
Mitigation Monitoring and Reporting
Program

Alameda Main Street Ferry Terminal Refurbishment Project

FEBRUARY 2023

**SAN FRANCISCO BAY AREA
WATER EMERGENCY TRANSPORTATION AUTHORITY**

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Introduction

In accordance with the California Environmental Quality Act (CEQA, Public Resources Code Section 21000 et seq.), the Water Emergency Transportation Authority (WETA) prepared a Mitigated Negative Declaration (MND) (State Clearinghouse No. 2022080698) that identified potentially significant and significant impacts prior to mitigation related to: Air Quality, Biological Resources, Cultural Resources, and Tribal Cultural Resources. The MND identifies mitigation measures that would clearly reduce the identified impacts to less-than-significant levels. CEQA and the CEQA Guidelines (Public Resources Code Section 21081.6 and CEQA Guidelines Sections 15091[d] and 15097) require public agencies “to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment.” A Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the proposed project. Adoption of the MMRP would occur along with approval of the proposed project.

Purpose of the Mitigation and Monitoring Program

The MMRP has been prepared to ensure that all required mitigation measures are implemented and completed in a sufficient manner before and during project construction and once operational. The MMRP table, included below, identifies each mitigation measure; the action required for the measure to be implemented; the time at which the monitoring is to occur; the monitoring conditions; and the agency or party responsible for ensuring that the monitoring is performed.

Roles and Responsibilities

Unless otherwise specified, WETA is responsible for taking all actions necessary to implement the mitigation measures under its jurisdiction according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. WETA, at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor or other designated agent.

Reporting

WETA shall require the contractor(s) to maintain records documenting compliance with the required mitigation measures. Information regarding inspections and other requirements shall be compiled and explained in monthly or annual reports, as relevant. The reports shall be designed to simply and clearly identify whether mitigation measures have been adequately implemented. At a minimum, each report shall identify the mitigation measures or conditions to be monitored for implementation, whether compliance with the mitigation measures or conditions has occurred, the procedures used to assess compliance, and whether further action is required.

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Mitigation Measure (MM)	Implementation Timing	Monitoring Frequency	Monitoring/ Reporting Party
Air Quality			
MM 3.3-1 Construction Equipment Emission Reductions. Prior to the commencement of construction activities for the project, the applicant shall require its construction contractor to demonstrate that all 200-horsepower or greater diesel-powered equipment is powered with CARB-certified Tier 4 Final engines. An exemption from this requirement may be granted if (1) the applicant documents equipment with Tier 4 Final engines greater than 200-horsepower are not reasonably available, and (2) the required corresponding reductions in criteria air pollutant emissions can be achieved for the project from other combinations of construction equipment. Before an exemption may be granted, the Applicant's construction contractor shall: (1) demonstrate that at least two construction fleet owners/operators in Alameda County were contacted and that those owners/operators confirmed Tier 4 Final equipment could not be located within Alameda County during the desired construction schedule; and (2) the proposed replacement equipment has been evaluated using the California Emissions Estimator Model (CalEEMod) or other industry standard emission estimation method and documentation provided to the Lead Agency to confirm that necessary project-generated emissions reductions are achieved.	Prior to construction	Once, prior to construction activities	WETA and construction contractor
Biological Resources			
MM3.4-1 Minimize and Avoid Underwater Noise Impacts. WETA and their construction contractor shall implement the following noise minimization and avoidance measures during project construction activities. <ul style="list-style-type: none"> All piling installation shall be conducted between June 1 and November 30, when the likelihood of sensitive fish species being present in the work area is minimal. Vibratory pile driving shall be conducted following the United States Army Corps of Engineers. 2018. "U.S. Army Corps of Engineers Proposed Additional Procedures and Criteria for Permitting Projects under a Programmatic Determination of Not Likely to Adversely Affect Select Listed Species in California (the 2018 NLAA Program)". p 1-37. San Francisco, CA. To the extent feasible, all pilings shall be installed and removed with vibratory pile driver hammer only. 	Prior to and during construction Between June 1 and November 30	Throughout duration of construction activities	WETA and construction contractor

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<ul style="list-style-type: none"> • An impact pile driver may only be used where necessary to complete installation of larger steel pilings in accordance with seismic safety or other engineering criteria. <ul style="list-style-type: none"> ○ If an impact pile driver is used it will be cushioned using a 12-inch-thick wood cushion block. ○ A Hydro Acoustic Monitoring Plan shall be prepared to be implemented in the event that an impact hammer is used. The sound monitoring results will be made available to CDFW and NMFS. ○ This Plan will provide detail on the sound attenuation system, the methods used to monitor and verify sound levels during impact pile driving activities, ○ The Plan shall include the use of a bubble curtain during any impact pile driving of piles in the water. The bubble curtain will be operated in a manner consistent with the following performance standards: ○ The bubble curtain will distribute air bubbles around 100% of the piling perimeter for the full depth of the water column. ○ The lowest bubble ring will be in contact with the mudline for the full circumference of the ring, and the weights attached to the bottom ring shall ensure 100% mudline contact. No parts of the ring or other objects shall prevent full mudline contact. ○ Air flow to the bubblers must be balanced around the circumference of the pile. • A “soft start” technique shall be employed in all pile driving to give marine mammals an opportunity to vacate the area. • Soft Start: When initiating pile driving, or when there has been downtime of 30 minutes or more without pile driving, the contractor will initiate the driving with ramp-up procedures described below. • For vibratory hammers, the contractor will initiate the driving for 15 seconds at reduced energy, followed by a 30-second waiting period. This procedure will be repeated two additional times before continuous driving is started. • For impact driving, an initial set of three strikes would be made by the hammer at 40% energy, followed by a 30-second waiting period, then two subsequent three-strike sets at 40% energy, with 30-second waiting periods, before initiating continuous driving. 			

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	<ul style="list-style-type: none"> A biological monitor will be present during all pile driving to observe the work area before, during, and after pile driving. The monitor will be present as specified by NMFS during the impact pile-driving phases of construction. A safety zone, based on the results of the noise analysis (Appendix C) will be established based on the type of pile driving required for the protection of marine mammals. Pile driving will be halted if a marine mammal is observed within the safety zone and will not re-start until 15 minutes after the animal has left the safety zone. All necessary permits including a BO from USFWS and NMFS, an IHA from NMFS, and an ITP will be obtained and adhered to during construction for in-water work that requires impact pile driving and is not covered under one of the existing programmatic consultations for federally listed species. 	Permits to be obtained prior to project construction activities		
MM 3.4-2	<p>Compensatory Mitigation for Longfin Smelt. Prior to construction, WETA shall obtain an ITP from the CDFW in accordance with California Fish & Game Code § 2081 (b), which states that, “the impacts of the authorized take shall be minimized and fully mitigated”. In addition to the noise impact minimization measures described above, WETA shall provide compensatory mitigation for potential noise impacts to the longfin smelt by purchasing mitigation credits at a CDFW-approved conservation bank or contribute funds to a CDFW-approved mitigation project. Specific details for the compensatory mitigation including the number of credits, schedule and payment terms shall be outlined in the conditions of the ITP.</p>	Prior to construction	No monitoring required, permit to be obtained once, prior to construction activities	WETA
MM 3.4-3	<p>Avoid Any Spread or Introduction of Invasive Marine Species. WETA and their construction contractor will ensure that standard Best Management Practices (BMPs) to avoid introduction or spread of marine invasive species are followed during construction and in-water work. Specific BMPs will be provided on the contractor’s design drawings and will include but not be limited to the following:</p> <ul style="list-style-type: none"> Environmental training of construction personnel involved in in-water work. Cleaning and sanitizing procedures for equipment and machinery used for in-water work. Procedures for the safe removal and disposal of any invasive taxa observed. 	<p>Prior to and during construction</p> <p>Training to occur prior to construction activities</p> <p>Cleaning, sanitizing, removal, and disposal procedures to occur during project construction activities</p>	<p>Training to occur once, prior to construction activities</p> <p>Monitoring of cleaning, sanitizing, removal, and disposal procedures to occur throughout duration of construction activities</p>	WETA and construction contractor

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MM 3.4-4	<p>Implement BMPs and Follow Approved Agency Requirements for In-Water Construction. Best management practices (BMPs) will be employed during project construction activities to protect special status species and their aquatic habitats. The contractor undertaking construction work will exercise every reasonable precaution to protect listed species and ESA-protected species and their habitat(s) from construction by-products and pollutants such as construction chemicals, fresh cement or other deleterious materials. Construction may be conducted from both land and water. Care will be used by equipment operators to control debris so that it does not enter the Bay. WETA's contractors shall prepare the plans covering the BMPs as follows: Stormwater Pollution Prevention Plan, Erosion and Sediment Control Plan, Oil Spill Prevention and Control Plan to specify restrictions and procedures for fuel storage location, fueling activities, and equipment maintenance locating fueling stations away from potentially jurisdictional features, and Construction Debris Management Plan.</p> <p>The measures identified in these four plans listed above will be based on Best Available Technology and will include but not be limited to the following:</p> <ul style="list-style-type: none"> • All debris will be off hauled, processed, and properly disposed of. The piles will be cut at the mudline and pulled out of the water. Timber piles that have been treated with creosote, or that contain other potentially hazardous materials, will be handled properly and disposed of at a facility permitted to handle hazardous waste. Any debris found on the seafloor in the ferry terminal's vicinity will be removed and disposed of on land. • Measures to ensure that fresh cement or concrete will not be allowed to enter the Bay. Construction waste will be collected and transported to an authorized upland disposal area, as appropriate, and per federal, state and local laws and regulations. • All hazardous material will be stored upland in storage trailers and/or shipping containers designed to provide adequate containment. Short-term laydown of hazardous materials for immediate use will be permitted with the same anti-spill precautions: • All construction material, wastes, debris, sediment, rubbish, trash, fencing, etc., will be removed from the site once the proposed project is completed and transported to an authorized disposal area, as appropriate, in compliance with applicable federal, state and local laws and regulations; • Construction material will need to be covered every night and during any rainfall event (if there is one); 	<p>During construction</p> <p>All measures to be implemented during construction activities</p>	<p>Throughout duration of construction activities</p>	<p>WETA and construction contractor</p>

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	<ul style="list-style-type: none"> Construction crews will reduce the amount of disturbance within the Project site to the minimum necessary to accomplish the project; Measures to prevent debris from entering the Bay; Vessels and equipment that rely on internal combustion engines for power and/or propulsion will be kept in good working condition and compliant with California emission regulations; No in-water fueling at the Project site will be permitted. Vehicles and equipment that are used during the course of construction will be fueled and serviced offsite. Fueling locations will be inspected after fueling to document that no spills have occurred. Any spills will be cleaned up immediately. 			
Cultural Resources				
MM 3.5-1	<p>Protection of Known and Unknown Archaeological Resources. The following shall be implemented by WETA and the construction contractor during any ground-disturbing activities associated with project construction:</p> <ul style="list-style-type: none"> In the event that unknown cultural deposits (e.g., prehistoric stone tools, milling stones, historic glass bottles, foundations) are encountered during project construction, all ground-disturbing activity within 30 feet of the resources shall be halted and a qualified professional archaeologist (36 Code of Federal Regulations [CFR] 61) and appropriate Native American tribal representative shall be notified immediately and retained to assess the significance of the find. Construction activities could continue in other areas of the project site. If the find is determined to be significant by the qualified archaeologist or Native American tribe (i.e., because it is determined to constitute either a historical resource or a unique archaeological resource), the archaeologist shall develop appropriate procedures to protect the integrity of the resource and ensure that no additional resources are affected. Procedures could include but would not necessarily be limited to preservation in place, archival research, subsurface testing, or contiguous block unit excavation and data recovery. If the qualified archaeologist determines the archaeological material to be Native American in nature, WETA shall contact the culturally affiliated Native American tribe for their input on the preferred treatment of the find. 	<p>During construction</p> <p>All measures to be implemented during construction activities</p>	Throughout duration of ground disturbing construction activities	WETA and construction contractor

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Tribal Cultural Resources			
<p>MM 3.18-1 Tribal Cultural Resources Unanticipated Discovery. If any suspected tribal cultural resources are discovered during ground disturbing construction activities, including midden soil, stone tools, chipped stone, or unusual amounts of baked clay, shell, or bone, all grading and excavation work shall cease within 100 feet of the find and the following procedures shall take place:</p> <ul style="list-style-type: none"> • WETA shall retain a qualified archaeologist and immediately notify and retain a tribal representative from a California Native American tribe that is traditionally and culturally affiliated with the geographic area. Together, the archaeologist and tribal representative shall determine if the find is a tribal cultural resource (pursuant to PRC Section 21074). If the find does not qualify as a tribal cultural resource, work may resume. • If the find is determined to be a tribal cultural resource, the tribal representative shall make recommendations for the appropriate treatment, as necessary. Preservation in place is the preferred alternative under CEQA and tribal protocols, and every effort must be made to preserve the resources in place, including through project redesign. • Culturally appropriate treatment may include, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project vicinity where they will not be subject to future impacts. Materials shall not be permanently curated unless approved by the tribe. Treatment that preserves or restores the cultural character and integrity of a tribal cultural resource may include culturally appropriate recovery of cultural objects and reburial of cultural objects or cultural soil. WETA shall work with the contractor and tribal representative to facilitate the appropriate tribal treatment of any finds, as necessary. • Work at the discovery location cannot resume until all necessary investigation and evaluation of the discovery, has been completed. 	<p>During construction</p> <p>All measures to be implemented during construction activities</p>	<p>Throughout duration of ground disturbing construction activities</p>	<p>WETA and construction contractor</p>