementation Alternative would not be expected to result in significant impacts to solid waste.

The Full Implementation Alternative is not anticipated to increase long-term demand for utilities/services related to sanitary sewer, potable water, electricity, natural gas, solid waste, or telecommunications as no additional personnel increases or increases in installation operations are associated with the Proposed Action.

3.10.2.2 Partial Implementation Alternative

Impacts to utilities under the Partial Implementation Alternative would be identical to the Full Implementation Alternative, with the exception that Project 4, Mt Diablo Creek Flood Control, would not be implemented. Implementation of this alternative would not be expected to result in significant impacts on utilities and service systems.

3.10.2.3 No Action Alternative

Under the No Action Alternative, MOTCO would not implement the real property master planning actions as described. Utilities and Service System resources would be expected to remain as described in **Section 3.11.1**. Ongoing maintenance and repair would continue, and individual projects could be implemented, subject to completion of project-specific NEPA and other required compliance. Utility and service system effects from individual projects would be evaluated as part of the overall NEPA analysis for the projects and any necessary mitigations would be implemented to ensure no significant effects would occur.

3.10.3 Reasonably Foreseeable Actions and Environmental Trends

The proposed cumulative projects listed in **Table 3.2-1** would have negligible impacts on utilities and service systems at MOTCO and would not increase demand. The existing utility infrastructure has adequate capacity to support the Proposed Action and all present and reasonably foreseeable actions. There would be minor and temporary disruptions to utility services during construction. Therefore, implementation of the proposed cumulative projects in conjunction with the Proposed Action would have no significant impacts on utilities and service systems.

3.11 SAFETY

3.11.1 Affected Environment

3.11.1.1 Fire/Emergency Services

MOTCO maintains a full-time fire department with two stations, one in the Mission District and one in the Administrative District. Personnel are trained to respond to all types of emergencies, including spills of hazardous materials and hazardous waste. The fire department is equipped for spills that occur on land or water. They also maintain mutual aid agreements with Contra Costa County and Riverview Fire Protection District. MOTCO also has access to onsite and offsite resources for police services, ambulance and medical services, technical services, and contractor services (MOTCO 2016).

3.11.1.2 Explosive Safety

To support its mission, MOTCO has implemented the DoD Explosives Safety Board's four levels of explosive safety protection which include: Inhabited Building Distance (IBD), Public Traffic Route, Intraline Distance, and Intermagazine Distance.

Large portions of MOTCO are within the IBD explosives safety quantity distance (ESQD) arc. As such, all buildings are required to conform to the design and construction requirements to protect personnel within inhabited structures per DoD Manual 6055.09-STD, *DoD Ammunition and Explosives Safety Standards* and UFC 3-340-02, *Structures to Resist the Effects of Accidental Explosions*. DoD Manual 6055.09-STD establishes safety standards designed to manage risks associated with ammunition and explosives by providing protection criteria to minimize serious injury, loss of life, and damage to property. This Manual also requires submitting site and general construction plans for non-ammunition and explosive facilities located within the IBD ESQD arc to the DoD Explosives Safety Board for review and approval. UFC 3-340-02 contains design procedures to achieve personnel protection, protect facilities and equipment, and prevent propagation of accidental explosions (DoD 2008).

3.11.1.3 Antiterrorism/Force Protection

Many of the facilities at MOTCO were constructed before Antiterrorism/Force Protection (AT/FP) considerations became a critical concern. Thus, many facilities do not currently comply with all current AT/FP standards. As new construction occurs and as facilities are modified, MOTCO incorporates these standards to the maximum extent practical during project planning and design phases to ensure AT/FP compliance.

3.11.2 Environmental Consequences

3.11.2.1 Full Implementation Alternative (Preferred Alternative)

Under the Full Implementation Alternative, the fire department at MOTCO would continue to respond to all fire and emergency incidents, which are not expected to increase in frequency as annual operations and personnel would remain unchanged.

Under the Full Implementation Alternative, AT/FP compliance would increase as all renovation and new construction projects that would occur would be designed using the most current AT/FP requirements and specifications. Projects 1A, 4, and 8 would enhance AT/FP at MOTCO by incorporating upgraded security fencing and perimeter measures, ensuring continuous access to both security gates even during flooding

events. Additionally, the inclusion of an on-base fuel point would eliminate the need for trucks to leave the installation for refueling. Therefore, implementation of AT/FP requirements would result in beneficial impacts to safety under the Full Implementation Alternative.

Under the Full Implementation Alternative, there would be no change to the amount or type of munitions handled by MOTCO. However, 10 of the proposed projects would fall within the footprint of the existing IBD ESQD arc. The buildings that fall within the ESQD arc, primarily in the Mission District where most proposed construction would occur, are not habitable. Furthermore, none of the proposed new construction projects are intended for occupancy, and all would adhere to established safety guidelines and protocols throughout the construction period. Therefore, impacts to safety would not be significant and there would be beneficial impacts with respect to AT/FP compliance under the Full Implementation Alternative.

3.11.2.2 Partial Implementation Alternative

Impacts to safety under the Partial Implementation Alternative would be identical to the Full Implementation Alternative, with the exception that Project 4, Mt Diablo Creek Flood Control, would not be implemented. Therefore, impacts to safety would not be significant under the Partial Implementation Alternative.

3.11.2.3 No Action Alternative

Under the No Action Alternative, MOTCO would not implement the real property master planning actions as described in **Section 2.4.3**. Safety resources would be expected to remain as described in **Section 3.11.1**. Ongoing maintenance and repair would continue, and individual projects could be implemented, subject to completion of project-specific NEPA and other required compliance. Safety effects from individual projects would be evaluated as part of the overall NEPA analysis for the projects and necessary mitigations would be implemented to ensure no significant effects would occur.

3.11.3 Reasonably Foreseeable Actions and Environmental Trends

The cumulative projects outlined in **Table 3.2-1** would have negligible impacts on safety at MOTCO. Projects would be conducted in accordance with all AT/FP requirements from design to completion. The proposed cumulative projects would increase safety at MOTCO through implementing waterside security, as well as a waterfront floodwall. Therefore, beneficial impacts would result with implementation of the cumulative impacts in conjunction with implementation of the Proposed Action.

Any cumulative projects occurring within the established IBD ESQD arc would adhere to all applicable regulations. Additionally, no explosives would be handled during construction or demolition activities. All projects would be coordinated with the fire department at MOTCO and therefore, no adverse cumulative impacts are expected to occur to Fire/Emergency Services or Explosive Safety.

4.0 MITIGATION MEASURES, REQUIRED PERMITS, SUMMARY OF EFFECTS

4.1 MITIGATION MEASURES

Mitigation measures are those that the Army would implement to mitigate possible adverse effects to resources identified in the EA. For projects for which sufficient details are not currently available, mitigations would be identified at a later date when detailed design and siting are available. **Table 4.1-1** provides a summary of required permits and consultations. In addition to mitigations, identified by resource, the Army would implement, as appropriate, applicable SOPs and BMPs, as summarized in **Appendix D**. These are implemented by the Army on an ongoing basis to provide environmental protection and are distinguished from mitigation measures because they are (1) existing requirements for the Proposed Action, (2) ongoing, regularly occurring practices, and (3) not specific to the Proposed Action.

Table 4.1-1 Regulatory Compliance Requirements

Resource	Consultation and Permit Requirements
Air Quality	none
Geological Resources	none
Water Resources	NPDES Construction Stormwater General Permit CWA Section 401 Water Quality Certification Permit CWA Section 404 Permit (where necessary)
Biological Resources	ESA Consultation with USFWS
Cultural Resources	NHPA Consultation with SHPO and American Indian Tribes
Hazardous Materials, Hazardous Waste, Toxic Substances, and Contaminated Sites	none
Land Use and Coastal Zone Management	FCD with BCDC
Utilities and Service Systems	none
Safety	none

Legend: BCDC = Bay Conservation and Development Commission; CWA = Clean Water Act; ESA = Endangered Species Act; FCD = Federal Consistency Determination; NHPA = National Historic Preservation Act; NMFS = National Marine Fisheries Service; NPDES = National Pollutant Discharge Elimination System; SHPO = State Historic Preservation Officer; USFWS = United States Fish and Wildlife Service

4.2 ALTERNATIVES EFFECTS SUMMARY

A comparison of the environmental consequences of the alternatives evaluated in this EA is provided in **Table 4.2-1**.

Table 4.2-1 Environmental Consequences Summary

Resource Area	No Action Alternative	Full Implementation Alternative (Preferred Alternative)	Partial Implementation Alternative
Air Quality	• No impacts to air quality and conditions would remain as described in **Section 3.3.1**.	• Minimal short-term increase in emissions. • Emissions would be temporary, ceasing upon completion of the Full Implementation Alternative. • Emission would be below *de minimis* thresholds for NO_x, VOC, SO_2, and $PM_{2.5}$, so the general conformity	• Impacts expected to be similar to the Full Implementation Alternative.

Resource Area	No Action Alternative	Full Implementation Alternative (Preferred Alternative)	Partial Implementation Alternative
		applicability analysis is complete, and the proposed emissions would be exempt from General Conformity. • No significant impacts to Air Quality would occur.	
Geological Resources	• No impacts to topography, geology, and soils and conditions would remain as described in **Section 3.4.1**.	• During demolition and construction, activities would be limited to developed or disturbed areas. • Less than significant impacts to soils. • Ongoing SOPs and BMPs would be used to minimize the migration of soils off-site.	• Impacts expected to be less than the Full Implementation Alternative.
Water Resources	• No impacts to water resources and conditions would remain as described in **Section 3.5.1.**	• Ongoing SOPs and BMPs would minimize impacts to surface water and groundwater. • Construction General Permits required for projects greater than 1 acre. • The Proposed Action would be compliant with EO 11988. • Impacts to approximately 3.6 acres of wetlands. A formal jurisdictional delineation would be required prior to permitting or impact assessment to wetlands and waters of the U.S. Any impacts to wetlands require permitting through the CWA Section 404 and State of California CWA Section 401. • Impacts to 2,400 LF of Mt Diablo Creek. • Permanent alteration of the drainage of Mt Diablo Creek. • Positive impacts to natural flooding that occurs from Mt Diablo Creek. • No significant impacts to Water Resources would occur.	• Impacts expected to be less than the Full Implementation Alternative.
Biological Resources	• No impacts to biological resources and conditions would remain as described in **Section 3.6.1**.	• No significant impacts to MOTCO plant communities. • No loss of habitat for special status species. • Wildlife is already habituated to the visual and audible disturbances from installation activities and military industrial operations. • No significant impacts to Biological Resources would occur.	• Impacts expected to be the same as the Full Implementation Alternative.
Cultural Resources	• No impacts to cultural resources and conditions would remain as described in **Section 3.7.1.**	• No significant impacts to archaeological or architectural resources. • No significant impacts to traditional cultural properties.	• Impacts expected to be the same as the Full Implementation Alternative.

Resource Area	No Action Alternative	Full Implementation Alternative (Preferred Alternative)	Partial Implementation Alternative
		• No significant impacts to Cultural Resources would occur.	
Hazardous Materials/ Hazardous Waste/Toxic Substances/ Contaminated Sites	• No adverse impacts from Hazardous Materials/Hazardous Waste/Toxic Substances/ Contaminated Sites and conditions would remain as described in **Section 3.8.1.**	• Negligible effects to hazardous materials. • Would not introduce any new sources of hazardous waste generation. • All proposed demolition would be conducted in accordance with MOTCO's ISWMP. • Negligible effects from toxic substances. • Negligible effects to MOTCOs contaminated sites. • No significant impacts to Hazardous Materials/Hazardous Waste/Toxic Substances/Contaminated Sites would occur.	• Impacts expected to be the same as the Full Implementation Alternative.
Land Use and Coastal Zone Management	• No impacts to land use and conditions would remain as described in **Section 3.9.1.** • No impacts to Coastal Zone Management and conditions would remain as described in **Section 3.9.1**.	• No significant impacts to land use would occur. • All land use designations and uses would remain the same. • CCND would be prepared in compliance with the Ocean and Coastal Resource Management regulations (15 CFR section 930.35) and San Fransico Bay Plan as administered by BCDC. • No significant impacts to Land Use and Coastal Zone Management would occur.	• Impacts expected to be the same as the Full Implementation Alternative.
Utility and Service Systems	• No impacts to the utilities and service systems and conditions would remain as described in **Section 3.10.1.**	• Minimal potential to disrupt service systems during demolition activities. • Any disruptions, should they occur, would be minor and short term. • No significant impacts to Utilities and Service Systems would occur.	• Impacts expected to be the same as the Full Implementation Alternative.
Safety	• No impacts to safety and conditions would remain as described in **Section 3.11.1.**	• Beneficial impacts to Safety due to added security and perimeter fencing. • All new construction would adhere to AT/FP standards. • All new construction/demolition built within the ESQD arc would not be habitable. • No significant impacts to Safety would occur.	• Impacts expected to be the same as the Full Implementation Alternative.

Legend: AT/FP = Antiterrorism Force Protection; BCDC = Bay Conservation and Development Commission; BMP = Best Management Practice; CCND = Coastal Consistency Negative Determination; CFR = Code of Federal Regulations; CWA = Clean Water Act; EO = Executive Order; ESQD = Explosive Safety Quantity Distance; ISWMP = Integrated Solid Waste Management Plan; MOTCO = Marine Ocean Terminal Concord; NO_x = nitrogen dioxide; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter; SO_2 = sulfur dioxide; SOP = Standard Operating Procedure; U.S. = United States; VOC = volatile organic compound

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APPENDIX A – AGENCY AND PUBLIC INVOLVEMENT

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Military Ocean Terminal Concord
Notice of Availability

Draft Environmental Assessment (EA), Draft Finding of No Significant Impact (FONSI), and Draft Finding of No Practicable Alternative (FONPA) for Real Master Plan Activities at Military Ocean Terminal Concord (MOTCO), Contra Costa County, California

The United States Army's Military Surface Deployment and Distribution Command (SDDC) announces the availability of a Draft EA, Draft FONSI, and Draft FONPA that assess the potential environmental and socioeconomic effects of construction, operation, and maintenance of specific facility modernization projects identified during the installation's master planning process. The EA is focused on specific master plan implementation actions that are currently planned or programmed to occur from approximately fiscal year (FY) 2027 to 2030 (FY27–FY30). Furthermore, the Proposed Action is needed to address MOTCO's real property deficiencies, shortcomings, and suboptimal facility conditions and provide modern, efficient, flexible, safe, and sustainable facilities to meet current and future mission requirements.

The Draft EA, Draft FONSI, and Draft FONPA are available for public review at the Concord Public Library, 2900 Salvio Street, Concord California 94519; the Bay Point Library, 205 Pacifica Avenue, Bay Point, California 94565; and online at https://www.sddc.army.mil/SitePages/Environmental%20Programs.aspx.

Interested parties are encouraged to email comments on the Draft EA and/or Draft FONSI and Draft FONPA at usarmy.motco.sddc.mesg.dpw@army.mil or by mail to:

MOTCO EA Comments
Military Ocean Terminal Concord
Department of Public Works
410 Norman Ave, Bldg 635
Concord, CA 94520

All comments must be submitted or postmarked on or before October 23, 2025. All comments submitted will be reviewed and addressed prior to a final determination by the Army as to whether to issue a Final FONSI or issue a Notice of Intent to prepare an Environmental Impact Statement.

APPENDIX B – RECORD OF NON-APPLICABILITY (RONA), AIR QUALITY CALCULATIONS AND ASSUMPTIONS

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UNITED STATES ARMY
RECORD OF NON-APPLICABILITY FOR CLEAN AIR ACT CONFORMITY

Introduction

This Proposed Action falls under the Record of Non-Applicability (RONA) category and is documented with this RONA. Federal regulations state that no department, agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license to permit, or approve any activity that does not conform to an applicable State Implementation Plan. It is the responsibility of the federal agency to determine whether a federal action conforms to the applicable State Implementation Plan before the action is taken (40 Code of Federal Regulations [CFR] section 93.150).

Federal actions are exempt from conformity determinations if their emissions do not exceed designated *de minimis* levels for criteria pollutants (40 CFR Part 93.153(c)). The general conformity rule also exempts certain federal actions from the requirements of the rule, as these actions are assumed to conform to a State Implementation Plan. Military Ocean Terminal Concord (MOTCO) is located in Contra Costa County, California, which lies within the San Francisco Bay Area Air Quality Management District. Applicable General Conformity *de minimis* levels (in tons/year) for Contra Costa County are listed in Table 1.

Table 1. Conformity *De Minimis* Levels for Criteria Pollutants in Contra Costa County

Pollutant	*de minimis* Level (tons/year)
Ozone and $PM_{2.5}$ precursor: VOCs	100
Ozone and $PM_{2.5}$ precursor: NO_x	100
$PM_{2.5}$ (including precursor SO_2)	100

Legend: NO_x = oxides of nitrogen; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter; SO_2 = sulfur dioxide; VOC = Volatile Organic Compound

Proposed Action

Activity: United States Army proposes to construct, operate, and maintain real property projects, currently planned for implementation in fiscal year (FY) 27–FY30.

Location: MOTCO, Contra Costa County, California

Proposed Action Name: Real Property Master Plan Activities at MOTCO

Proposed Action Summary: The Proposed Action includes construction activities that are anticipated to occur starting in 2027 through 2030.

Air Emissions Summary: Based on the air quality analysis, the emissions from construction would be well below conformity *de minimis* levels. Attachment (1) of this RONA presents the air emission documentation for the Proposed Action.

Date RONA Prepared: 20 May 2025

RONA Prepared By: Scott Baggiore, Stantec GS

Proposed Action Exemptions

The Proposed Action is exempt because the calculated total emissions are below *de minimis* levels set forth in the Clean Air Act General Conformity Regulation (40 CFR 93, Subpart B).

Attainment Status and Emissions Evaluation and Conclusion

The General Conformity Rule requires conformity evaluations for proposed emissions that would occur within areas that are in nonattainment or maintenance of a national ambient air quality standard. The project site is within Contra Costa County, California and is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). Therefore, the focus of this conformity applicability analysis is to compare project emissions to *de minimis* levels applicable to Contra Costa County.

Contra Costa County is classified as a nonattainment area for ozone and particulate matter less than or equal to 2.5 microns in diameter ($PM_{2.5}$). Ozone is a secondary pollutant formed when ozone precursors, nitrogen oxides (NO_x), and volatile organic compounds (VOCs) combine in the atmosphere in the presence of sunlight. Similarly, these compounds and sulfur dioxide (SO_2) react in the atmosphere to form $PM_{2.5}$. Therefore, the United States Environmental Protection Agency general conformity regulations set *de minimis* levels for ozone precursors instead of ozone and have added SO_2 as a $PM_{2.5}$ precursor for consideration under general conformity. Based upon these designations, the applicable annual conformity *de minimis* thresholds for Contra Costa County are 100 tons per year for VOCs, NO_x, $PM_{2.5}$, and SO_2.

Table 2 summarizes the conformity-related emissions that would occur from implementation of the Proposed Action within Contra Costa County. The main sources of conformity-related emissions associated with the project construction would include combustive emissions due to the use of fossil fuel-powered equipment and engines. The data show that conformity-related emissions for the Proposed Action would be well below the applicable *de minimis* levels and exempt from conformity under the Clean Air Act, as amended. Table 2 details the emissions associated with the Preferred Alternative, Alternative 1. The emissions for Alternative 2, which does not include the Mt Diablo Creek Flood Control project, would be similar but slightly lower. Therefore, the emissions in Table 2 represent the worst-case scenario for the Proposed Action.

Table 2. Total Conformity-Related Emissions from the Preferred Alternative (Alternative 1) Analyzed Under A Single Year of Activity

Activity	Total Air Pollutant Emissions in Tons			
	VOCs	NOx	$PM_{2.5}$	SO_2
Construction Emissions	0.74	9.88	2.72	0.37
Conformity *de minimis* Levels (tons/year)	100	100	100	100
Exceeds Conformity *de minimis* Levels?	No	No	No	No

Legend: NO_x = oxides of nitrogen; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter; SO_2 = sulfur dioxide; VOC = Volatile Organic Compound

RONA Approval

To the best of my knowledge, the information presented in this RONA is correct and accurate, and I concur in the finding that the Proposed Action does not require a formal Clean Air Act Conformity Determination.

Kelsey Lamer
NEPA Program Manager
Military Ocean Terminal Concord

Date

APPENDIX C – CHECKLIST FOR TIERED NEPA COMPLIANCE

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1.0 INTRODUCTION

The purpose of this checklist is to ensure compliance with the National Environmental Policy Act of 1969 (NEPA) (Title 42 of the United States Code [U.S.C.] section 4321) and the DoD NEPA Implementing Procedures.

This checklist supports the Environmental Assessment (EA) for Military Ocean Terminal Concord (MOTCO) Real Property Master Planning Activities. Specifically, the checklist is meant to facilitate consideration of environmental effects of infill development in the cantonment area by identifying NEPA requirements.

2.0 USING THE CHECKLIST

This checklist can be used to help determine whether reliance on this EIS or other existing NEPA analysis is appropriate or if additional NEPA analysis is required before implementing a proposed action. When completing the checklist, multiple installation-level subject matter experts should be consulted to ensure careful and informed consideration of all potential effects.

Based on the responses in the checklist, the appropriate NEPA documentation is required as follows:

- If the response to each checklist item is “no,” no further NEPA analysis would be required. The Proposed Action would qualify for a record of environmental consideration (REC), indicating that the analysis in the Programmatic EA (PEA) has adequately addressed the action. If any Categorical Exclusions (CX) apply, the REC should cite them.
- If the response to any checklist item is “yes” or “maybe,” details of the Proposed Action (such as siting or timing) should be reconsidered to determine if effect to the resource can be avoided (and the checklist answer changed to “no”).
- If the response to any checklist item is “yes” or “maybe” to any checklist item and the effect(s) cannot be avoided, additional environmental analysis may be required as part of an installation-level NEPA process.

If no further NEPA analysis is required, installations should prepare a REC reflecting that determination, which includes the following.

- The name of the applicable NEPA analysis (e.g., the PEA) and associated Finding of No Significant Impact (FONSI) or Record of Decision, and reference to 32 CFR section 651.12(a)(2): “*action is adequately covered within an existing EA or EIS*”
- The completed checklist
- Any CXs that may apply
- Any specific issues that prompted modification or special consideration of the Proposed Action (e.g., the items for which the initial response was “yes” or “maybe”)

If additional NEPA analysis is necessary, documentation must be prepared before any decision is made or there are irreversible and irretrievable commitments of resources for the Proposed Action. The NEPA document can focus on resource areas for which "yes" was checked and tier from the EA for resource areas for which the response was "no."

3.0 CHECKLIST

This checklist is designed to assist in identifying the coordination and documentation required to meet the requirements of NEPA, as well as other applicable laws, regulations, and policies required to ensure that there are no significant effects to the human and natural environment. For some resources, this includes coordination and consultation with other agencies and groups. For others, it involves adherence to the terms of plans and policies.

Resource Area and Questions	Response
Biological Resources	
Would the Proposed Action have a substantial detrimental effect on native wildlife or plants (other than those protected by federal law)?	☐ Yes ☐ No ☐ Maybe
Would the Proposed Action result in an unpermitted take of a species protected under the ESA, Migratory Bird Treaty Act, or Bald and Golden Eagle Protection Act?	☐ Yes ☐ No ☐ Maybe
Would the Proposed Action result in detrimental alteration of U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)-designated critical habitat?	☐ Yes ☐ No ☐ Maybe
Note: All required USFWS and NMFS informal or formal consultation must be completed prior to implementing a proposed action.	
Cultural Resources	
Does the Area of Potential Effects (APE) require a survey for historic architectural resources (areas with the potential presence of historic architectural resources not previously surveyed)?	☐ Yes ☐ No ☐ Maybe
Would the proposed construction affect a building or structure that was built before the end of the Cold War (1991)?	☐ Yes ☐ No ☐ Maybe
Are there any architectural resources within the APE that are potentially eligible for but have not been evaluated for listing in the National Register of Historic Places (NRHP)?	☐ Yes ☐ No ☐ Maybe

Resource Area and Questions	Response
Would the Proposed Action result in adverse effects, as defined by the National Historic Preservation Act (NHPA), on a historic property listed or eligible for listing on the NRHP that are not resolved through a Memorandum of Agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO), and possibly with the Advisory Council on Historic Preservation (ACHP)?	☐ Yes ☐ No ☐ Maybe
Does the APE require a survey for archeological resources (those areas not previously surveyed or disturbed)?	☐ Yes ☐ No ☐ Maybe
Is the APE in a high probability area for archeological resources?	☐ Yes ☐ No ☐ Maybe
Are there any previously identified Traditional Cultural Properties (TCPs) within the APE?	☐ Yes ☐ No ☐ Maybe
Would the Proposed Action create conditions that would stop the traditional use of sacred or ceremonial sites or resources by a Tribe or Tribes without discussions on a government-to-government level with the affected Tribe(s)?	☐ Yes ☐ No ☐ Maybe
Note: All required NHPA Section 106 consultation with SHPO, ACHP, federally recognized Native American Tribes must be completed prior to the approval of the expenditure of any federal funds on the undertaking. Proposed projects requiring ground disturbance in areas not yet surveyed for cultural resources would require a survey prior project initiation.	
Health and Safety	
Would the Proposed Action increase human exposure to a health hazard or safety risk?	☐ Yes ☐ No ☐ Maybe
Would the Proposed Action result in noncompliance with or a violation of laws and regulations governing human health and safety?	☐ Yes ☐ No ☐ Maybe
Note: Compliance with safety requirements related to OSHA must be implemented as part of the Proposed Action.	
Coastal Zone Management	
Are the activities associated with the installation *inconsistent* with enforceable policies of local coastal county Coastal Zone Management Plan?	☐ Yes ☐ No ☐ Maybe
Note: If proposed activities were inconsistent with a Coastal Zone Management Plan, compliance with CZMA requirements, through development of a Federal Consistency Determination, must be implemented as part of the Proposed Action.	

APPENDIX D – BEST MANAGEMENT PRACTICES AND STANDARD OPERATING PROCEDURES

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Table D-1 Summary of Relevant Best Management Practices and/or Standard Operating Procedures

Item	BMP/SOP	Description	Activity		Resource Area									Potential for Significant Impact if Not Implemented
			Demolition	Operation	Air Quality	Geology/ Soils	Water	Biological	Cultural	HazMat/ Waste	Land Use	Utilities	Safety	
1.	Dust Control	• Require construction contractors to minimize disturbed areas as much as possible through demolition sequencing; using wet suppression to control dust from motorized equipment and vehicle traffic; utilizing water trucks, power washers, sweepers, and/or vacuums on paved roads to control dust; and placing rock construction entrances on access roads that begin at a junction with paved roads to reduce track out of loose materials. • Conduct daily inspections of dust control measures when environmental conditions are dry.	Yes	No	Yes	No	No	No	No	No	No	No	No	Possible – in addition to compliance issues, dust is also a health and safety issue
2.	Air Quality Permitting	• Pursue the appropriate permitting once project details are available, and in accordance with CARB.	Yes	Yes	Yes	No	No	No	No	No	No	No	No	Unlikely
3.	SPCC Plan	• Update and implement existing SPCC Plan to assess and respond to hazardous substance spills and/or releases. • Ensure DoD personnel and contractors are trained as to proper labeling, container, storage, staging, and transportation requirements for hazardous substances. Also, ensure they are trained in accordance with spill prevention, control, and cleanup methods. • Ensure POL fuel transfers are kept away from water bodies, and a response/contingency plan is in place in the event of any releases, leaks, or spills • Minimize the risk of human exposure to contaminated media through the use of a site-specific health and safety plan, engineering and administrative controls, and appropriate personal protective equipment.	Yes	Yes	No	Yes	Yes	No	No	Yes	No	No	Yes	Unlikely
4.	NPDES Construction Permit(s)	• For projects where the collective area impacted by the proposed construction activity would exceed 1 acre in size, obtain a California NPDES Construction Permit. This includes development of a site-specific Erosion and Sediment Control Plan to emphasize pollution prevention using BMPs to minimize potential impacts associated with stormwater runoff during construction. These measures include straw bales, sandbags, silt fencing, earthen berms, use of tarps or water spraying, soil stabilization, temporary sedimentation basins, and revegetation with native plant species, where possible. • Prepare and implement a post-construction Stormwater Management Plan in compliance with the General Permit for Stormwater Discharges from Construction Activity. The Plan would identify the BMPs that would be installed to manage and treat the stormwater discharge to protect water quality after construction activities are terminated.	Yes	No	No	Yes	Yes	Yes	No	No	No	No	Yes	Possible – regulatory violation for failure to meet permitting requirements
5.	ICRMP Implementation	• Implement the Proposed Action in accordance with applicable ICRMP-identified BMPs and SOPs (e.g., Unanticipated Discovery of Archaeological Deposits).	Yes	Yes	No	No	No	No	Yes	No	No	No	No	Possible – adherence to these BMPs and SOPs ensures regulatory compliance
6.	Hazardous Materials and Waste Management	• Follow existing hazardous materials management procedures as identified in the MOTCO Hazardous Waste and Hazardous Materials Management Plan. • Follow MOTCOs ISWMP requirements to include waste minimization and recycling. • Require construction contractor to implement a Hazardous Materials and Wastes Management Plan to ensure appropriate procedures are in place to address handling, storage, and disposal of hazardous materials and wastes (e.g., construction and demolition debris recycling, waste diversion, etc.) • Prior to any demolition and as warranted given previous investigations, conduct testing for presence of hazardous/toxic materials. If such materials are present, require work to be completed in accordance with applicable OSHA and EPA regulations. • In the unlikely event that hazardous wastes would be generated, MOTCO would increase existing management and disposal procedures	Yes	Yes	No	No	No	No	No	Yes	No	Yes	Yes	Possible –environmental and/or health and safety regulatory violations

Item	BMP/SOP	Description	Activity		Resource Area									Potential for Significant Impact if Not Implemented
			Demolition	Operation	Air Quality	Geology/ Soils	Water	Biological	Cultural	HazMat/ Waste	Land Use	Utilities	Safety	
		to accommodate the increase and obtain all required permits, and amend generator status, as necessary.												
7.	Safety Plans/ Procedures	• Ensure that all contractors and personnel are adhering to installation safety plans and procedures.	Yes	No	No	No	No	No	No	No	No	No	Yes	Unlikely
8.	Adherence to Current Land Use Designations	• All planned construction and demolition will adhere to MOTCOs ADP and RPMP to ensure continuous land uses and designations.	Yes	Yes	No	No	NO	No	No	No	Yes	No	No	Unlikely
9.	Pre-Construction Surveys for Threatened and Endangered Species	• Pre-construction surveys would be performed to ensure no presence of threatened or endangered species	Yes	No	No	No	No	Yes	No	No	No	No	No	Possible – ESA regulatory violations
10.	Conservation Measures for California Ridgway's Rail	• To minimize or avoid the loss of individual California Ridgway's rails, activities within or adjacent to California Ridgway's rail habitat will not occur within two hours before or after extreme high tides (6.5 feet or above, as measured at the Golden Gate Bridge), when the marsh plain is inundated, because protective cover for California Ridgway's rails is limited and activities could prevent them from reaching available cover. • To minimize or avoid the loss of individual California Ridgway's rails, activities within or adjacent to tidal marsh areas will be avoided during the California Ridgway's rail breeding season from 1 February through 31 August each year unless surveys are conducted to determine California Ridgway's rail locations and California Ridgway's rail territories can be avoided or the marsh is determined to be unsuitable breeding habitat by a qualified biologist. If breeding California Ridgway's rails are determined to be present, activities will not occur within 700 feet of an identified calling center. If the intervening distance across a major slough channel or across a substantial barrier between the California Ridgway's rail calling center and any activity area is greater than 200 feet, then it may proceed at that location within the breeding season.	Yes	No	No	No	Yes	Yes	No	No	No	No	No	Unlikely – Though would be implemented as a BMP
11.	Conservation Measures for the California Least Tern	• No activities will be performed within 300 feet of an active least tern nest during the California least tern breeding season, 15 April to 15 August (or as determined through surveys).	Yes	No	No	No	No	Yes	No	No	No	No	No	Unlikely – Though would be implemented as a BMP
12.	Conservation Measures for the California Red-legged Frog and California Tiger Salamander	• California red-legged frog and California tiger salamander will be included in pre-construction environmental awareness training of construction contractors. • In areas of vegetation and soil disturbance, a Service-approved biologist with California red-legged frog and California tiger salamander experience will inspect the site to determine if occupied habitat is found. • A Service-approved biologist will be present and monitor for the presence of listed species during initial ground disturbance and vegetation removal. The biological monitor will also sporadically observe the construction site for California red-legged frog and California tiger salamander within 24 hours following a rainfall event, if that time period falls under a scheduled workday. If work is to continue during rain events, a Service-approved biologist will survey the project area for presence of listed species prior to the day's work activities and periodically during the day. • If a California red-legged frog or California tiger salamander is found anywhere on the project site, immediate measures will be taken to avoid take, and USFWS will be contacted immediately to discuss the potential for avoidance measures. • Vehicle speeds will be reduced to 15 miles per hour during rain events.	Yes	No	No	No	No	Yes	No	No	No	No	No	Unlikely – Though would be implemented as a BMP

Legend: BMP = Best Management Practice; CARB = California Air Resource Board; DoD = Department of Defense; EPA = United States Environmental Protection Agency; ICRMP = Integrated Cultural Resources Management Plan; ISWMP = Integrated Solid Waste Management Plan; MOTCO = Military Ocean Terminal Concord; NPDES = National Pollutant Discharge Elimination System: OSHA = Occupational Safety and Health Administration; POL = petroleum, oil, and lubricants; RPMP = Real Property Master Plan; SOP = Standard Operating Procedure; SPCC = Spill Prevention Control and Countermeasure

APPENDIX E – FEDERAL CONSISTENCY NEGATIVE DETERMINATION

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Coastal Consistency Negative Determination

Real Property Master Plan Activities at Military Ocean Terminal Concord, CA

1.0 AUTHORITY

The United States (U.S.) Army's Military Surface Deployment and Distribution Command (hereafter referred to as "the Army") has prepared this Negative Determination (ND) for Real Property Master Plan Activities at Military Ocean Terminal Concord (MOTCO) in northern California. The Real Property Master Plan activities comprise various construction, operation, and maintenance activities associated with facility modernization projects necessary for mission readiness. This ND is being submitted in accordance with the Coastal Zone Management Act of 1972 (CZMA), as amended, 16 U.S. Code (U.S.C.) section 1451 and the implementing regulations entitled Federal Consistency with Approved Coastal Management Programs, 15 Code of Federal Regulations (CFR) part 930. Pursuant to 15 CFR section 930.35, if the Army determines that a proposed project will not have coastal effects, the Army shall submit a Coastal Consistency ND to the San Francisco Bay Conservation and Development Commission (BCDC) for concurrence.

The Army is also preparing an associated Environmental Assessment in accordance with the requirements of the National Environmental Policy Act (NEPA) (42 U.S.C. section 4321 et seq.) and the Department of Defense (DoD) NEPA Implementing Procedures.

2.0 DETERMINATION

The Army has evaluated its Proposed Action to construct, operate, and maintain mission-essential real property projects planned for implementation at MOTCO in Fiscal Year (FY) 27–FY30. The Proposed Action constitutes land-based activities within the installation boundary. Although one land-based project involves adding a new bridge at Nichols Creek and another project involves flood control at Mount Diablo Creek (analyzed programmatically in the Environmental Assessment because sufficient details are not yet available), neither would adversely affect coastal resources. The Proposed Action would impact approximately 3.6 acres of wetlands that would be mitigated through habitat restoration at MOTCO and in compliance with applicable permits. The sections below outline how the Proposed Action is consistent to the maximum extent practicable with the BCDC's San Francisco Bay Plan applicable enforceable policies.

3.0 PROJECT AREAS, PURPOSE, AND ACTIVITIES

3.1 BACKGROUND

Section 304(1) CZMA defines the coastal zone as "the coastal waters (including lands therein and there under), strongly influenced by each other and in proximity to the shorelines of the several coastal states, and includes islands, transitional and intertidal areas, salt marshes, wetlands, and beaches." BCDC's San Francisco Bay Plan delineates the San Francisco Bay and a shoreline band of 100 feet landward as within its jurisdiction.

MOTCO is a 4,312-acre installation located in the east San Francisco Bay region of California, near Concord, California. MOTCO is an Army Military Surface Deployment and Distribution Command munitions and general cargo transshipment facility. Approximately one-third of the total land area (2,045 acres) of the installation is situated on seven offshore islands in the Bay.

3.2 Purpose of and Need for Proposed Action

The Proposed Action would address MOTCO's real property deficiencies, shortcomings, and suboptimal facility conditions and provide modern, efficient, flexible, safe, and sustainable facilities to meet current and future mission requirements. The proposed facility and infrastructure upgrade projects would comply with federal, DoD, and Army standards pertaining to safety, security, environmental compliance, and operational efficiency.

Facility modernization requirements at MOTCO are identified to meet mission requirements and are evaluated and prioritized during the master planning process. Within the framework of the installation master planning process, as defined in Unified Facilities Criteria, an Area Development Plan (ADP) provides a comprehensive strategy for responsible development of an installation in logical planning phases. MOTCO's ADPs support and update previous real property master plan documents and are addressed in two geographically separate planning districts: the 4,197-acre Mission District and the approximately 115-acre Administrative District as depicted in Figure 1.

3.3 Project Locations

The Proposed Action would occur entirely within the installation boundary of MOTCO, as depicted in Figures 1 and 2. The overall location of the various projects is presented in Figure 2, and a detailed description is provided below in Section 4. Subsequent figures depict the proposed project locations at a closer level.

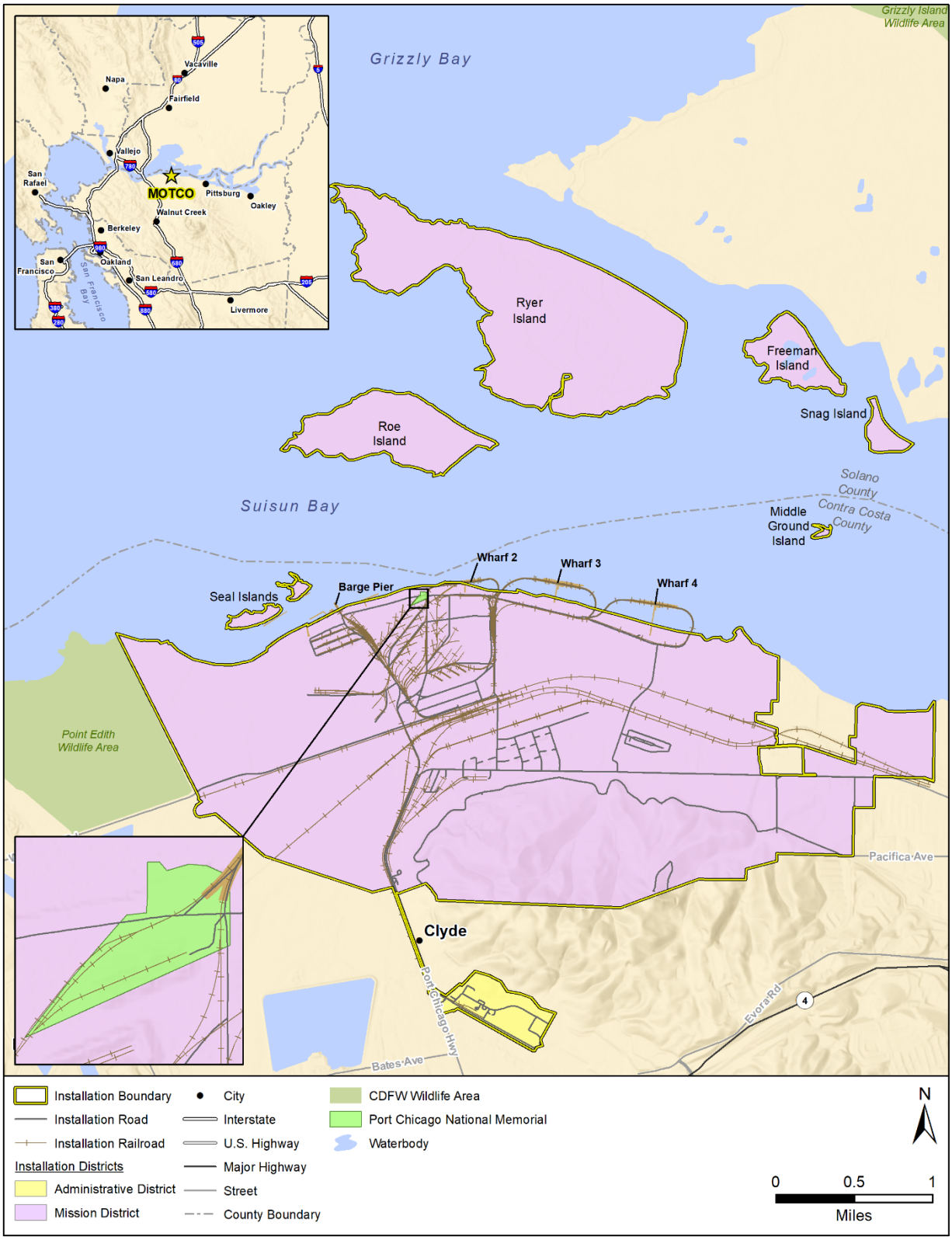

Figure 1 MOTCO Districts

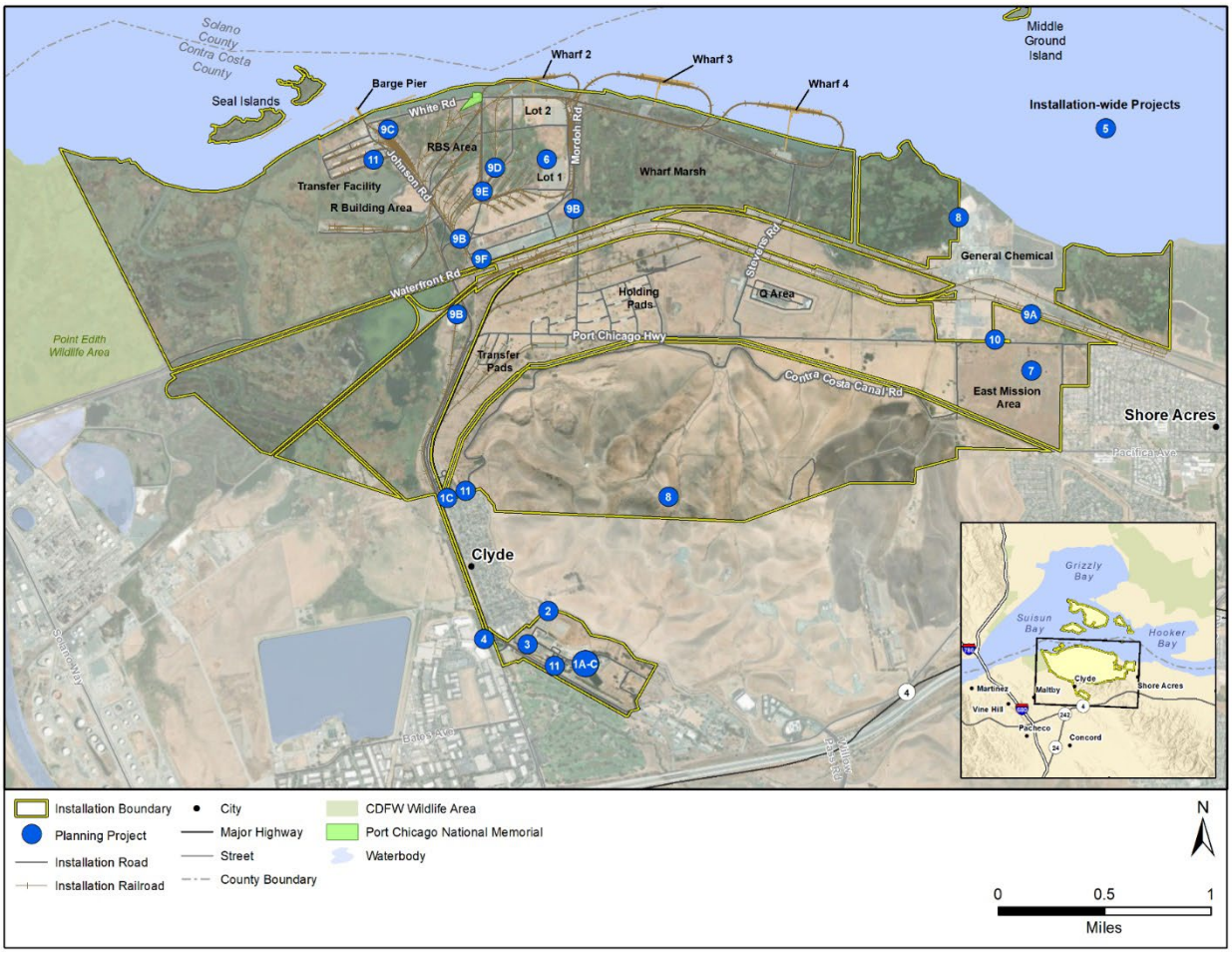

Figure 2 Proposed Action Locations

4.0 DETAILED PROJECT DESCRIPTION

4.1 PROPOSED REAL PROPERTY ACTIVITIES

The Proposed Action consists of construction, operation, and maintenance of real property projects, currently planned for implementation in FY27–FY30. The timeline and anticipated area of disturbance for implementation is presented in Table 1, followed by a brief description of each project.

Table 1 Proposed Real Property Master Plan Project Details

Project No.	Project Description	Area Disturbance (acre)	Proposed Implementation Year Start
Administrative District			
1	**Construct New Vehicle and Pedestrian Transportation Infrastructure in the Administrative District**		
1A	Construct Logistics Readiness Center Parking Lot and Fuel Point	<1	FY29
1B	Install and Repair Sidewalks	<1	FY27
1C	Install Electric Vehicle Charging Stations	<1	FY30

Project No.	Project Description	Area Disturbance (acre)	Proposed Implementation Year Start
2	**Construct Access Control Point #2 Bypass Road**	**5**	**FY30**
3	**Building 635 Parking Lot Expansion**	**2**	**FY27**
4	**Mt Diablo Creek Flood Control**	**1**	**FY29**
Mission District			
5	**Wastewater System Repairs and Improvements**	1	FY30
6	**Convert Lot #1 Ammunition Transfer Area to Staging and Marshalling**	**12**	**FY27**
7	**Construct Organizational Parking for MHE**	**17**	**FY29**
8	**Construct Perimeter Road and Fencing**	**11**	**FY27**
9	**Modernize Rail Infrastructure**		
9A	Repair Industrial Lead Connection to Union Pacific Line	<1	FY27
9B	Construct Railcar Inspection Stations	1	FY30
9C	Expand Class Yard 1	3	FY27
9D	Demolish/Repair Railroad Tracks – Rail Barricaded Sidings Area	22	FY28
9E	Construct Curve B347	2	FY27
9F	Construct New Rail Along Waterfront Road	3	FY29
10	**Construct the Network Enterprise Center**	**9**	**FY29**
11	**Repair/Renovate Buildings 542, 605, 607, 608, 177**	**1**	**FY29**

Legend: < = less than; FY = Fiscal Year; MHE = Material Handling Equipment

Note: Area of Disturbance is the maximum estimated area of disturbance that could occur from the Proposed Action based on the planning completed to date.

4.2 ADMINISTRATIVE DISTRICT PROJECTS

4.2.1 Project 1A: Construct Logistics Readiness Center Parking Lot and Fuel Point

MOTCO would upgrade and pave an existing 23,850-square foot (SF) gravel parking area and construct a fuel point that would be co-located in the parking area. An existing 450-SF canopy would be reinstalled as part of the secondary containment system for the fuel point. Three aboveground storage tanks (ASTs) would be installed, one each for gasoline, diesel fuel, and diesel exhaust fluid. Additionally, approximately 750 linear feet (LF) of perimeter fencing with two vehicle gates would be installed as depicted in Figure 3. No facilities would be demolished as part of this project and no site clearing is required.

Figure 3 Project 1A, 1B, 1C, and 3

4.2.2 Project 1B: Install and Repair Sidewalks

Concrete sidewalks would be constructed and repaired in the Administrative District. Approximately 6,000 LF of sidewalk would be constructed on both sides of A Street and both sides of Coyote Street. Additionally, 3,000 LF of sidewalk would be installed along Kinney Boulevard as depicted in Figure 3. Existing sidewalks would be repaired as necessary to comply with Americans with Disabilities Act requirements.

4.2.3 Project 1C: Install Electric Vehicle Charging Stations

Six electric vehicle charging stations would be installed at MOTCO and connected to the installation's electrical grid. Five of the stations would be installed in the Administrative District and one nearby at the entrance to the Mission District as depicted in Figure 3. All stations would be installed on previously paved parking lots but could require minimal trenching to connect each of the charging stations to the existing electrical utility lines. Existing electrical conduits would be used if available and proximate to the charging station locations.

4.2.4 Project 2: Construct Access Control Point #2 Bypass Road

This project includes the construction of an asphalt-paved, two-lane road connecting the Administrative District and Mission District following the route of the existing Contra Costa Water District canal access road as depicted in Figure 4. Lighting would be installed along the route. Construction is estimated to include approximately 117,900 SF of asphalt pavement.

4.2.5 Project 3: Building 365 Parking Lot Expansion

This project would expand existing pavement at a building in the Mission District for additional parking as depicted in Figure 3. An approximately 33,000 SF parking lot would be constructed.

4.2.6 Project 4: Mt Diablo Creek Flood Control (Programmatic)

This Project would address flooding issues associated with Mt Diablo Creek. Currently, during high rain events, the storm surge floods Port Chicago Highway at both MOTCO access control points preventing access to both districts of the base. The proposed flood control project would channelize approximately 2,400 LF of creek along Port Chicago Highway as depicted in Figure 4 to ensure proper drainage and to prevent flooding during storm surges.

4.3 Mission District Projects

4.3.1 Project 5: Wastewater System Repairs and Improvements

This project would require improvements and repairs to the wastewater system throughout the Mission District as depicted in Figure 2. The wastewater system would be either slip lined or epoxy coated to correct current deficiencies in the wastewater system. Any manholes that are found to be leaking would be replaced. Minor temporary trenching or digging could be required to access the wastewater system lines.

4.3.2 Project 6: Convert Lot #1 Ammunition Transfer Area to Staging and Marshalling

A new western access road to Lot #1 would be installed, and two side-by-side rails along a newly constructed holding pad near the southern portion of the lot would be added. Construction would involve full-depth replacement of and conversion of approximately 171,000 SF of Lot #1, Open Storage Area, to paved transfer pad space. Construction would add approximately 65,700 SF of pavement, fencing, and a lightning protection catenary system, 3,330 LF of rail lines and switches, and 17,100 SF of structural fill as depicted in Figure 5. This project would also include potential munitions and explosives of concern (MEC) or unexploded ordnance (UXO) clearing.

Figure 4 Projects 2 and 4

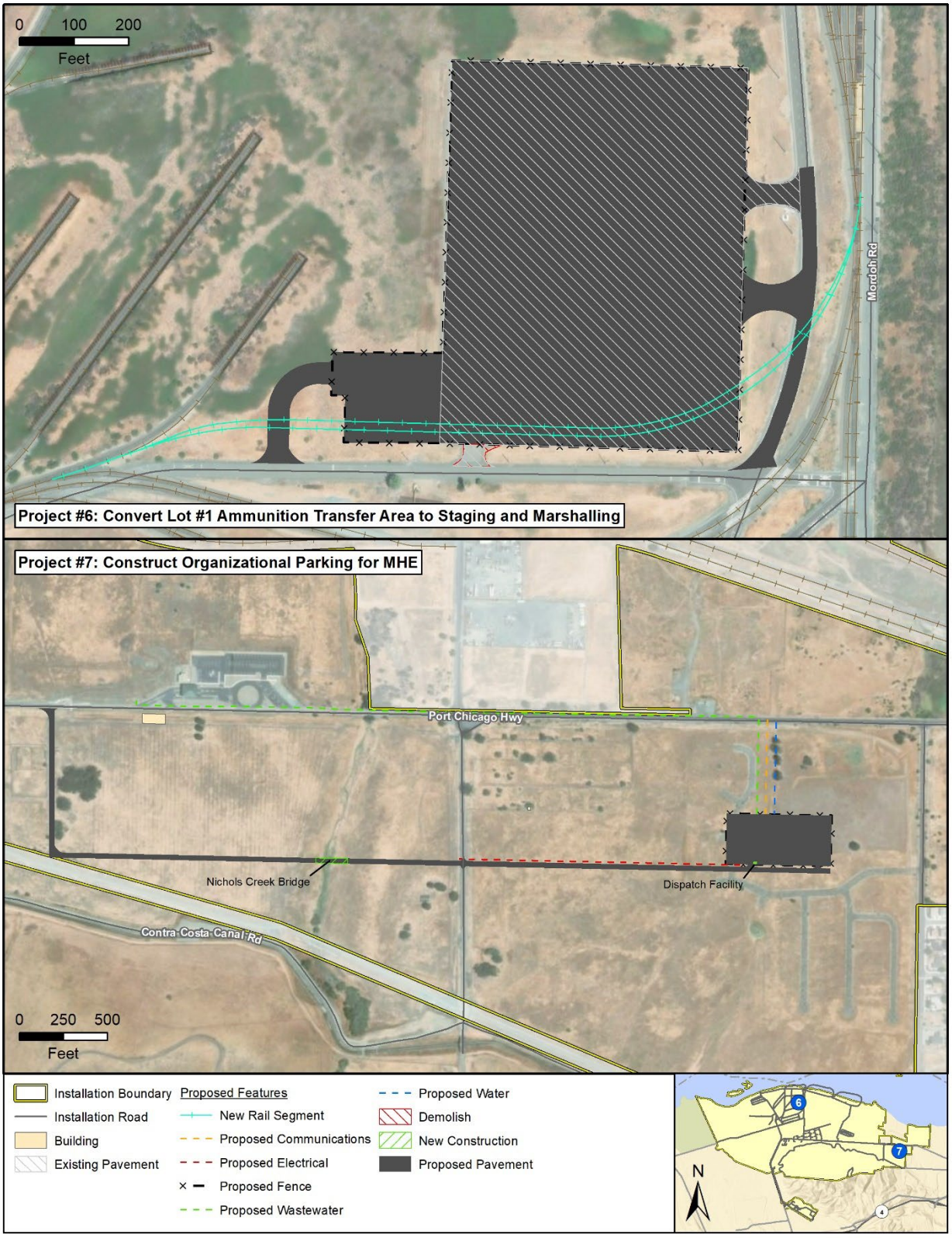

Figure 5 Projects 6 and 7

4.3.3 Project 7: Construct Organizational Parking for MHE

Material Handling Equipment (MHE) dedicated parking does not currently exist at MOTCO. This proposed project would involve construction of a motor pool; approximately 900 LF of road redevelopment; approximately 2,400 LF of new paved access roadway; adding a new bridge along Nichols Creek; a dispatch facility; and a fuel point, wash rack, fencing, and supporting utilities to the site. Approximately 171,000 SF would be paved for the parking area as depicted in Figure 5.

4.3.4 Project 8: Construct Perimeter Road and Fencing

This project would include the construction of an exterior perimeter fence and road to provide security forces with the ability to drive the distance of the new fence line. This project would include installation of approximately 19,000 LF of proposed exterior perimeter fencing and 19,000 LF of associated dirt roadway as depicted in Figure 6. The perimeter road would be a dirt, one-lane road similar to other fire roads on the installation and located on undisturbed land. Grading would be required to establish an even roadbed and appropriate drainage. Post construction, the road would be maintained on an as-needed basis.

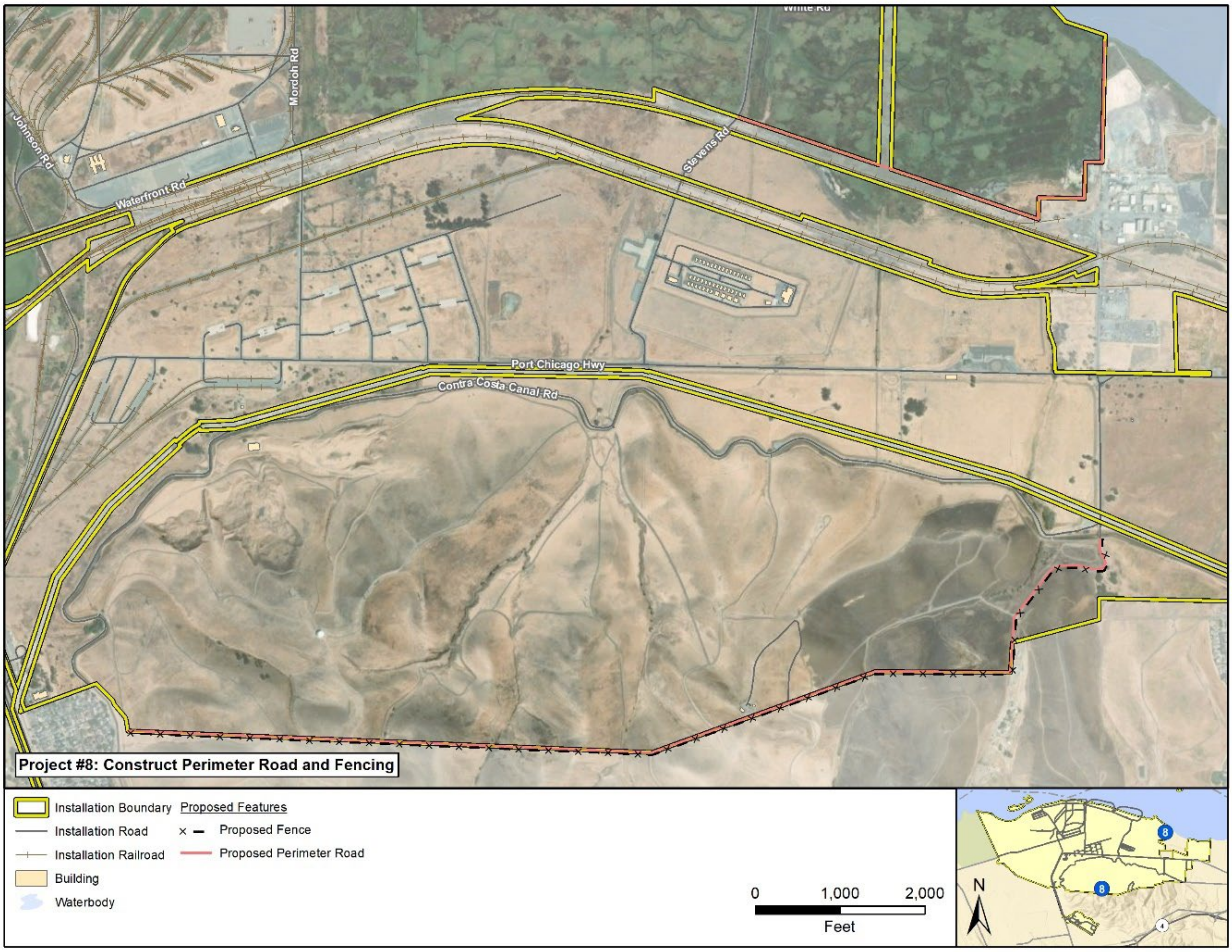

Figure 6 Project 8

4.3.5 Project 9A: Repair Industrial Lead Connection to Union Pacific Line

This project would repair approximately 1.4 miles of an existing lead connection Union Pacific rail line as depicted in Figure 7. Old rail would be replaced in previously disturbed areas.

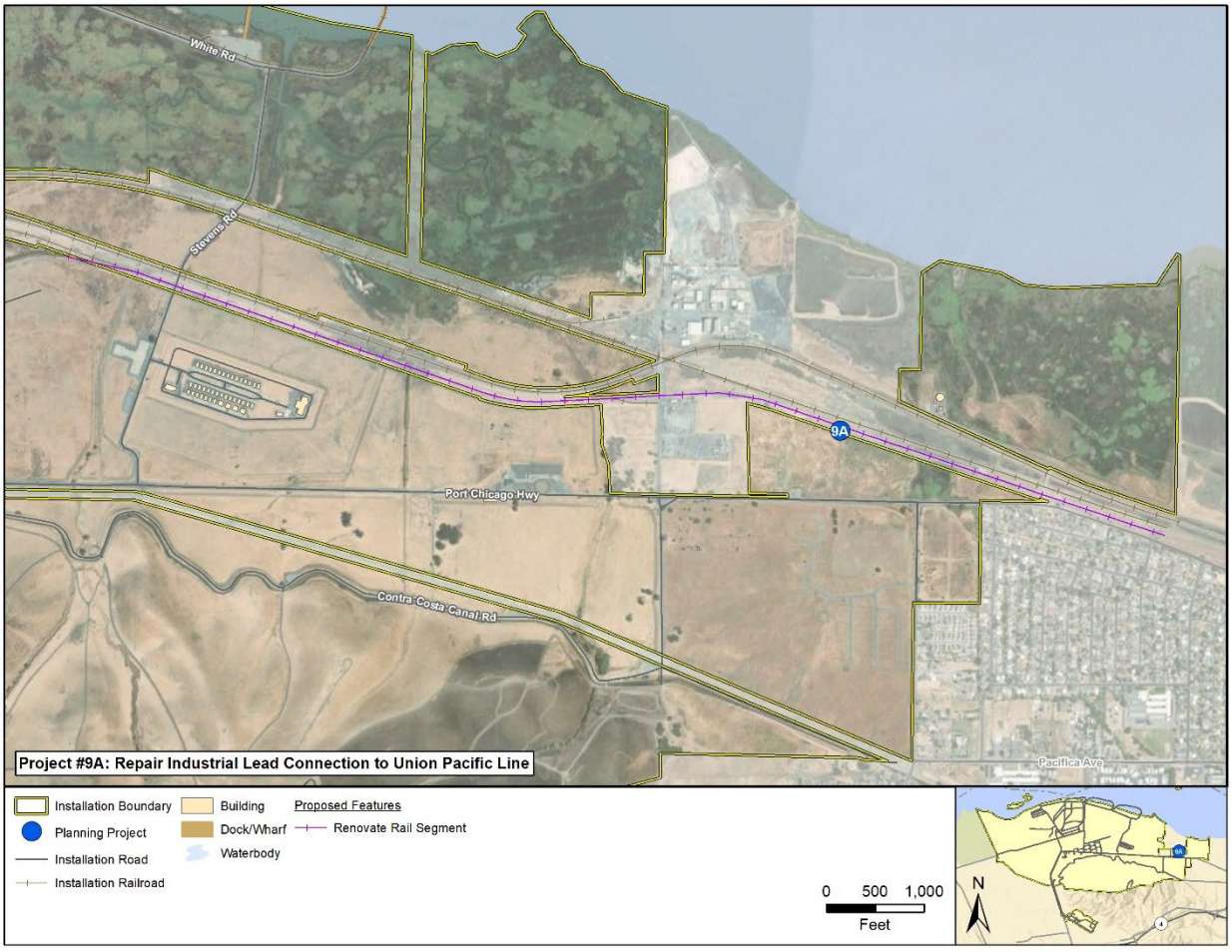

Figure 7 Project 9A

4.3.6 Project 9B: Construct Railcar Inspection Stations

This project would install a camera-based inspection station at three locations in the Mission District to visually inspect the sides of all railcars entering MOTCO as depicted in Figure 8. For the underside inspections, cameras would be mounted between the rails and barely noticeable. For the side and top railcar inspections, the cameras would likely be pole mounted. Minor ground disturbance would be needed to install the camera mount footings.

4.3.7 Project 9C: Expand Class Yard 1

This project would expand Class Yard 1 as depicted in Figure 8. The expansion would require the demolition of three adjacent building foundations to make way for new track.

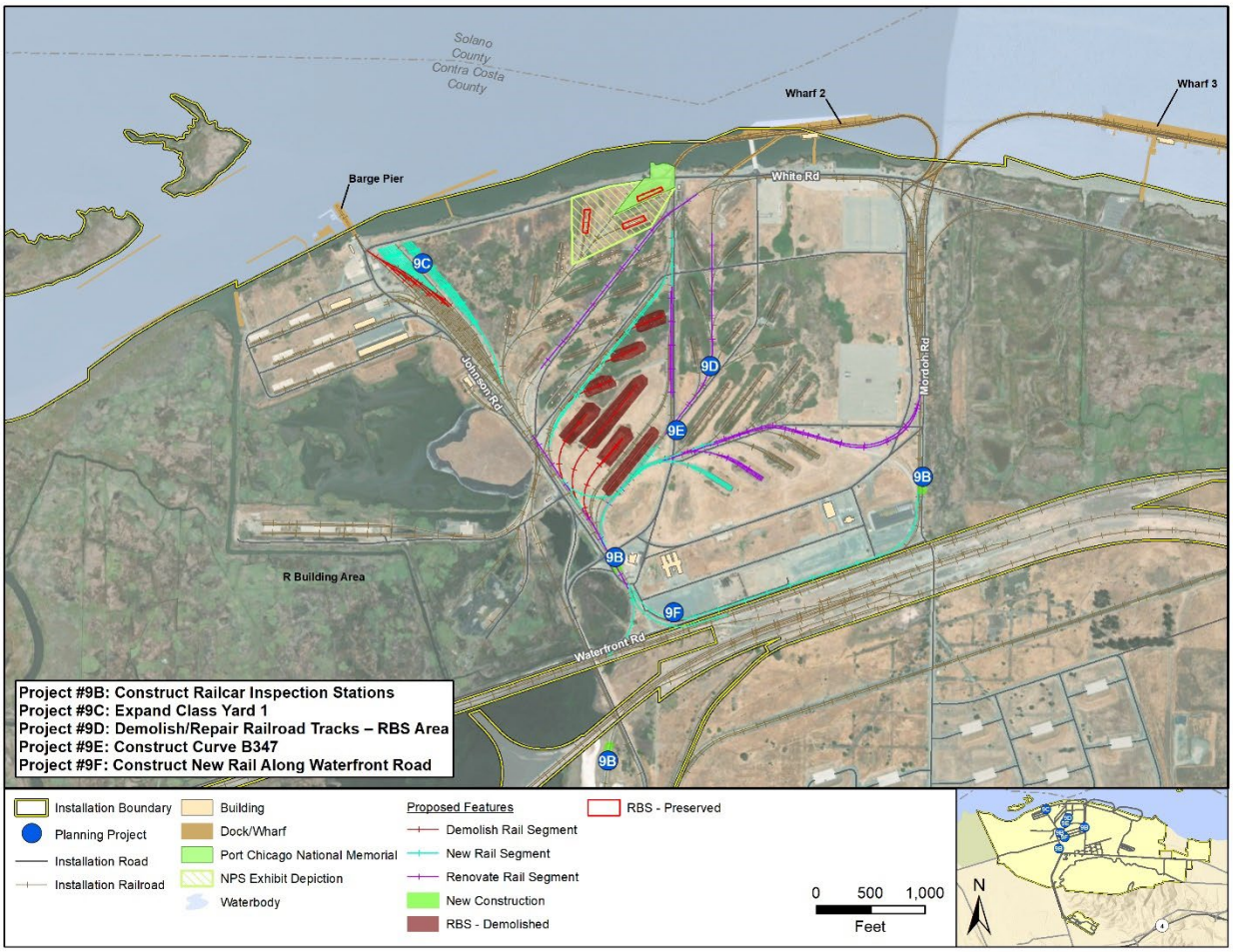

Figure 8 Project 9B, 9C, 9D, 9E, and 9F

4.3.8 Project 9D: Demolish/Repair Railroad Tracks – Rail Barricade Sidings Area

This project would modernize the existing rail loop in the Mission District with a track that is navigable for modern railcars. A total of approximately 17,000 LF of existing railroad track would be repaired. The project would involve the demolition of approximately 5,000 LF of railroad tracks, as well as the removal of four soil barricades/revetments and up to 5,200 SF of earth-covered ammunition magazines as depicted in Figure 8. This project would primarily occur on existing developed land since most of the rail would be in the path of current existing railbeds. The additional new track would be installed on previously developed land and would require some demolition and site preparation. This project is adjacent to the Port Chicago Naval Magazine National Memorial, which is operated by the National Park Service (the National Park Service has proposed to expand the memorial exhibit to include an additional three barricades that would be preserved).

4.3.9 Project 9E: Construct Curve B347

This project would include the construction of 1,000 LF of rail curve as depicted in Figure 8.

4.3.10 Project 9F: Construct New Rail Along Waterfront Road

A new rail curve would be constructed along Waterfront Road in the Mission District. The approximately 3,200 LF of new rail would be constructed on previously disturbed areas as depicted in Figure 8.

4.3.11 Project 10: Construct the Network Enterprise Center

This project includes the construction of an approximately 7,845 SF Network Enterprise Center facility with associated organizational parking in the eastern portion of the Mission District as depicted in Figure 9. Supporting facilities include site development, utilities and connections, lighting, paving, walkways, storm drainage, information systems, landscaping, and signage.

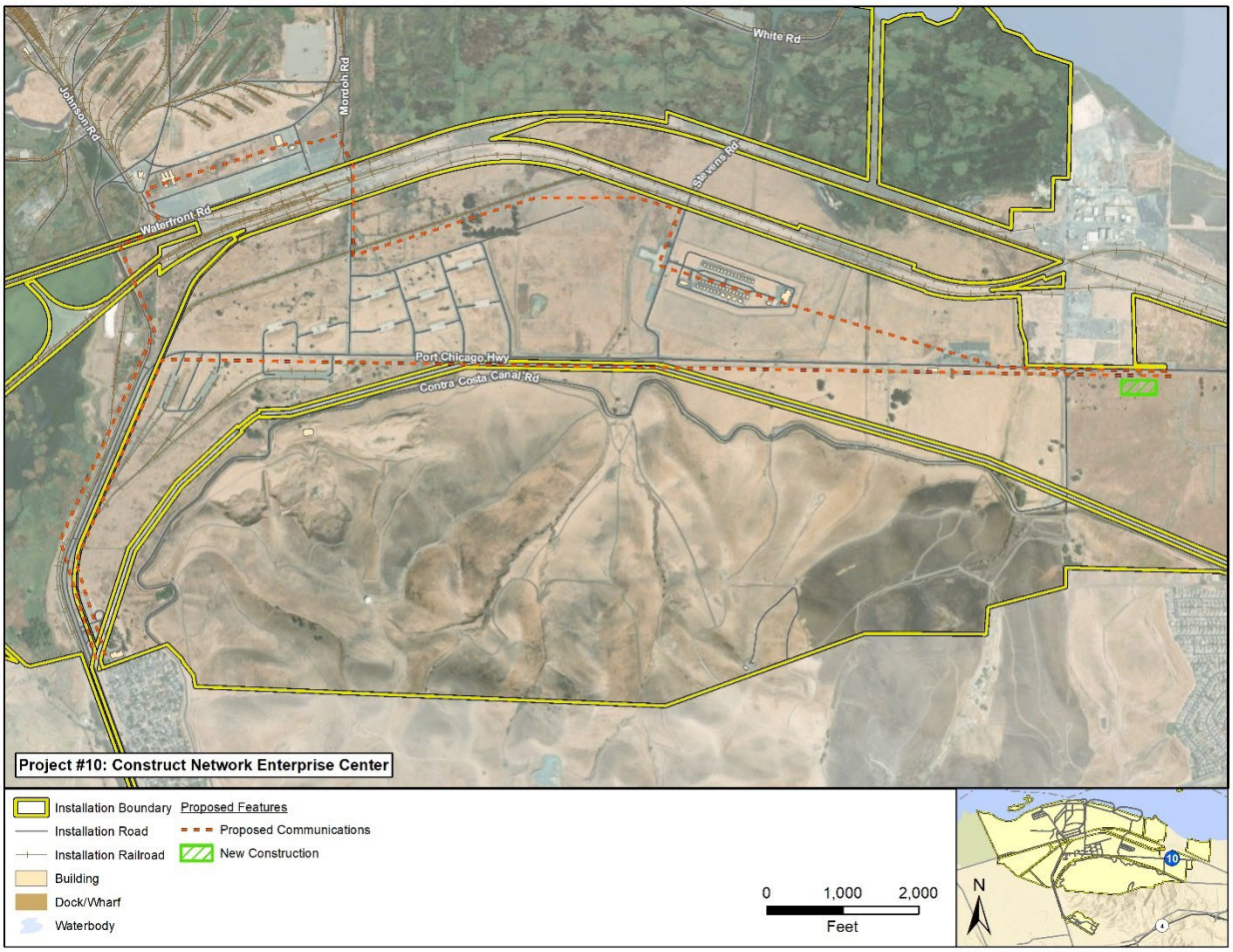

Figure 9 Project 10

4.3.12 Project 11: Repair/Renovate Buildings 542, 605, 607, 608, 177

This project includes repairs and renovations to buildings in the Mission District as depicted in Figure 10. All repairs and renovations would be interior improvements.

Figure 10 Project 11

5.0 CONSISTENCY WITH THE PROVISIONS OF THE BAY PLAN

The Army reviewed the San Fransico Bay Plan to identify enforceable policies relevant to the Proposed Action as described below.

5.1 ENFORCEABLE POLICIES OF THE SAN FRANSICO BAY PLAN THAT ARE NOT APPLICABLE TO THE PROPOSED ACTION

The policies not applicable to the Proposed Action are provided in Table 2, with a brief rationale explaining the non-applicability.

Table 2 Enforceable Policies of the San Fransico Bay Plan That Are Not Applicable to the Proposed Action

Policy	Explanation of Non-Applicability
Fish, Other Aquatic Organisms, and Wildlife (Policies 5–7).	The Proposed Action would not involve fill, dredging, or sediment placement in public trust wetlands; therefore, Policies 5–7 are N/A.
Water Surface Area and Volume	The Proposed Action would not result in changes to surface area or total volume of water of the Bay. A slight increase in freshwater runoff may occur from increases in impervious surfaces due to Projects 2, 3, 4, 5, 7, 8, and 10. However, BMPs and SOPs would be implemented during construction to minimize runoff, and the proposed projects would occur at least 400 feet from the Bay's shoreline band. Therefore, these Policies are N/A.
Shell Deposits	The Proposed Action would not involve any filling or diking of coastal resources, so no shell deposits would be affected. Therefore, these Policies are N/A.
Freshwater Inflow	Diversions and/or reductions of freshwater inflow into the Bay would not occur under the Proposed Action. Therefore, these Policies are N/A.
Subtidal Areas	Filling and dredging of subtidal areas would not occur under the Proposed Action. Therefore, these Policies are N/A.
Environmental Justice and Social Equity	The Proposed Action is within federal property and would not occur in an area that is identified as an underrepresented, vulnerable, and/or disadvantaged community. Therefore, these Policies are N/A.
Climate Change	The Proposed Action is within federal property and would have no impact on climate. Therefore, these Policies are N/A.
Safety of Fills	The Proposed Action does not involve filling or construction on Bay mud. All projects would be constructed in accordance with appropriate design and engineering standards. Therefore, these Policies are N/A.
Shoreline Protection	The Proposed Action would not take place within or near the shoreline, as projects would occur further than 400 feet from the shoreline band. Therefore, these Policies are N/A.
Water-Related Industry	MOTCO is a military installation and the Proposed Action would not support or benefit water-related industries. Therefore, these Policies are N/A.
Ports	While MOTCO is a seaport, it is a military installation and is not directly governed by any Seaport Policies. Therefore, these Policies are N/A.

Policy	Explanation of Non-Applicability
Airports	The Proposed Action would occur entirely on the installation and would not affect nearby airport facilities/operations. Therefore, these Policies are N/A.
Transportation	The Proposed Action would occur entirely on the installation and would not affect nearby transportation structures or systems. Therefore, these Policies are N/A.
Commercial Fishing	The Proposed Action would occur within a military installation and would not affect localized commercial fishing communities. Therefore, these Policies are N/A.
Recreation	The Proposed Action would occur within a military installation and would not affect recreational opportunities for local communities. The Port Chicago Naval Magazine National Memorial (the Memorial) operated by the National Park Service is adjacent to Project 6D. The Memorial would continue to operate under similar conditions that are present. Therefore, these Policies are N/A.
Appearance, Design, and Scenic Views	MOTCO is a military installation comprised of industry style structures. The Proposed Action activities would not affect the appearance, design, and scenic views of the local environment. Therefore, these Policies are N/A.
Salt Ponds	The Proposed Action activities would not occur on or near salt ponds as none are present on or near the installation. Therefore, these Policies are N/A.
Managed Wetlands	The Proposed Action activities occur within approximately 3.6 acres of USFWS NWI wetlands. The Proposed Action would not affect public trust wetlands. Therefore, these Policies are N/A.
Other Uses of the Bay and Shoreline	The Proposed Action would not include any activities that would affect public uses of the Bay or shoreline. Therefore, these Policies are N/A.
Fills in Accord with the Bay Plan	The Proposed Action would not require any filling within public trust areas. Therefore, these Policies are N/A.
Fill for Bay-Oriented Commercial Recreation and Bay-Oriented Public Assembly on Privately-Owned Property	The Proposed Action would not involve any filling on privately-owned property since all projects would occur within the installation boundary. Therefore, these Policies are N/A.
Fill for Bay-Oriented Commercial Recreation and Bay-Oriented Public Assembly on Privately-Owned or Publicly-Owned Property	The Proposed Action would not involve any filling on publicly-owned property as all projects would occur within the installation boundary. Therefore, these Policies are N/A.
Filling for Public Trust Uses on Publicly Owned Property Granted in Trust to a Public Agency by the Legislature	The Proposed Action would not involve any filling on public property trusted to the public as all projects would occur within the installation boundary. Therefore, these Policies are N/A.
Public Trust	The Proposed Action would not take place on lands subject to the public trust. Therefore, these Policies are N/A.
Navigational Safety and Oil Spill Prevention	The Proposed Action would not affect navigational safety since all projects would be land-based and within the installation boundary. Therefore, these Policies are N/A.

Legend: BMP = Best Management Practice; MOTCO = Military Ocean Terminal Concord; N/A = Not Applicable; NWI = National Wetlands Inventory; SOP = Standard Operating Procedure; USFWS = United States Fish and Wildlife Service

5.2 Enforceable Policies of the San Fransico Bay Plan That Are Applicable to the Proposed Action

Following is a discussion of the San Francisco Bay Plan enforceable policies applicable to the Proposed Action. Related policies are discussed together to minimize redundancy.

Fish, Other Aquatic Organisms, and Wildlife

> ***Policy 1:*** *To assure the benefits of fish, other aquatic organisms and wildlife for future generations, to the greatest extent feasible, the Bay's tidal marshes, tidal flats, and subtidal habitat should be conserved, restored and increased.*
>
> ***Policy 2:*** *Native species, including candidate, threatened, and endangered species; species that the California Department of Fish and Wildlife, the National Marine Fisheries Service, and/or the U.S. Fish and Wildlife Service have listed under the California or Federal Endangered Species Act; and any species that provides substantial public benefits, as well as specific habitats that are needed to conserve, increase, or prevent the extinction of these species, should be protected, whether in the Bay or behind dikes. Protection of fish, other aquatic organisms, and wildlife and their habitats may entail placement of fill to enhance the Bay's ecological function in the near-term and to ensure that they persist into the future with sea level rise.*
>
> ***Policy 3:*** *In reviewing or approving habitat restoration projects or programs the Commission should be guided by the best available science, including regional goals, and should, where appropriate, provide for a diversity of habitats for associated native aquatic and terrestrial plant and animal species.*
>
> ***Policy 4:*** *The Commission should:*
>
> a) *Consult with the California Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, whenever a proposed project may adversely affect an endangered or threatened plant, fish, other aquatic organism or wildlife species;*
> b) *Not authorize projects that would result in the "taking" of any plant, fish, other aquatic organism or wildlife species listed as endangered or threatened pursuant to the state or federal Endangered Species Acts, or the federal Marine Mammal Protection Act, or species that are candidates for listing under these acts, unless the project applicant has obtained the appropriate "take" authorization from the U.S. Fish and Wildlife Service, National Marine Fisheries Service or the California Department of Fish and Wildlife; and*
> c) *Give appropriate consideration to the recommendations of the California Department of Fish and Wildlife, the National Marine Fisheries Service or the U.S. Fish and Wildlife Service in order to avoid possible adverse effects of a proposed project on fish, other aquatic organisms and wildlife habitat.*

The Proposed Action includes construction, operation, and maintenance activities located on land within an active military/industrial installation/port. Due to the highly developed environment within the project footprint, minimal natural habitat would be affected. The

total area that would be disturbed under the Proposed Action would be less than 100 acres. As previously mentioned, two projects would involve water resources including a new bridge over Nichols Creek and channeling for the Mt Diablo Flood Control project, although the Army would conduct further NEPA and CZMA analysis for the flood control project once detailed information is available.

The Proposed Action overlaps with approximately 3.8 acres of wetlands, as shown in Figure 11 and Table 3. Prior to construction, the Army would obtain a formal jurisdictional delineation and acquire appropriate permitting through the Clean Water Act Section 404 and State of California Clean Water Act Section 101. Although minor impacts to aquatic species could occur from the loss or disturbance of wetland habitat, the Army would implement best management practices (BMPs) such as silt fencing and other sedimentation controls and conduct mitigation through habitat restoration at MOTCO as required.

The Proposed Action would result in temporary and long-term impacts to plant communities and commonly occurring wildlife through displacement, but due to the limited habitat availability and generalist species occurring on the installation, there would be no anticipated population level effects. Additionally, the channelization of Mt Diablo Creek (Project 4) would result in fewer flooding events from this water body and therefore, lower the amount of runoff and chance for increased turbidity because of Mt Diablo Creek flooding which would improve longer term conditions for aquatic species and their habitat.

Based on a USFWS Information for Planning and Consultation web search, 14 federally listed species protected under the Endangered Species Act (ESA) have the potential to occur at MOTCO as shown in Table 4 (USFWS 2025). The delta smelt (*Hypomesus transpacificus*) and longfin smelt (*Spirinchus thaleichthys*) are both found throughout Suisun Bay. Designated critical habitat for the delta smelt occurs within Suisun Bay, which abuts the project area. There is proposed critical habitat for the longfin smelt in Suisun Bay. Delta smelts are federally threatened and have no state listing status, while the longfin smelt are federally and state endangered. The project area does not overlap with Suisun Bay, and therefore, these species would not be expected to occur in the project area.

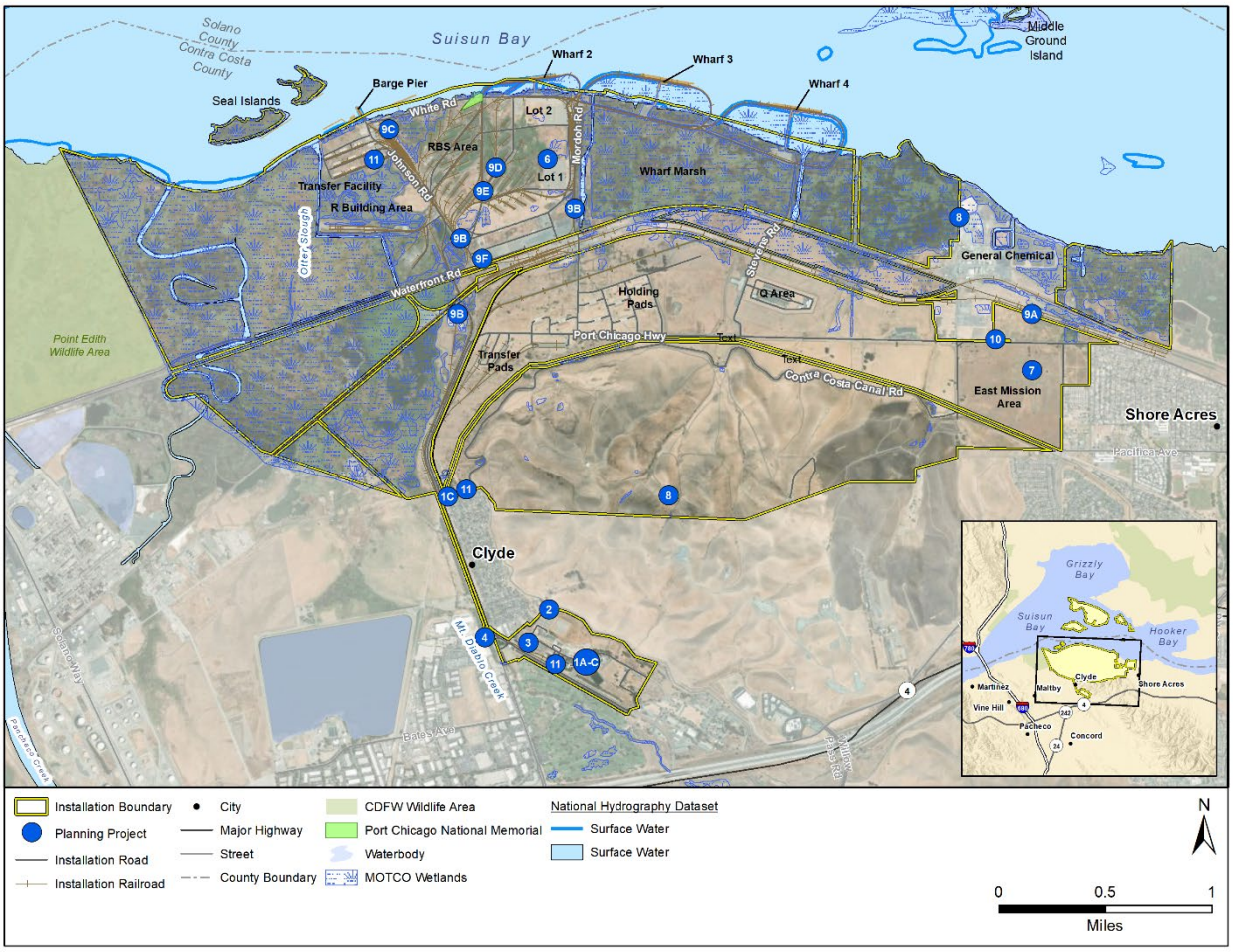

Figure 11 Surface Water and Wetlands

Table 3 Proposed Action Impacts to Wetlands

Project Number	Project Feature	Acreage
2	Proposed Road	0.07
4	Flood Control	0.02
8	Proposed Perimeter Road and Fence	2.16
9A	Renovate Rail Segment	0.46
9B	New Construction	0.01
9C	Renovate Rail Segment	0.72
10	Proposed Communications	0.36
	Total	**3.81**

Table 4 Federally Listed Species with Potential to Occur in the Project Area

Common Name	Scientific Name	Federal/State Status	Occurrence in the Project Area	Habitat/Regional Occurrence
Birds				
California least tern	*Sternula antillarum browni*	E / E	Unlikely	Colonial breeder on bare or sparsely vegetated sand beaches or alkali flats. Last observed on installation in 1982. Nesting colony approximately10 miles up Delta in Montezuma Slough.
California ridgway's rail	*Rallus obsoletus obsoletus*	E / E	Possible	Salt and brackish marshes. Rare in Suisun Bay. Considered secretive. No occurrences were found within or adjacent to the Proposed Action Area during 2010, 2013, 2015, or 2021 surveys.
Reptiles				
Alameda whipsnake	*Masticophis lateralis euryxanthus*	T / T	Unlikely	Chaparral, northern coastal sage scrub, adjacent habitats, such as grasslands, oak savannas, and occasionally oak-bay woodlands. No previous occurrence on MOTCO.
Northwestern pond turtle	*Actinemys marmorata*	PT / SC	Possible	Permanent or near-permanent freshwater ponds. Recorded occurrence in 2020 in the Mission District on-installation in Otter Slough and Seal Creek Marsh.
Amphibians				
California red-legged frog	*Rana draytonii*	T / CE	Possible	Permanent freshwater ponds and marshes. Nearest known occurrences are in four ponds within the Navy BRAC Re-Use Area located on the other side of Highway 4. No occurrences were found in the Proposed Action Area during 2014–2015 or 2015–2016 surveys.
California tiger salamander	*Ambystoma californiense*	T / CE	Possible	Permanent freshwater ponds and marshes. Nearest known occurrences are in four ponds within the Navy BRAC Re-use Area. No occurrences were found in Proposed Action Area during 2014–2015 and 2015–2016 surveys.
Foothill yellow-legged frog	*Rana boylii*	T / -	Possible	Foothill and mountain streams, and vegetation types, including valley-foothill riparian, mixed chaparral, and wet meadows.
Western spadefoot	*Spea hammondii*	PT / -	Possible	Can inhabit a variety of environments, including hot and dry, by burrowing underground.

Common Name	Scientific Name	Federal/State Status	Occurrence in the Project Area	Habitat/Regional Occurrence
				Emerges during rain events between October and May.
Fishes				
Delta smelt	*Hypomesus transpacificus*	T / -	Extremely unlikely, no suitable habitat within the Project Area	Larval, juvenile, and adult Delta smelt may all be found in Suisun Bay, including the shallow edges and backwater sloughs.
Longfin smelt	*Spirinchus thaleichthys*	E / E	Extremely unlikely, no suitable habitat within the Project Area	Found throughout the Bay-Delta, including Suisun Bay. Habitat includes low-salinity, freshwater, and ocean.
Insects				
Monarch butterfly	*Danaus plexippus*	PT / -	Highly likely	Numerous overwintering sites for the monarch butterfly are found around the Bay Area. The nearest overwintering site to the Project Area is in Vallejo. Monarchs are likely to be found in any areas with milkweed or other flowering plants.
Crustaceans				
Vernal pool fairy shrimp	*Branchinecta lynchi*	T / -	Extremely unlikely	Vernal pools in Oregon and California; occasionally in artificial pools created by roadside ditches. No previous occurrence on MOTCO.
Vernal pool tadpole shrimp	*Lepidurus packardi*	E / -	Extremely unlikely	Vernal pools, clay flats, alkaline pools, ephemeral stock tanks, roadside ditches, and road ruts in California's Great Central Valley. No previous occurrence on MOTCO.
Flowering Plants				
Soft bird's-beak	*Cordylanthus mollis* ssp. *mollis*	E / R	Possible, project area outside of known occurrences	Low marsh zone and eroding banks of Delta tidal brackish marshes. Occurrences found in 2019 west of the chemical plant and east of the easternmost pier.

Legend: BRAC = Base Realignment and Closure; E = Endangered; T = Threatened; PE = Proposed Endangered; PT = Proposed Threatened; SC = Special Concern; CE = California Endemic; R = Rare; MOTCO = Military Ocean Terminal Concord

Sources: Army 2023; USFWS 2025

The Army is conducting an informal consultation with USFWS for the ESA-listed species identified in Table 4 and anticipates a "may affect, not likely to adversely affect" determination.

Existing BMPs, policies, and practices would be used to avoid and minimize the environmental impacts to biological resources within the Proposed Action area, including stormwater management to avoid sedimentation impacts to nearby critical habitat within Suisan Bay. For the reasons stated above, the Proposed Action would be consistent to the

maximum extent practicable with Fish, Other Aquatic Organisms, and Wildlife Policies under the San Francisco Bay Plan.

Water Quality

> ***Policy 1:*** *Bay water pollution should be prevented to the greatest extent feasible. The Bay's tidal marshes, tidal flats, and water surface area and volume should be conserved and, whenever possible, restored and increased to protect and improve water quality. Fresh water inflow into the Bay should be maintained at a level adequate to protect Bay resources and beneficial uses.*
>
> ***Policy 2:*** *Water quality in all parts of the Bay should be maintained at a level that will support and promote the beneficial uses of the Bay as identified in the San Francisco Bay Regional Water Quality Control Board's Water Quality Control Plan, San Francisco Bay Basin and should be protected from all harmful or potentially harmful pollutants. The policies, recommendations, decisions, advice and authority of the State Water Resources Control Board and the Regional Board, should be the basis for carrying out the Commission's water quality responsibilities.*
>
> ***Policy 3:*** *New projects should be sited, designed, constructed and maintained to prevent or, if prevention is infeasible, to minimize the discharge of pollutants into the Bay by: (a) controlling pollutant sources at the project site; (b) using construction materials that contain nonpolluting materials; and (c) applying appropriate, accepted and effective best management practices, especially where water dispersion is poor and near shellfish beds and other significant biotic resources.*

As discussed above, the Proposed Action includes various construction, operation, and maintenance activities at MOTCO that are entirely land-based within the installation boundary. All projects would occur at least 400 feet from the shoreline band and the majority of the proposed projects would occur on previously disturbed land (see also discussion above for potential minor wetland impacts, under Fish, Other Aquatic Organisms, and Wildlife). The Proposed Action would primarily involve paving, digging, minor trenching, and excavation. The approximate area of disturbance for the proposed projects would be less than 100 total acres of ground disturbed. The Proposed Action would result in an increase in impervious surfaces, which could generate additional stormwater runoff during construction and operations. There would be no significant changes to the Bay's tidal marshes, flats, and water surface area and volume. The new bridge over Nichols Creek (part of Project 7) would be constructed in a manner to minimize sediment release into the waterway. Improvements and repairs to the wastewater system (Project 5) would reduce potential for leaks or other potential introduction of pollutants to surface water on MOTCO and therefore, may improve surface water quality conditions. The Mt Diablo Creek Flood Control (Project 4) would address flooding issues nearby. Channelization of the creek would reduce flooding during storm surges which would reduce potential runoff into the Bay or other surface waters and could also help to improve water quality overall.

The Army would identify and use BMPs to protect the Bay and the environments mentioned above, including minimizing adverse impacts to water quality from potential stormwater runoff and pollutants into the Bay. Construction and modification activities would comply with the Construction General Permit which would include a site-specific and detailed Storm Water Pollution Prevention Plan (SWPPP) that coordinates the timing of soil disturbing activities with the installation of soil erosion and runoff controls is an effective way of controlling erosion while soil is exposed and subject to construction activity. BMPs could include the use of effective wind erosion controls, stabilization for all disturbed soils prior to storm events, maintaining effective perimeter controls and stabilizing site entrances and exits. Post construction BMPs, as outlined in the MOTCO SWPPP, would minimize erosion during operations. Implementation of these measures, as necessary and appropriate, would ensure that impacts to water quality are minimized.

> ***Policy 4:*** *When approving a project in an area polluted with toxic or hazardous substances, the Commission should coordinate with appropriate local, state and federal agencies to ensure that the project will not cause harm to the public, to Bay resources, or to the beneficial uses of the Bay.*

While MOTCO is a designated Superfund Site, UXO are not considered toxic or hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or the Resource Conservation and Recovery Act (RCRA). However, munitions are dangerous and all appropriate safety measures would be taken in accordance with DoD Manual 6055.09, DoD Ammunition and Explosives Safety Standards, UXO Standby Support, and as directed by the Explosive Safety Submission to ensure the safety of personnel working on the project.

Further, though the Management Site is outside of BCDC's jurisdiction, the site is not subject to any clean up requirements under the Federal Facilities Agreement, and it would be lined to prevent any groundwater infiltration from the project.

For the reasons stated above, the Proposed Action would be consistent to the maximum extent practicable with Water Quality, Policies 1–4 under the San Francisco Bay Plan.

Tidal Marshes and Tidal Flats:

> ***Policy 3:*** *Project should be sited and designed to avoid, or if avoidance is infeasible, minimize adverse impacts on any transition zone present between tidal and upland habitats. Where a transition zone does not exist and it is feasible and ecologically appropriate, shoreline projects should be designed to provide a transition zone between tidal and upland habitats.*

The Proposed Action would employ designs and mitigation measures to avoid adverse impacts to transitional zones found between tidal and upland habitats. As noted previously, the Proposed Action would occur entirely within the MOTCO boundary, and all projects would be land-based. The majority of the Proposed Action areas would occur on disturbed land, with minimal natural habitat available. The Army would implement appropriate BMPs to minimize adverse impacts from stormwater runoff and ground disturbance (see

discussion above under Water Quality). Therefore, the Proposed Action would be consistent to the maximum extent practicable with this policy.

Mitigation

> ***Policy 1:*** *Projects should be designed to avoid adverse environmental impacts to Bay natural resources such as to water surface area, volume, or circulation and to plants, fish, other aquatic organisms and wildlife habitat, subtidal areas, or tidal marshes or tidal flats. Whenever adverse impacts cannot be avoided, they should be minimized to the greatest extent practicable. Finally, measures to compensate for unavoidable adverse impacts to the natural resources of the Bay should be required. Mitigation is not substitute for meeting the other requirements for the McAteer-Petris Act.*
>
> ***Policy 9:*** *Mitigation programs should be coordinated with all affected local, state, and federal agencies having jurisdiction or mitigation expertise to ensure, to the maximum practicable extent, a single mitigation program that satisfies the policies of all the affected agencies.*

To the maximum extent practicable, the project has been designed to avoid or minimize adverse environmental impacts to the San Francisco Bay and associated coastal resources in accordance with BCDC San Francisco Bay Plan enforceable policies. As demonstrated in the Environmental Assessment, there would be no significant effects resulting from the Proposed Action. The Army would coordinate with all affected local, state, and federal agencies to avoid or minimize adverse environmental impacts to the San Francisco Bay and would apply BMPs and Standard Operating Procedures to avoid impacts. The Army would also conduct habitat restoration mitigation at MOTCO for potential impacts to wetlands, in compliance with all applicable permits. The Proposed Action is therefore consistent to the maximum extent practicable with Mitigation, Policies 1 and 9 under the San Francisco Bay Plan.

Conclusion

Based on the above analysis, the Proposed Action is consistent to the maximum extent practicable with all applicable enforceable policies of the BCDC San Francisco Bay Plan.

References

Army. 2023. Final Military Ocean Terminal Concord Integrated Natural Resources Management Plan 2023-2028. June.

USFWS. 2025. Information for Planning and Consultation Report for the MOTCO EA. 15 April 2025.

APPENDIX F – REGULATORY FRAMEWORK

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Table F-1 Federal, State, and Local Regulations, Laws, and Executive Orders

Title	Law, Regulation, or Executive Order
American Indian Religious Freedom Act	42 U.S.C. section 21 et seq.
Archaeological Resources Protection Act	16 U.S.C. section 470aa et seq.
Bald and Golden Eagle Protection Act	16 U.S.C. section 668–668d
Clean Air Act (CAA)	42 U.S.C. section 7401
Clean Water Act (CWA)	33 U.S.C. section 1251
Coastal Zone Management Act (CZMA)	16 U.S.C. section 1451 et seq.
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)	42 U.S.C. section 9601 et seq.
Emergency Planning and Community Right-to-Know Act	42 U.S.C. sections 11001–11050
Energy Independence and Security Act (EISA)	42 U.S.C. sections 6291, 6293, and 6295, as amended
Endangered Species Act (ESA)	16 U.S.C. sections 1531–1543
Master plans for major military installations, Resilience Component	10 U.S.C section 2864(c)
Migratory Bird Treaty Act (MBTA), as amended	16 U.S.C. sections 703–712
National Historic Preservation Act (NHPA) of 1966	16 U.S.C. section 470 et seq., as amended
Native American Graves Protection and Repatriation Act	25 U.S.C. chapter 32 section 3001 et seq.
NEPA	42 U.S.C. sections 4321–4347
Resource Conservation and Recovery Act (RCRA)	42 U.S.C. section 6901
Safe Drinking Water Act	42 U.S.C. section 300f et seq.
National Pollutant Discharge Elimination System (NPDES)	40 CFR part 122
Toxic Substances Control Act	15 U.S.C. sections 2601–2629
Floodplain Management	EO 11988
Protection of Wetlands	EO 11990
Federal Compliance with Pollution Control Standards	EO 12088
Protection of Children from Environmental Health Risks and Safety Risks	EO 13045
Consultation and Coordination with Indian Tribal Governments	EO 13175
Responsibilities of Federal Agencies to Protect Migratory Birds	EO 13186
Unleashing American Energy	EO 14154

Legend: CFR = Code of Federal Regulations; EO = Executive Order; NEPA = National Environmental Policy Act; U.S.C. = United States Code

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APPENDIX G – ACRONYMS AND ABBREVIATIONS

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ACRONYMS AND ABBREVIATIONS

834th Trans BN	834th Transportation Battalion
ADP	Area Development Plan
AMC	Army Materiel Command
APE	Area of Potential Effects
AT/FP	Antiterrorism/Force Protection
BAAQMD	Bay Area Air Quality Management District
BCDC	Bay Conservation and Development Commission
BIOS	Biogeographic Information and Observation System
BMP	Best Management Practice
CAA	Clean Air Act
CCWD	Contra Costa Water District
CDFW	California Department of Fish and Wildlife
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DERP	Defense Environmental Restoration Program
DoD	Department of Defense
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EISA	Energy Independence and Security Act
EO	Executive Order
EPA	United States Environmental Protection Agency
EPRB	Executive Plan Review Board
ESA	Endangered Species Act
ESQD	Explosives Safety Quantity Distance
FONPA	Finding of No Practicable Alternative
FONSI	Finding of No Significant Impact
FY	Fiscal Year
GHG	greenhouse gas
HAP	hazardous air pollutant
IBD	Inhabited Building Distance
ICRMP	Integrated Cultural Resources Management Plan
IMCOM	Installation Management Command
INRMP	Integrated Natural Resources Management Plan
IPB	Installation Planning Board
IRP	Installation Restoration Program
ISWMP	Integrated Solid Waste Management Plan
IT	Information Technology
LF	Linear Foot/Feet
LID	Low Impact Development
LTM	long-term monitoring
MBTA	Migratory Bird Treaty Act
MEC	Munitions and Explosives of Concern
mgd	Million Gallon per Day
MHE	Materiel Handling Equipment
MMRP	Military Munitions Response Program
MRS	Munitions Response Site
MOTCO	Military Ocean Terminal Concord
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NOA	Notice of Availability
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
O_3	ozone
OSHA	Occupational Safety and Health Administration
PA	Programmatic Agreement
PC Historic District	Port Chicago Historic District
PCB	polychlorinated biphenyl

PEA	Programmatic Environmental Assessment
PG&E	Pacific Gas and Electric
$PM_{2.5}$	particulate matter less than or equal to 2.5 microns in diameter
PM_{10}	particulate matter less than or equal to 10 microns in diameter
RBS	Rail Barricaded Sidings
REC	Record of Environmental Consideration
SDDC	Surface Deployment and Distribution Command
SF	Square Foot/Feet
SHPO	State Historic Preservation Office
SO_2	sulfur dioxide
SOP	Standard Operating Procedure
SPCC	Spill Prevention, Control, and Countermeasures
SWPPP	Storm Water Pollution Prevention Plan
SY	Square Yard
tpy	tons per year
U.S.	United States
U.S.C.	United States Code
UFC	Unified Facilities Criteria
UP	Union Pacific
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
UXO	Unexploded Ordnance
VOC	volatile organic compound

APPENDIX H – FIGURES FOR DETAILED PROJECT LOCATIONS

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Figure H-1 Projects 1A, 1B, 1C, and 3

Figure H-2 Project 2 and Project 4

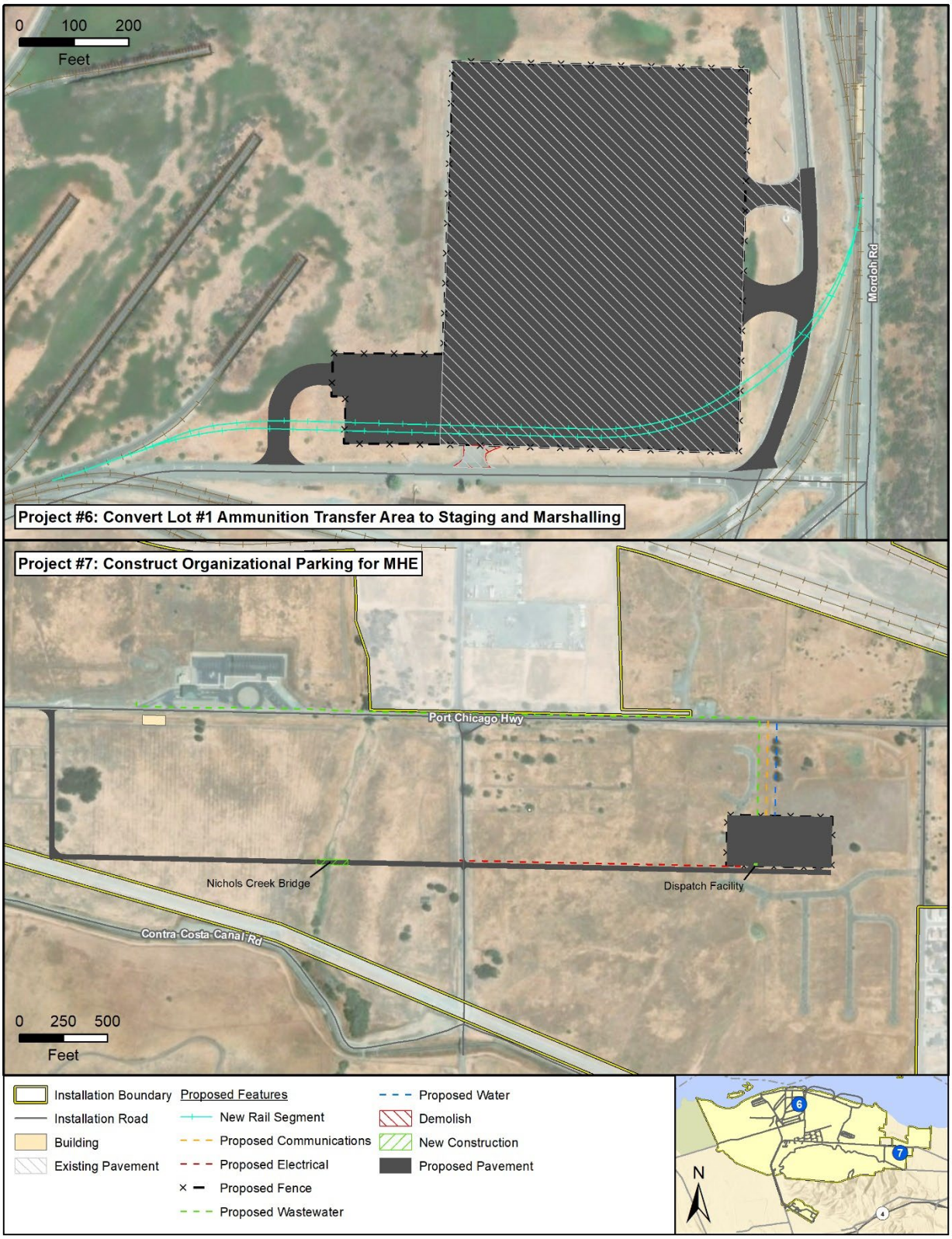

Figure H-3 Projects 6 and 7

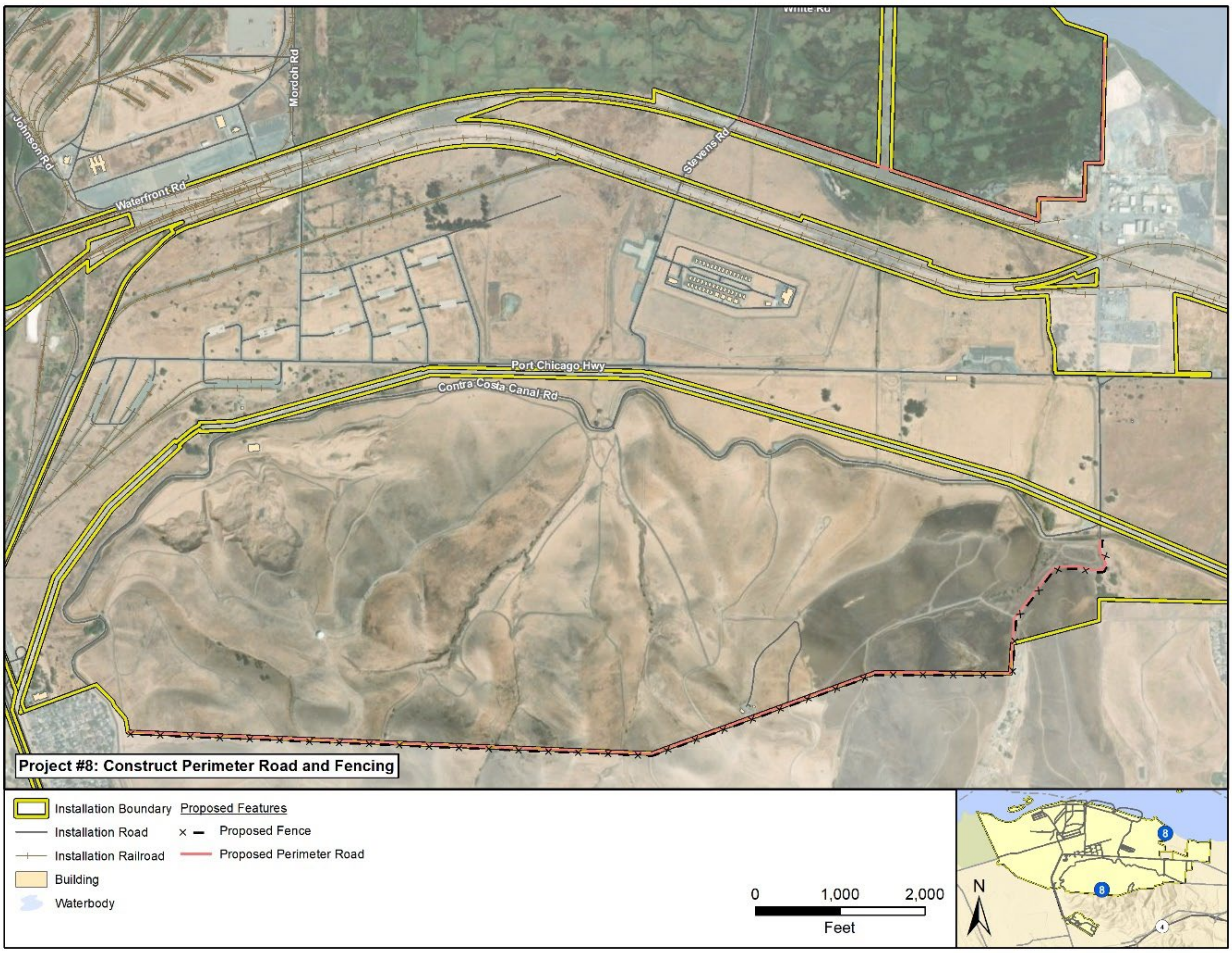

Figure H-4 Project 8: Perimeter Road and Fencing

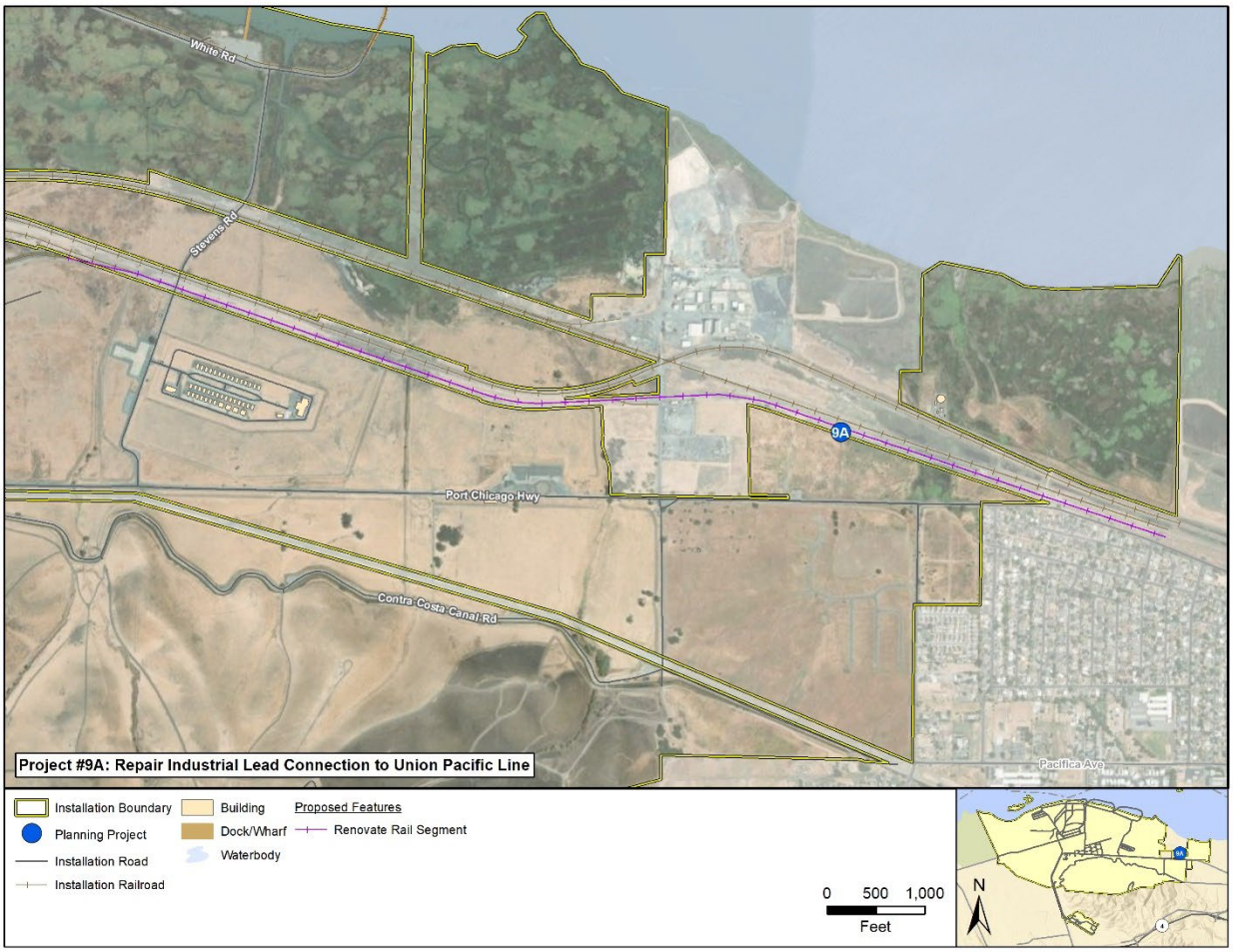

Figure H-5 Project 9A

Figure H-6 Examples of Proposed Rail Inspection Camera Infrastructure (Project 9B)

(Left: Track-mounted camera to inspect the bottom of rail cars. Right: Pole-mounted cameras to inspect the top and sides of railcars.)

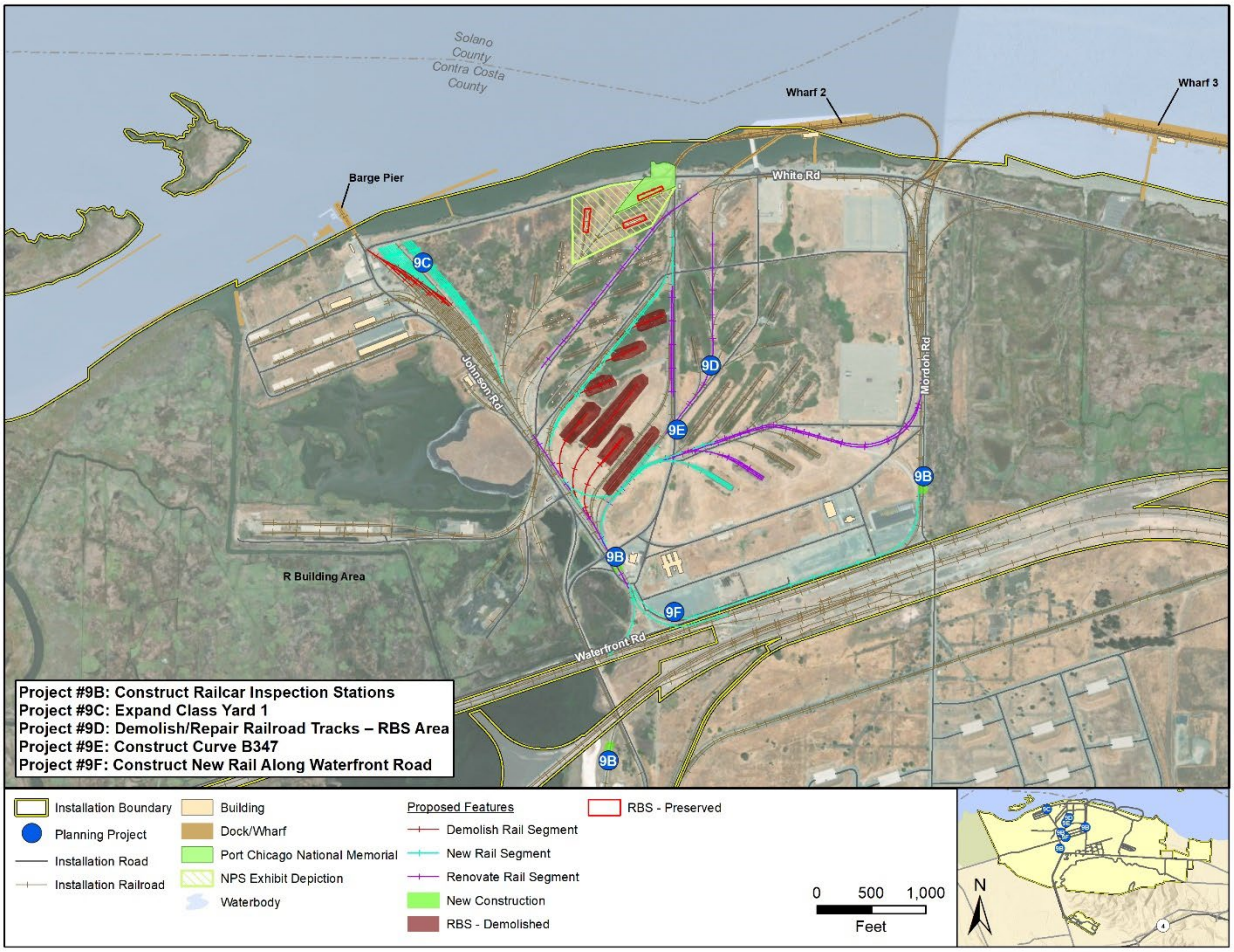

Figure H-7 Projects 9B, 9C, 9D, 9E, and 9F

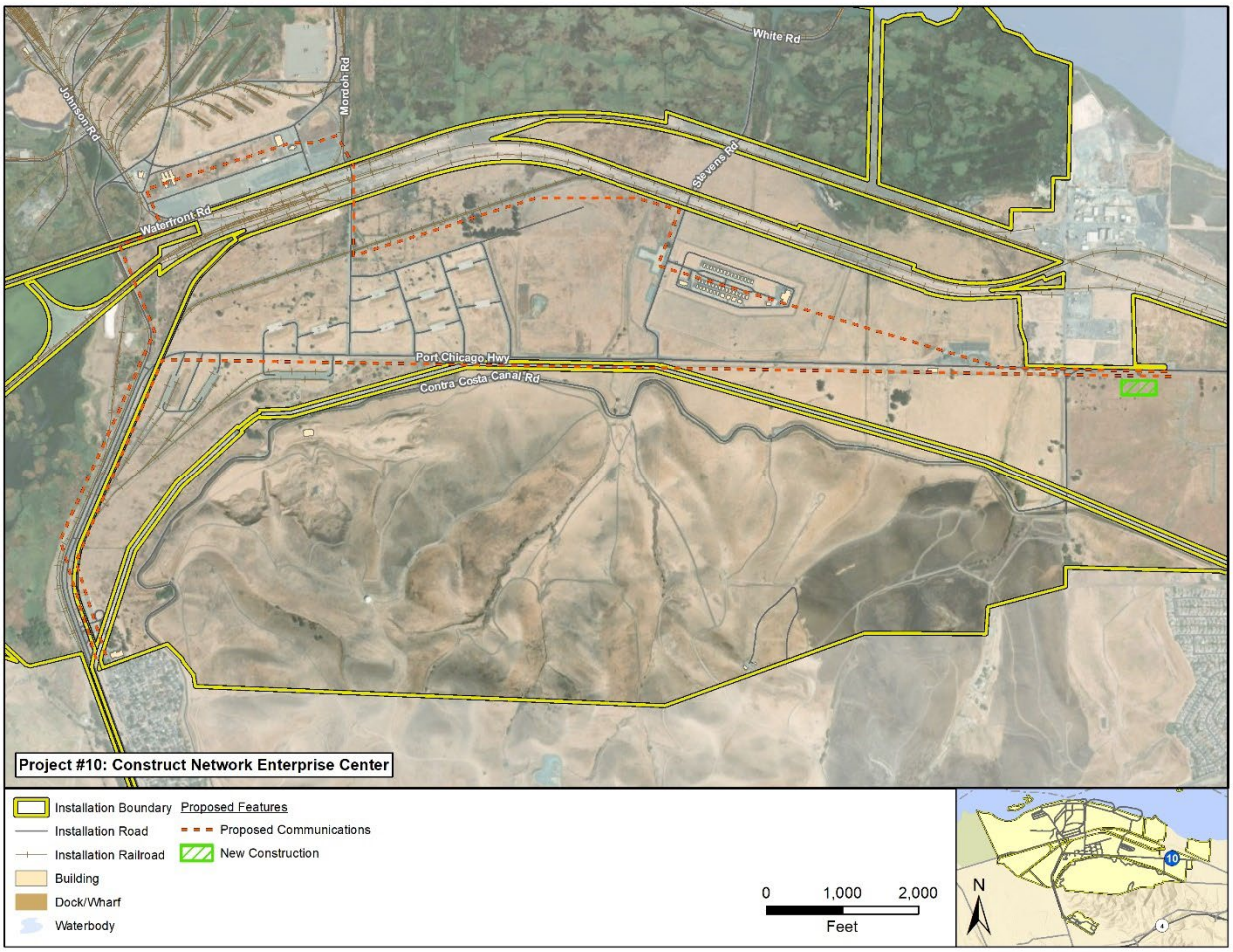

Figure H-8 Project 10 Network Enterprise Center

Figure H-9 Project 11: Repair/Renovate Buildings 542, 605, 607, 608, 177

APPENDIX I – LIST OF PREPARERS AND CONTRIBUTORS

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