



## MILITARY OCEAN TERMINAL CONCORD

### Real Property Master Plan Digest

**Prepared by**

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Surface Deployment and Distribution Command

834th Transportation Battalion

596th Transportation Brigade



## SCOPE OF THIS DIGEST.

This Digest summarizes the vision, goals, and objectives for the short-term and long-term management and development of Military Ocean Terminal Concord (MOTCO), California. The Digest includes a description of the components of the MOTCO Real Property Master Plan and the path that will be taken by all Installation personnel and community members to achieve the identified goals.

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## FOREWARD.

Real property master planning is an iterative process that involves collecting, mapping, and evaluating planning information and guidance documents; integrating mission requirements across the various units, activities, and organizations at the Installation and in surrounding civilian communities; performing a set of analyses; and conducting extensive coordination, staff reviews, and deliberations. The process provides a means for effective and orderly sustainable facility design and Installation development that support the mission, property management, local community/Installation land use zoning, and other issues affecting existing or future development potential at the Installation.



## BACKGROUND.

MOTCO is the primary West Coast common-user ammunition terminal, and it is home to the 834th Transportation Battalion (TB) of the Army's Surface Deployment and Distribution Command (SDDC) installation. MOTCO is located at a strategic site in north-central Contra Costa County, California, in the East San Francisco Bay region.

The Installation is composed of an approximately 115-acre Inland Area and an approximately 6,526-acre Tidal Area, which includes 2,045 acres of offshore islands. These two areas are connected by a stretch of Port Chicago Highway. MOTCO operates three ocean terminal piers and an Army-owned rail system that connects with two major public rail lines.

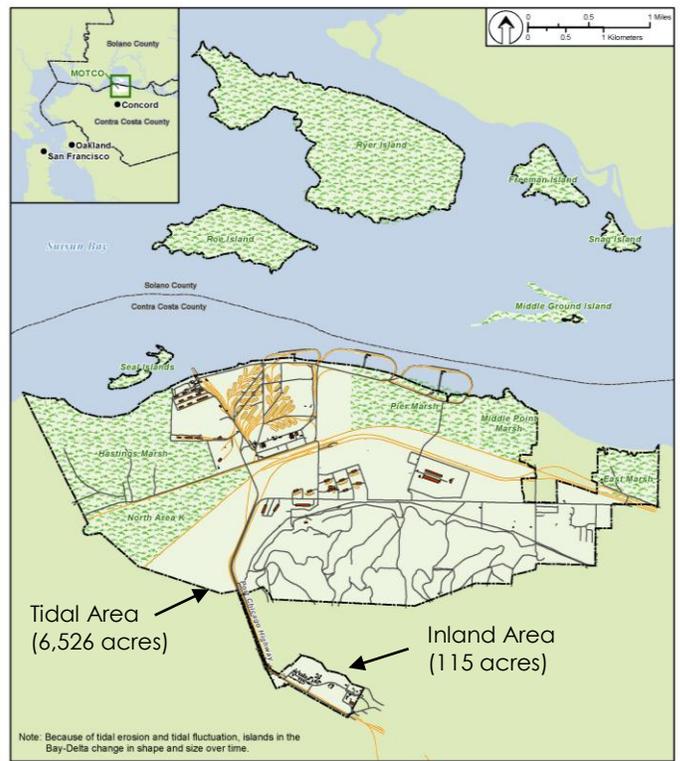


Offload of ammunition containers at MOTCO pier



- Cities
- Military Ocean Terminal Concord
- County Boundary
- Interstate Highway
- US and State Highway
- Local Roads

REGIONAL VICINITY



Note: Because of tidal erosion and tidal fluctuation, islands in the Bay-Delta change in shape and size over time.

- Installation Boundary
- Facilities
- Wetland Preserve
- County Boundary
- Road
- Railroad

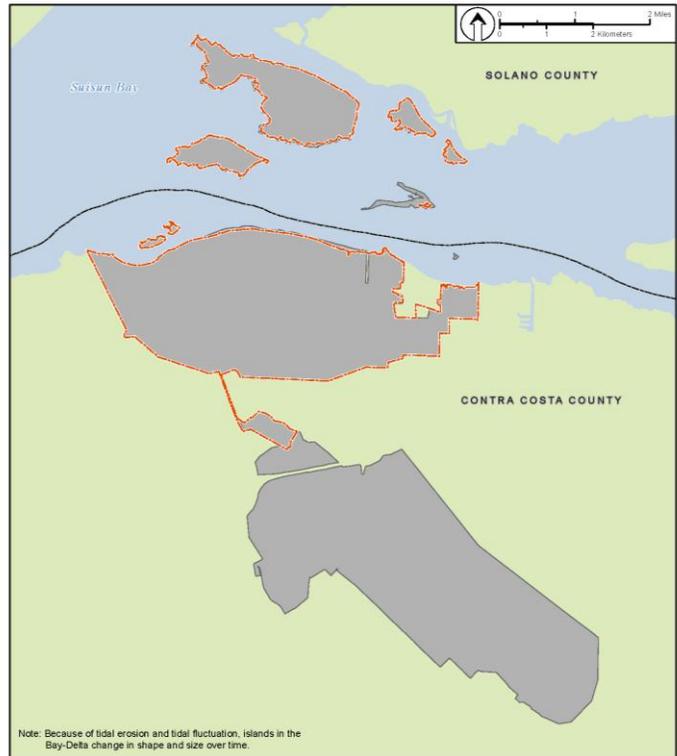
MOTCO LOCATION



## History.

MOTCO installation lands were formerly Department of the Navy lands within Naval Weapons Station Seal Beach Detachment (NWSSBD) Concord. On 1 October 2008, MOTCO properties were transferred from the Navy to the Army per 2005 Defense Base Closure and Realignment Commission recommendations. However, the Army's presence at MOTCO dates back to 1 October 1997, when the Army's 1302nd Major Port Command was relocated from the Oakland Army Base to MOTCO and became the 834th TB. The City of Concord has been recognized as the Local Reuse Authority for the approximately 5,028-acres of former NWSSBD Concord lands that were determined surplus.

MOTCO is the site of the Port Chicago Naval Magazine explosion, the worst home-front disaster of World War II. On 17 July 1944, the massive detonation of 3.5 million pounds of high explosives killed 320, injured 390, and caused an estimated \$12.5 million in property damage (in 1944 dollars). Today, the 5-acre Port Chicago Naval Magazine National Memorial Site, administered by the National Park Service, is located at MOTCO at the site of the explosion.



- Military Ocean Terminal Concord (MOTCO)
- Naval Weapons Station Seal Beach Detachment Concord
- County

**NWSSBD CONCORD AND MOTCO BOUNDARIES**



*Port Chicago National Memorial*



*Port Chicago Disaster damage*



## Mission.

The mission of the 834th TB is to provide terminal and distribution services in support of deploying and redeploying forces in the California Area of Responsibility; to safely provide ammunition terminal services, including the provision of operational and training synergies between East and West Coast ammunition terminals; and to oversee Installation management of MOTCO. MOTCO is strategically relevant both due to its location and Net Explosive Weight capacity. The maximum Net Explosive Weight capacity of 18.8 million pounds represents nearly 25 percent of the nation's total ammunition throughput capability.

The 834th TB executes its ammunition mission at MOTCO and its general cargo mission at four different commercial West Coast (California) ports: Oakland, Port Hueneme, Los Angeles/Long Beach, and San Diego. Using commercial ports for the general cargo mission can have disadvantages, including the increase of congestion and competition for port access and less access control.

MOTCO receives ammunition by rail and highway; stages containers, railcars, and trailers; and loads vessels with containers and breakbulk (loose items) ammunition. No ammunition storage occurs at MOTCO. Rail lines, piers, holding pads, transfer facilities, staging areas, railcar class yards, barricaded railcar holding areas, and Main Supply Routes are all operated in support of cargo receipt and movement.



*Concurrent operations at all three piers*



*Inspection of ammunition cargo at truck receiving station*



*Holding pads are used for staging ammunition cargo*



## PLANNING VISION, GOALS, OBJECTIVES, & PRINCIPLES.

To meet the demands of a rapidly transforming Army, MOTCO requires a clearly defined vision for the future and a strategy for transforming and developing its facilities.

### Long-Term Vision.

The long-term vision for MOTCO is to transform the Installation into a versatile, modern, and efficient seaport capable of receiving, staging, and onward moving ammunition and general cargo as necessary to meet Department of Defense (DoD) requirements.

- *Ongoing Ammunition Mission:* to meet all current and future Operations Plan requirements.
- *Expanded Cargo Mission:* to improve MOTCO's ability to support general cargo operations as necessary to meet DoD requirements while focusing on the primary ammunition mission.

### Short-Term Vision.

The short-term vision for MOTCO is focused on the ongoing ammunition mission. It also includes:

- Addressing current facility deficiencies (most buildings are of 1940's era construction).
- Optimizing functional relationships.
- Implementing changes needed to fully conduct the 834th TB's ownership of MOTCO.
- Planning in a manner that allows for the flexibility to accommodate the long-term vision.



*Containerized SDDC cargo*



*Marine Cargo Specialists oversee port operations at MOTCO*



*Soldiers preparing material for blocking and bracing containers during an ammunition containerization operation, Golden Mariner 2008 Exercise at MOTCO*



## RPMP Goals and Objectives.

### **Goal 1 – Provide long range guidance to decision makers for future development.**

#### *Objectives*

- a. Provide flexibility to accommodate existing and future long-term mission changes within the SDDC.
- b. Provide high levels of service to the warfighter.

### **Goal 2 – Foster a long-term sustainable development pattern through planning, design, and a wise use of natural and social resources.**

#### *Objectives*

- a. Promote a complimentary relationship between the 834th TB and community agencies through cooperative planning.
- b. Develop a sensitive and responsible design that satisfies both operational and environmental requirements.

### **Goal 3 – Provide adequate infrastructure to meet existing and future mission requirements to maintain a quality working environment.**

#### *Objectives*

- a. Improve the overall condition of the infrastructure in and around MOTCO through a balanced program of investment, demolition, and preventative maintenance to achieve the most efficient flow of equipment and people.
- b. Minimize conflicting functional relationships of ammunition versus general cargo to increase rail, truck, ship, and open storage capacity.
- c. Integrate land use and transportation planning to ensure they are mutually supportive.
- d. Provide infrastructure to increase throughput efficiency.

### **Goal 4 – Establish a strategy for the implementation of a capital improvements program.**

#### *Objectives*

- a. Retain flexibility to reuse facilities.
- b. Consolidate related functions into composite facilities such as a joint operations center.
- c. Utilize capital improvements planning to ultimately develop the capability to handle one Large, Medium-speed, roll-on roll-off or two Cape class roll-on roll-off vessels simultaneously as necessary to meet DoD requirements.
- d. Develop the capability to meet current and future requirements.

## Planning Principles.

The following principals, based on the above, were used in RPMP development:

- Site all new facilities in compliance with explosive safety requirements.
- Ensure that new development is compatible with the current and future ammunition mission.
- Maximize efficiencies.
- Consolidate related functions and facilities.
- Comply with all regulatory requirements.
- Meet Wetlands Preserve Area obligations.
- Balance improvement and demolition programs.

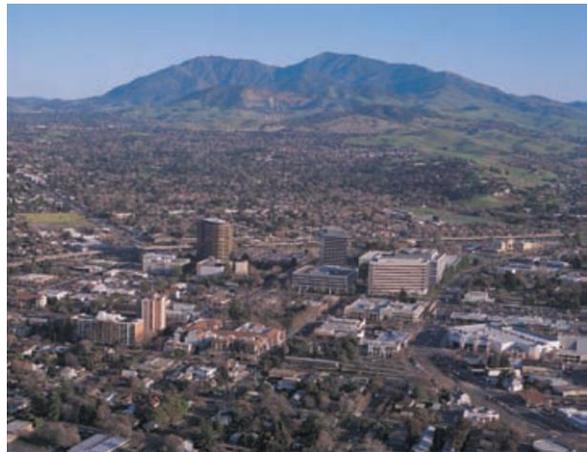


View of vessel loading/unloading at MOTCO from Suisun Bay



## INSTALLATION CONTEXT & CURRENT CONDITIONS

MOTCO is optimally located to serve its customers. The Tidal Area contains approximately 5 miles of shoreline and facilities for reception, staging, and loading of ammunition; railroad and truck classification yards; and three ocean terminal piers. MOTCO enables the DoD Operations Plan for the Pacific Rim and has the capability to act as the strategic launch platform for the West Coast.



*Aerial view of City of Concord*

MOTCO is located in the eastern San Francisco Bay Area, which is home to 7.1 million residents and is one of the most diverse economic regions in the United States. If the region were a country, its economy would be the tenth largest in the world. The MOTCO area is relatively rural relative to the region. The Inland Area is within the boundaries of the City of Concord and neighbors the unincorporated community of Clyde. The Tidal Area is part of unincorporated Contra Costa County and adjacent to the City of Pittsburg and the unincorporated community of Bay Point. Five of MOTCO's seven offshore islands are located within Solano County. Land use development is guided by existing federal, regional, state, and local land use plans and policies, and many of the communities adjacent to MOTCO have formally adopted specific documents for land use planning that must be regarded as MOTCO considers its own development.

As shown in the table at the right, 834th TB/MOTCO personnel loading is primarily civilians and contractors in support, as military personnel comprise just 5 percent of the loading.

834th TB/MOTCO Personnel Loading	
Military	8
Civilians	83
Contractors	68
<b>Total</b>	<b>159</b>

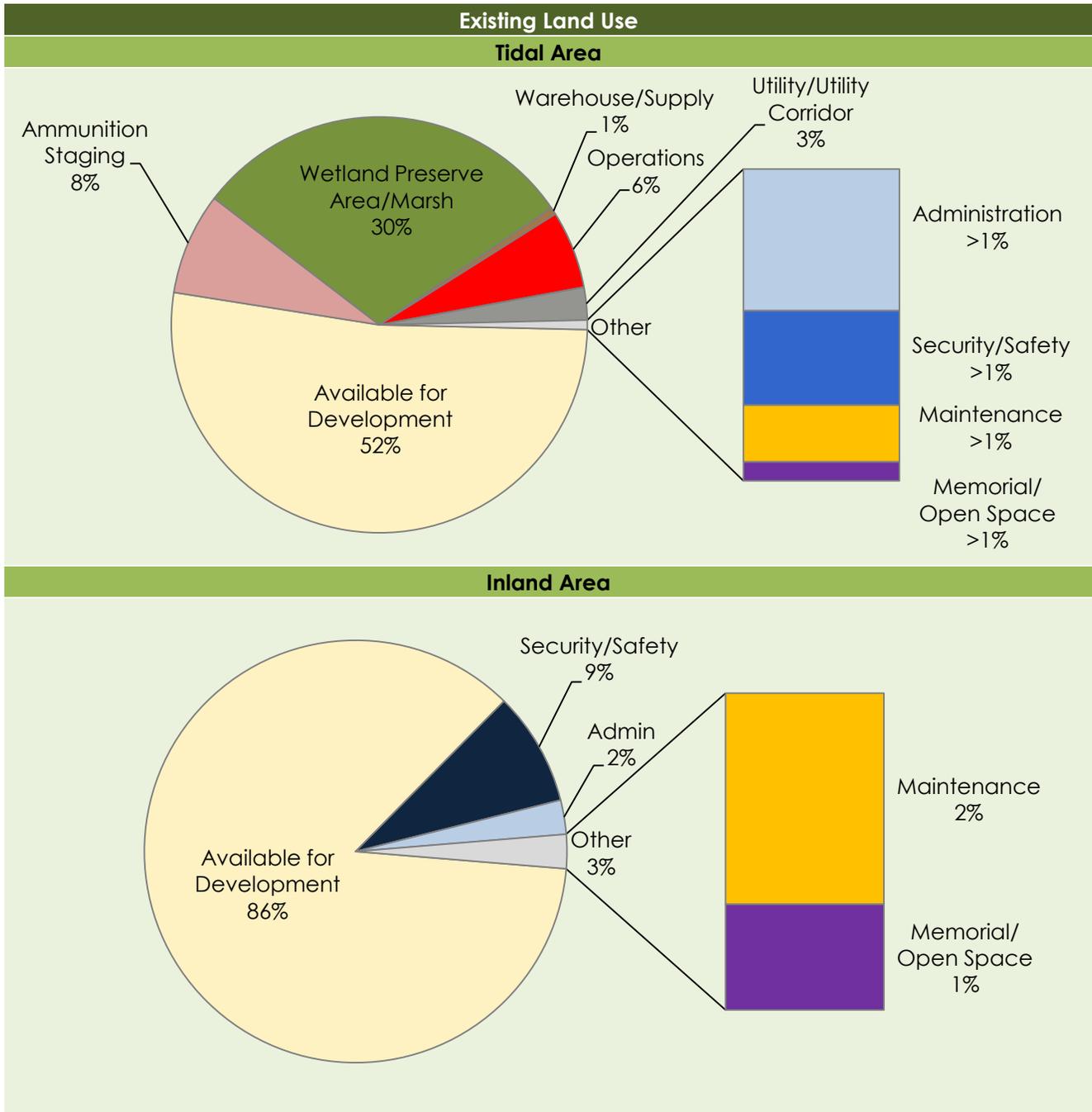
Additionally, the 834th TB relies on contracted manpower for mission support functions, including security. There are approximately 50 contractors and tenants at MOTCO on a daily basis. During a mission, an additional 75 to 85 personnel are present for contracted terminal operations and as stevedore personnel. The planned establishment of the Army Reserve 63rd Regional Support Command at MOTCO will increase the tenant population, with a full-time strength of 22 personnel.





## Land Use.

An evaluation of existing land use for MOTCO indicates that much of MOTCO lands are currently “available for development.” Development of much of the Tidal Area is constrained by wetlands and explosive safety distance arcs.





Most of the MOTCO facilities are categorized as having significant deficiencies, with some deficiencies presenting significant obstacles as many facilities have not been renovated or improved. Many existing facilities are vacant, underutilized, or are re-utilized in a suboptimal manner for a function that they were not designed for. There has been a lack of investment in many facilities and the demolition program has not been aggressive.



Many facilities at MOTCO are aged, vacant, or underutilized

Sanitary sewer, gas, potable water, and electricity infrastructure and capacity are all adequate to serve current MOTCO demands. However, due to the age of the sewerage piping and the materials that were used at the time of installation, the sanitary sewer piping is likely to have problems in sections that have not been replaced.

The following correctable explosive safety violations were identified to be addressed in a future land use plan:

- inhabited buildings within the explosive safety arcs and;
- severe restrictions in use of barricaded rail sidings in their current configuration due to proximity to the piers.



Gate 1, MOTCO Inland Area Gate

Other violations, including the public rail lines within the explosive safety arcs and separation distance between ammunition piers, will continue to be waived or exempt.

## Transportation.

**Motor Transport.** California Highway 4 provides the main access to MOTCO. Access control is primarily at two gates that are manned at all times: Gate 1, which provides access to the Inland Area and Gate 2, which provides access to the Tidal Area via Port Chicago Highway and Taylor Boulevard. In the Tidal Area, the roads are well placed, providing good transit between operational areas. Traffic congestion is not an issue on the road network,



Water transportation occurs just offshore of MOTCO on the Baldwin-Stockton Deepwater Shipping Channel



but there are issues with the adequacies of the roadway surfaces, railroad crossings, turns, and capacity limits, particularly for heavy loads. In the Inland Area, the current transportation network is adequate but road improvements and parking need to be incorporated into all future development plans for the Inland Area.

**Water Transport.** MOTCO is located 40 nautical miles inland from the Sea Buoy on the Baldwin-Stockton Deepwater Shipping Channel, which serves Stockton, Sacramento, and other commercial shipping ports along the Sacramento River. Although it can support the majority of ships requiring transit through the area, the Baldwin-Stockton Deepwater Shipping Channel is the shallowest channel in the complex of channels in the area, and therefore limits the size of vessels that can transit further inland. The current depth of the channel is 35 feet below Mean Lower Low Water. The authorized depth of the channel is 45 feet below Mean Lower Low Water, but required environmental clearances have not been obtained for the dredging project that would be required to deepen the channel. The height of the Benicia-Martinez Rail Bridge across the Carquinez Strait just west of Suisun Bay presents a limiting factor for vessel access to MOTCO as this bridge has an 135-foot vertical clearance.

**Rail Transport.** The Union Pacific line and Burlington Northern Santa Fe public railroads, which serve MOTCO, primarily provide general freight and commuter (AMTRAK) service for the region. The MOTCO-owned rail system consists of approximately 46 total miles of track, two classification yards (Class Yard 1 and Class Yard 2), 38 barricaded rail sidings, several



*Benicia Martinez Bridge (rail bridge in center)*



*Railroad trestle at MOTCO*



*SDDC locomotives are used to transport trains on MOTCO-owned tracks within the installation*



warehouse tracks, multiple tracks to the piers, transfer pad tracks, and a myriad of other tracks connecting all of these tracks. Union Pacific delivers trains to MOTCO directly to Class Yard 1 and Burlington Northern Santa Fe delivers trains to the “BNSF Bullpen” Interchange Yard located on the southwestern side of the installation near the Taylor Bridge. The overall condition of the MOTCO-owned track is satisfactory.

## OPPORTUNITIES & CONSTRAINTS.

To analyze development potential, all constraints to development and the relationships of those constraints to the built environment were identified, mapped, and categorized according to the degree of limitations they place on potential development. Highly constrained areas have little development potential, moderately constrained areas have limited development potential, and low constrained areas have high development potential.

### Manmade Constraints.

There are no manmade constraints in the Inland Area. At the Tidal Area, manmade constraints classified as high constraint include explosives safety distance arcs, especially the Inhabited Building Distance arc within proximity to piers and ammunition holding areas. Moderate constraints include environmental restoration sites and easements such as the public railroads, utility corridors, Contra Costa Canal, and petroleum pipeline corridors. Low constraint areas include underground storage tank locations, three Military Munitions Response Program sites, and potential cultural resource sites.



*The Contra Coastal Canal traverses the Tidal Area*



*Safety distance arcs separate ammunition/ammunition operations from those activities not essentially related*



*Marshlands*



## Environmental Constraints.

High environmental constraints at MOTCO include the Tidal Area Wetland Preserve, the 3,175 acres of *potential* jurisdictional wetlands in the Tidal Area, surface waters (tidal and brackish), threatened/ endangered species habitats, steep slope, and soils unsuitable for development. Much of the Tidal Area marshlands and the seven offshore islands of the Tidal Area is a Wetland Preserve. Low constraints include the 100-year floodplain, grassland habitat, and soils suitable for development with limitations. The result of this analysis is identification of the areas of the installation where there are relatively unconstrained opportunities for development. As depicted on the following figures, the Inland Area, land in the vicinity of Building 542 in the Tidal Area, and the eastern portion of the Tidal Area are the lands most suitable for development at MOTCO. The identification of these areas as opportunities for development is combined with the spatial analysis and development needs to inform the future development planning.



*Low marsh bordering the Pier 4 Slough*



*Grassland Marsh ecotone*



*Salt marsh harvest mouse*



**High Development**  
 100-year Floodplain  
 Grassland T&E Habitat  
 Soils Suitable for Development with Limitations

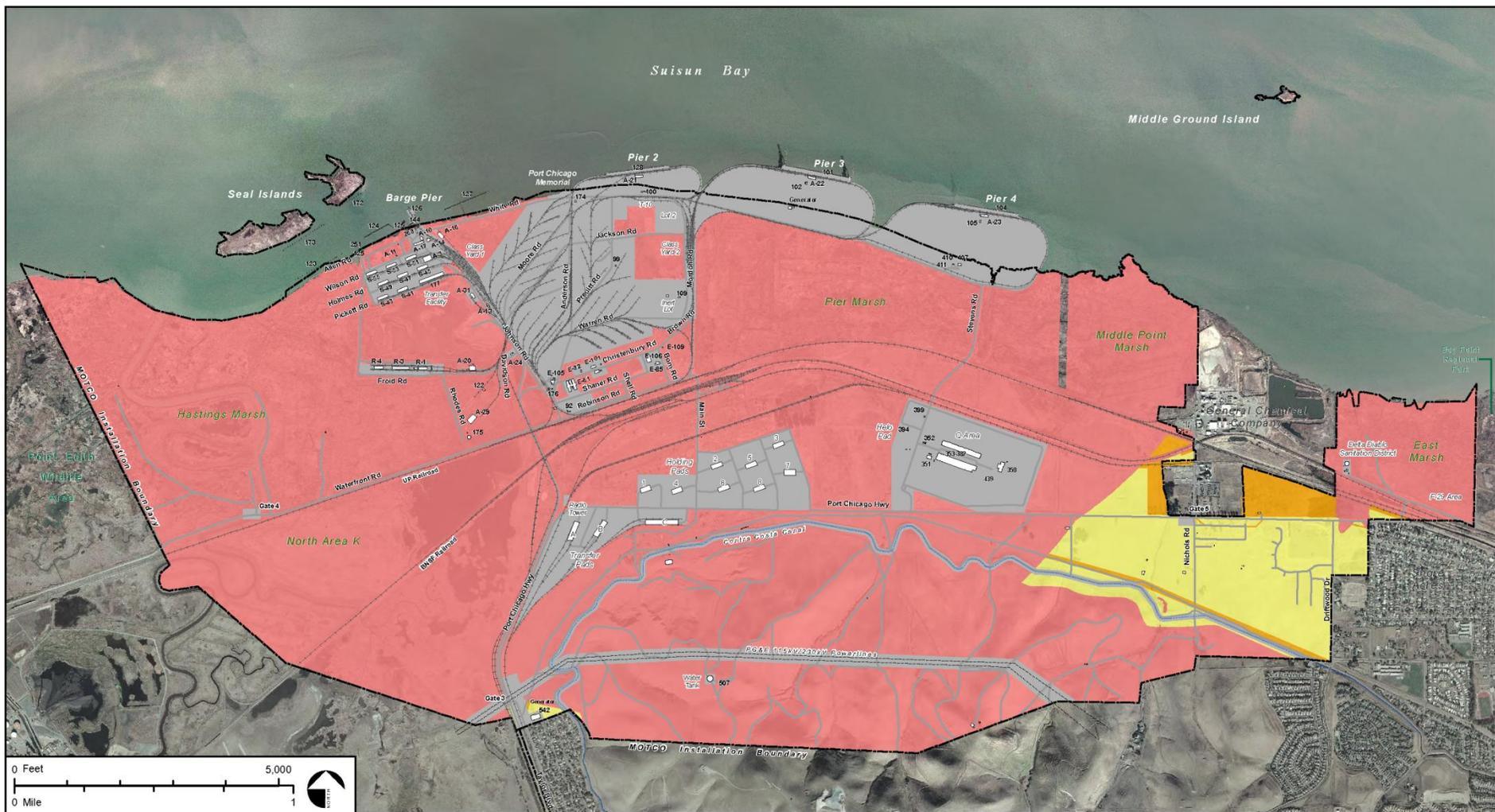
**Built Environment**

**DEVELOPMENT POTENTIAL**

**INLAND AREA**



# Military Ocean Terminal Concord Real Property Master Plan Digest



- |   |  |   |   |
|---|--|---|---|
| <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: red; margin-right: 5px;"></span> <b>Restricted Development</b></li> <li>Contra Costa Canal</li> <li>Explosives Arc</li> <li>Likely Wetland Area</li> <li>Public Rail</li> <li>Soils Unsuitable for Development</li> <li>Steep Slopes</li> <li>Surface Waters</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> <b>Limited Development</b></li> <li>Burlington Northern Santa Fe Rail</li> <li>Contra Costa Water District Easements</li> <li>East Bay Municipal Utility</li> <li>Environmental Restoration Sites</li> <li>Pipeline</li> <li>Union Pacific Rail</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> <b>High Development</b></li> <li>100-year Floodplain</li> <li>Grassland T&amp;E Habitat</li> <li>MMRP Sites</li> <li>Monitoring Wells</li> <li>Soils Suitable for Development with Limitations</li> <li>Underground Storage Tank</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: grey; margin-right: 5px;"></span> <b>Built Environment</b></li> </ul> |
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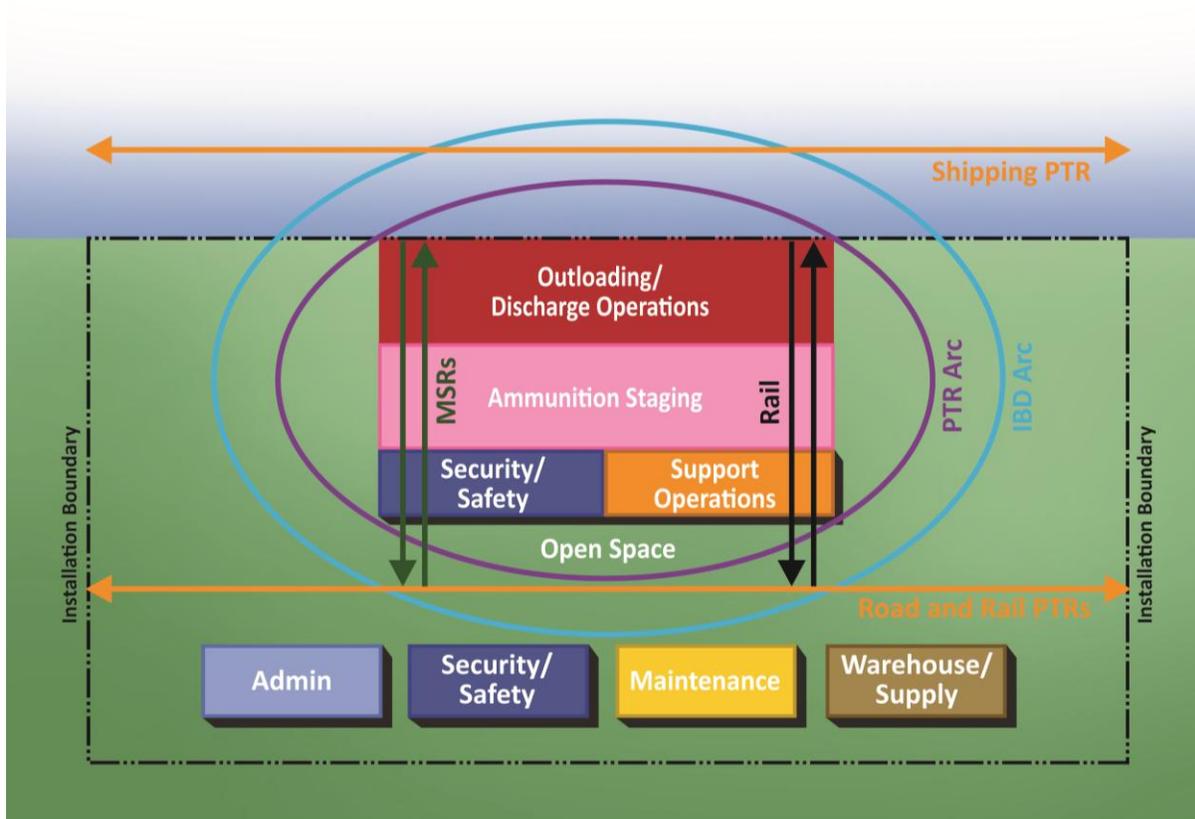
## DEVELOPMENT POTENTIAL

## TIDAL AREA

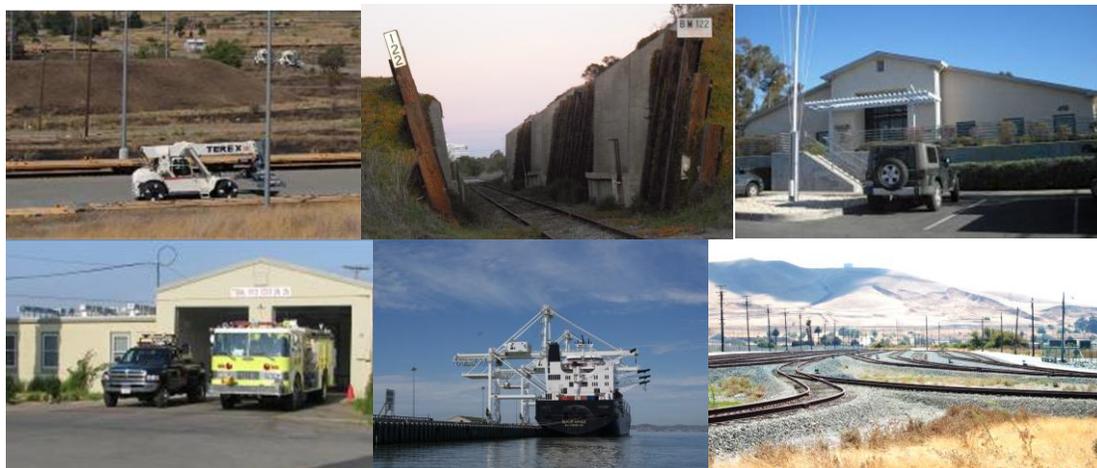


## Spatial Relationships.

Evaluating spatial relationships assists in the identification of functions that should ideally be located in a certain area of the Installation, functions that should be co-located to optimize efficiency, and functions that should be separated due to incompatibilities. Land use functional relationships at MOTCO are driven almost exclusively by the location of the shoreline and explosive safety.



Conceptual Diagram of Idealized MOTCO Land Use Spatial Relationships





## Needed Improvements.

The following improvements for MOTCO facilities and functions were identified. They are categorized by function: waterfront, staging, rail, and intra-MOTCO (which refers to truck transport, logistics and support, and administrative facilities).

Needed Improvements			
Short-Term			
Waterfront	Staging	Rail	Intra-MOTCO
<ul style="list-style-type: none"> <li>• Rebuild Pier 2</li> <li>• Establish Marina for Security Boats and Berthing for Fire Boat</li> <li>• Restore Barge Pier to Original Design Capacity</li> <li>• Improve Pier 4 Parking Lot</li> </ul>	<ul style="list-style-type: none"> <li>• Enlarge and Curb Container Handler Operating Area of Existing Holding Pads 1-8</li> <li>• Add New Holding Pads to Expand Holding Pad Area</li> </ul>	<ul style="list-style-type: none"> <li>• Connect MOTCO Interchange Yard to BNSF Line</li> <li>• Expand Locomotive Shop</li> <li>• Connect Transfer Pads to MOTCO Interchange Yard</li> <li>• Acquire Union Pacific (East) for Connection to Union Pacific (West) from MOTCO Interchange Yard</li> <li>• Reconfigure Barricaded Rail Sidings Area and Expand MOTCO Interchange Yard</li> </ul>	<ul style="list-style-type: none"> <li>• Reserve Center (not SDDC funded)</li> <li>• Visitor Control Center and Perimeter Security</li> <li>• IT Infrastructure Improvements</li> <li>• Facilities Maintenance Building</li> <li>• Gate 5 Truck Inspection Station and Support Complex</li> <li>• Equipment Maintenance Facility</li> <li>• Security Headquarters</li> <li>• Lightning Protection</li> <li>• Main Gate Reconfiguration (Includes Truck Inspection Station)</li> <li>• Site Manager/ Stevedore Break Facility</li> <li>• Logistics Warehouse/Storage Facility</li> <li>• Improve Main Supply Routes                             <ul style="list-style-type: none"> <li>a. Mordoh Road and Main Street</li> <li>b. White Road</li> <li>c. Upgrade Port Chicago Highway</li> <li>d. Expand T-10 Transfer Pad</li> </ul> </li> <li>• Improve Stevens Road Emergency Evacuation Route</li> <li>• Construct Mordoh Road Bridge Over Public Rail Lines</li> <li>• Reconfigure "R" Buildings</li> <li>• Reconfigure "S" Buildings</li> </ul>
Long-Term			
<ul style="list-style-type: none"> <li>• Rebuild Pier 4</li> <li>• Add Jetty/Finger Platform to Pier 4</li> <li>• Dredge All Piers to 37 ft below MLLW</li> </ul>	<ul style="list-style-type: none"> <li>• 20 acres of Staging in Gate 5 Area</li> <li>• 13 acres of Staging in Lot 2 Area</li> <li>• Vehicle Wash Rack near Lot 2</li> <li>• Intermodal Transfer Pad at MOTCO Interchange Yard</li> <li>• 11 acres of Staging in Cristenbury Road Area</li> </ul>	<ul style="list-style-type: none"> <li>• Upgrade Acquired Union Pacific (East) for Connection to Union Pacific (West) from MOTCO Interchange Yard</li> </ul>	<ul style="list-style-type: none"> <li>• Emergency Services Training Facility</li> <li>• Pistol Range</li> <li>• Improve Stevens Road MSR and MOTCO Interchange Yard/Port Chicago Highway Connection</li> </ul>

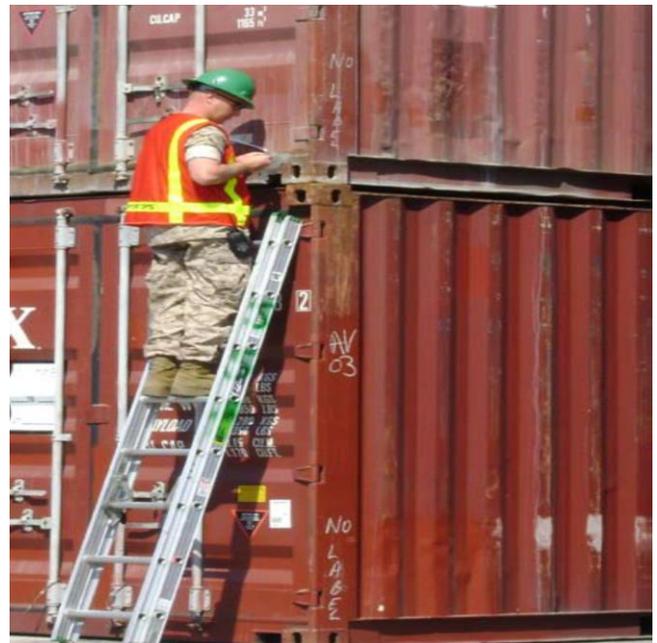


## FUTURE DEVELOPMENT PLAN.

The Future Development Plan addresses all aspects of future MOTCO development and provides an adaptable blueprint that brings control, coordination, and direction to current and potential change. It is intended to be a living, flexible plan that integrates the known with the unknown – the planning itself is not constrained by funding considerations. The future development plan is presented in the pages that follow with short-term and long-term development plans for the Inland Ares and Tidal Areas.

## Improvements for Vision Execution.

Vision execution is focused on the Short Range Component of the RPMP, which marks the transition from planning to programming. This component identifies real property projects planned in the near future for integration into the Army's budgetary and operational planning processes. The short-term vision for MOTCO is focused on the ongoing ammunition mission and includes addressing current facility deficiencies and optimizing functional relationships, while also planning in a manner that allows for the flexibility to accommodate the long-term vision. The standard timeline for a Short Range Component is tied to the Future Year Defense Program Military Construction Army program, which is currently being planned for Fiscal Years 2012-2016. Due to funding constraints, only those projects that meet criteria for mitigation of a serious life safety hazard or avoidance of severe degradation of a critical mission are included in the current program for MOTCO.



*Completion of paperwork for stacked TEUs*

In fact, the Future Year Defense Plan for Fiscal Years 2012-2016 includes only one project for MOTCO: to Rebuild Pier 2 (P71057), which is currently programmed for Fiscal Year 16. Six additional MCA projects have been reviewed beyond the installation/user identified need at MOTCO (these projects are identified by a project number herein), but programming for funding would be beyond Fiscal Year 16. The funding timeline for the remaining 19 projects in the SRC is increasingly in the out-years, with priority given to those correcting health, safety, or life-threatening deficiencies. In the interim, space reassignments are underway to reduce inappropriate use of facilities within the IBD arc and increase efficiencies, wherever possible.



### SHORT-RANGE PROJECTS (PRIORITIZED)

- 1 P74877, Visitor Control Center (and Perimeter Security)
- 2 P76091, Facilities Maintenance Building
- 3 P76092, Security Headquarters Building
- 4 Main Gate Reconfiguration (Includes Truck Inspection Station)
- 5 Locomotive Maintenance Shop Expansion
- 6 Logistics Warehouse/Storage Building

### SHORT RANGE DEVELOPMENT PLAN INLAND AREA



**PROJECT LEGEND**

<span style="color: green;">■</span>	Intra MOTCO
<span style="color: red;">■</span>	Rail
<span style="color: purple;">■</span>	Staging
<span style="color: blue;">■</span>	Waterfront

**LEGEND**

<span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	MOTCO Installation Boundary	<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Army Reserve Center
<span style="border-bottom: 1px solid black; display: inline-block; width: 15px;"></span>	Base Features	<span style="color: orange;">→</span>	Traffic Flow
<span style="border-bottom: 1px dashed black; display: inline-block; width: 15px;"></span>	Rail Lines	<span style="border-bottom: 1px dashed black; display: inline-block; width: 15px;"></span>	148' AFTP Setback
<span style="border-bottom: 1px solid blue; display: inline-block; width: 15px;"></span>	Contra Costa Canal	<span style="border-bottom: 1px dashed red; display: inline-block; width: 15px;"></span>	33' AFTP Setback
<span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Existing Facility		

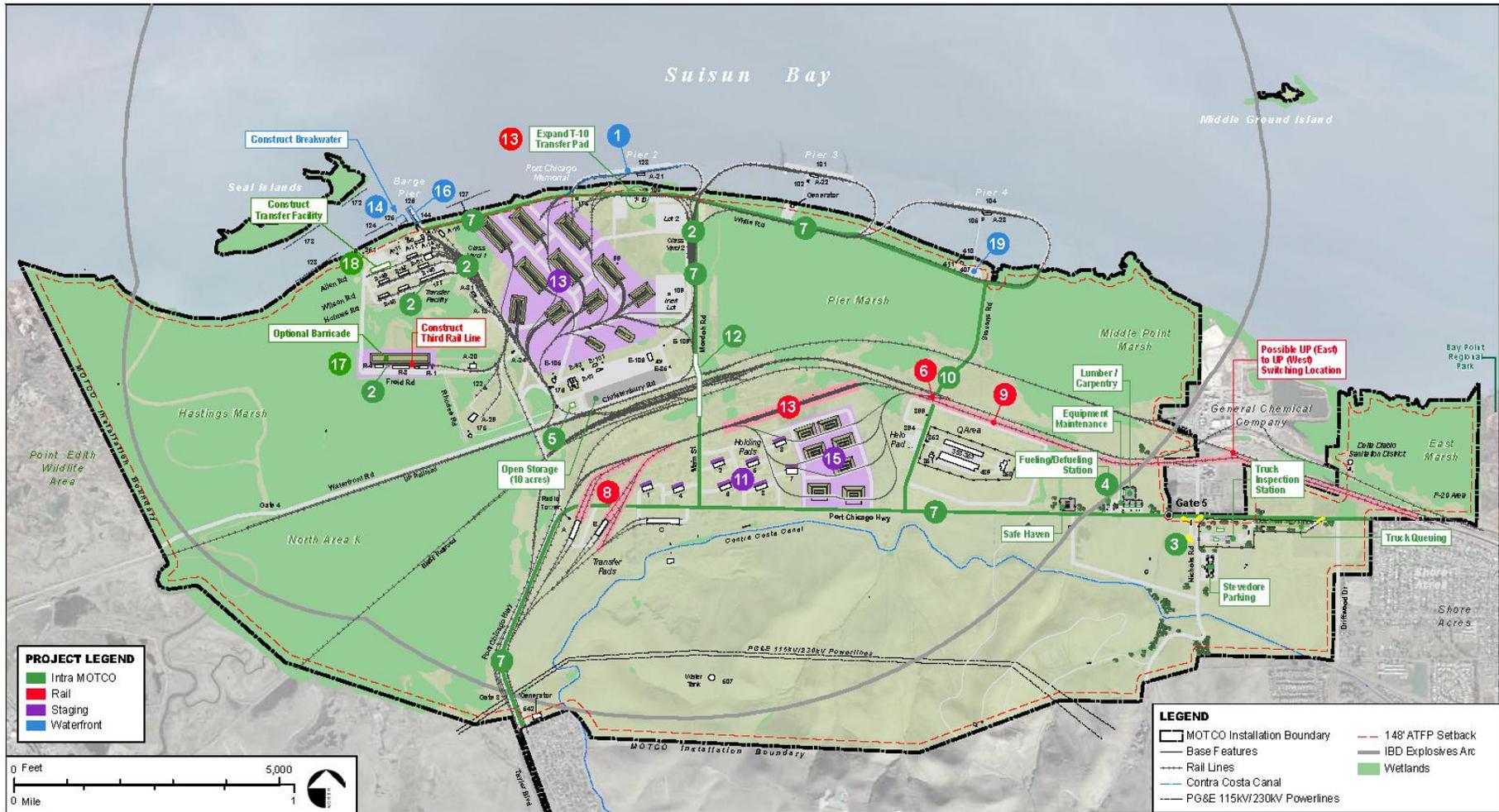
**LONG-RANGE PROJECTS**

- ① Emergency Services Training Facility (5 acres)

**LONG RANGE DEVELOPMENT PLAN  
INLAND AREA**



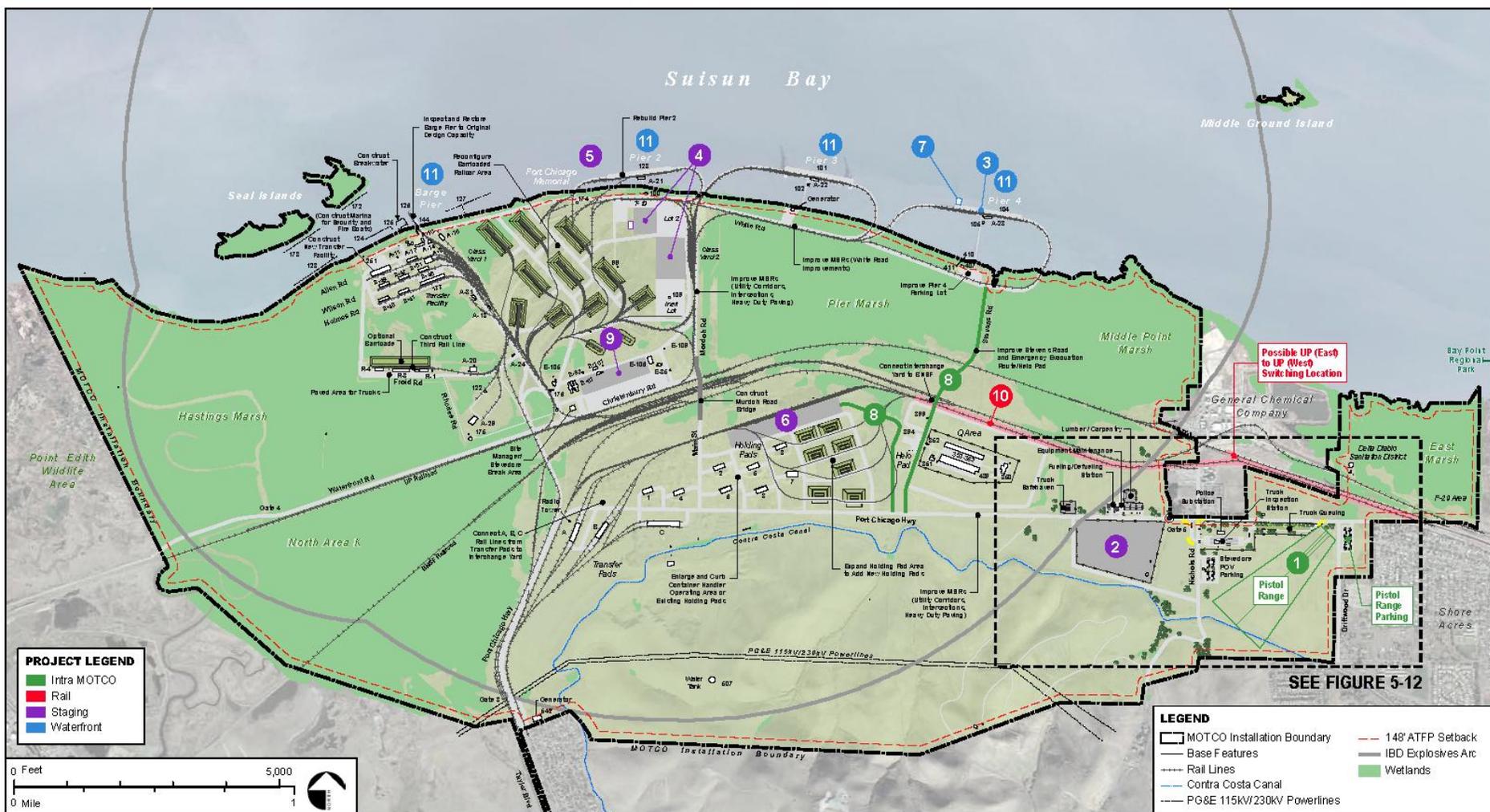
# Military Ocean Terminal Concord Real Property Master Plan Digest



## SHORT-RANGE PROJECTS (PRIORITIZED)

- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"> <li>1 P71057, Rebuild Pier 2</li> <li>2 P76086, Lightning Protection</li> <li>3 P76093, Gate 5 Truck Inspection Station</li> <li>4 P76087, Equipment Maintenance Facility</li> <li>5 Site Manager and Stevedore Operations Area</li> <li>6 Rail: Connect Interchange Yard to BNSF</li> </ul> | <ul style="list-style-type: none"> <li>7 Improve MSR's (Utility Corridors, Intersections, Heavy Duty Paving)</li> <li>8 Rail: Connect 'A', 'B', and 'C' Transfer Pads to Interchange Yard</li> <li>9 Acquire UPRR (East) for Connection to UPRR (West) from Interchange Yard</li> <li>10 Improve Stevens Road and Emergency Evacuation Route</li> <li>11 Enlarge and Curb Container Handler Operating Area of Existing Holding Pads 1 - 8</li> <li>12 Construct Mordoh Road Bridge</li> </ul> | <ul style="list-style-type: none"> <li>13 Reconfigure Barricaded Railcar Area and Expand Interchange Yard</li> <li>14 Establish Marina for Security Boats and Berthing for Fire Boat</li> <li>15 Expand Holding Pad Area to Add New Holding Pads</li> <li>16 Restore Barge Pier to Original Design Capacity</li> <li>17 Reconfigure "R" Buildings</li> <li>18 Reconfigure "S" Buildings</li> <li>19 Improve Pier 4 Parking Lot</li> </ul> |
|---|---|---|

## SHORT RANGE DEVELOPMENT PLAN TIDAL AREA



## LONG-RANGE PROJECTS

- 1 Pistol Range
- 2 Construct 20 acres of Hardstand Staging
- 3 Rebuild Pier 4
- 4 Construct 13 acres of Hardstand Staging
- 5 Construct Vehicle Wash Rack near Lot 2
- 6 Interchange Yard Intermodal Transfer Pad
- 7 Jetty / Finger Platform to Pier 4
- 8 Improve Stevens Road MSR and MOTCO Interchange Yard / Port Chicago Highway Connection
- 9 Construct 10 acres of Hardstand Staging
- 10 Upgrade UPRR (East) for Connection to UPRR (West) from Interchange Yard
- 11 Dredge all Piers to -37 feet MLLW (plus 2-3 feet overdepth)

## LONG RANGE DEVELOPMENT PLAN TIDAL AREA



## Short Range Component Project List.

The following lists the 25 projects identified in the Short Range Component of the MOTCO RPMP.

Short Range Component Prioritized Project List	
1.	P71057, Rebuild Pier 2
2.	P76086, Lightning Protection
3.	P74877, Visitor Control Center and Perimeter Security
4.	P76091, Facilities Maintenance Building
5.	P76093, Gate 5 Truck Inspection Station
6.	P76087, Equipment Maintenance Building
7.	P76092, Security Headquarters Building
8.	Main Gate Reconfiguration
9.	Site Manager/Stevedore Break Facility
10.	Connect MOTCO Interchange Yard to Burlington Northern Santa Fe Line
11.	Expand Locomotive Shop
12.	Logistics Warehouse/Storage Facility
13.	Improve Main Supply Routes
14.	Connect Transfer Pads to MOTCO Interchange Yard
15.	Acquire Union Pacific (East) for Connection to Union Pacific (West) from MOTCO Interchange Yard
16.	Improve Stevens Road Emergency Evacuation Route
17.	Enlarge and Curb Container Handler Operating Area of Existing Holding Pads 1-8
18.	Construct Mordoh Road Bridge
19.	Reconfigure Barricaded Rail Sidings Area and Expand MOTCO Interchange Yard
20.	Establish Marina for Security Boats and Berthing for Fire Boat
21.	Expand Holding Pad Area to Add New Holding Pads
22.	Restore Barge Pier to Original Design Capacity
23.	Reconfigure "R" Buildings
24.	Reconfigure "S" Buildings
25.	Improve Pier 4 Parking Lot





## Real Property Planning and Analysis System Correlation.

The following table relates these projects to the Real Property Planning and Analysis System (RPLANS) Tabulation of Existing and Required Facilities (TAB) analysis by category code (CATCD).

Relationship Between RPLANS/TAB Analysis and Short Range Component Projects for MOTCO				
CATCD	CATCD Description	Deficit	U/M	Project(s) Addressing Deficit
12451	LAND VEHICLE FUEL STORAGE TANK, ABOVE GROUND	-2,000	GA	6. P76087, Equipment Maintenance Building
13115	MAILROOM	-1,000	SF	3. P74877, Visitor Control Center and Perimeter Security
14113	ACCESS CONTROL BUILDING	-2,225	SF	3. P74877, Visitor Control Center and Perimeter Security (1,000 SF) 5. P76093, Gate 5 Truck Inspection Station (1,224 SF)
14160	BLOCKING AND BANDING FACILITY	-11,272	SF	6. P76091, Equipment Maintenance Building
14161	EMERGENCY OPERATIONS CENTER	-1,050	SF	7. P76092, Security Headquarters Building
14179	OVERHEAD PROTECTION FACILITY	-2,750	SF	5. P76093, Gate 5 Truck Inspection Station
14310	SHIP OPERATIONS BUILDING	-324	SF	9. Site Manager/Stevedore Break Facility (324 SF) 23. Reconfigure "R" Buildings
15210	WHARF	-17,013	SY	1. P71057, Rebuild Pier 2
16410	BREAKWATER	-150	LF	20. Establish Marina for Security Boats and Berthing for Fire Boat
21840	RAILROAD EQUIPMENT/ENGINE MAINTENANCE SHOP	-2,000	SF	11. Expand Locomotive Shop
21850	BATTERY SHOP	-3,000	SF	6. P76087, Equipment Maintenance Building
21885	VEHICLE MAINTENANCE, GENERAL PURPOSE	-27,431	SF	6. P76087, Equipment Maintenance Building
21910	ENGINEERING/HOUSING MAINTENANCE SHOP	-14,413	SF	4. P76091, Facilities Maintenance Building
42104	EXPLOSIVE TRANSFER BUILDING, DEPOT LEVEL	-17,522	SF	24. Reconfigure "S" Buildings
42510	OPEN AMMUNITION STORAGE PAD	-76,456	SY	17. Enlarge Curb Container Handler Operating Area of Existing Holding Pads 1-8 (2,400 SY) 19. Reconfigure Barricaded Rail Sidings Area and Expand Interchange Yard (55,556 SY) 21. Expand Holding Pad Area to Add New Holding Pads (18,500 SY)
44220	STORAGE BUILDING, GENERAL PURPOSE, INSTALLATION	-10,000	SF	6. P76087, Equipment Maintenance Building (2,000 SF) 12. Logistics Warehouse/Storage Facility (8,000 SF)
73016	POLICE/MILITARY POLICE STATION	-3,182	SF	7. P76092, Security Headquarters Building
74060	BREAK/LUNCH ROOM	-1,458	SF	3. P74877, Visitor Control Center and Perimeter Security (508 SF) 9. Site Manager/Stevedore Break Facility (950 SF)
81113 -94011	UTILITIES, INFRASTRUCTURE, AND REAL ESTATE	N/A		2. P76086, Lightning Protection 8. Main Gate Reconfiguration 10. Connect MOTCO Interchange Yard to Burlington Northern Santa Fe Line 13. Improve Main Supply Routes (MSRs) 14. Connect Transfer Pads to MOTCO Interchange Yard 15. Acquire Union Pacific (East) for Connection to UP (West) from MOTCO Interchange Yard 16. Improve Stevens Road Emergency Evacuation Route 18. Construct Mordoh Road Bridge 25. Improve Pier 4 Parking Lot