

INVITATION FOR BIDS

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

**NORTH BAY OPERATIONS AND MAINTENANCE
FACILITY – PILE RECONFIGURATION PROJECT**

IFB #17-020

**ATTACHMENT B – REGULATORY PERMIT
CONDITIONS**

JULY 26, 2017

**North Bay Operations Maintenance Facility
In-water Work Conditions and Mitigation Measures**

A break in numbering indicates a condition or mitigation measure was not included as it does not apply to the waterside work.

Cal Fish & Wildlife – Streambed Alteration Agreement No. 1600-2011-0028-R3 (Issued August 2011, amendment pending)

Avoidance and Minimization Measures

- 2.1 All in-channel work shall be confined to the period of July 1 to October 30 **[THE WORK WINDOW HAS BEEN NARROWED BY OTHER AGENCIES TO August 1 to October 31]**.
- 2.2 All work shall be done according to the plans submitted to DFG with the project Notification package.
- 2.3 All work, species monitoring and mitigation shall be done according to the Notification received by DFG, as well as the Subsequent Mitigated Negative Declaration dated February 2011 and revised May 2011, State Clearinghouse Number 2011022039 unless otherwise noted in this Agreement. The Permittee shall notify DFG of any modifications made to the plans submitted to the DFG. Modifications to the project description may require an Amendment to this Agreement.
- 2.6 The Permittee shall conduct an employee orientation program for all persons who will work on-site during all project activities. The orientation program shall consist of a brief presentation from a DFG approved biologist about the biology of the species listed in this Agreement, their habitat needs, and their status under the California Endangered Species Act and DFG Species of Special Concern designation.
- 2.7 A DFG approved biologist will be present during all pile driving events. The biologist shall abide by all safety requirements of the Permittee. If, at any time during a pile driving event more than 10 fish are observed dead, as seen floating at the surface, within 50 meters from the pile, the pile driving will cease for 30 minutes. The pile driving may proceed after 30 minutes and the biologist will again observe. If, additional mortality is noted, pile driving will cease and DFG will be contacted as defined in the "Contact Information" section of this Agreement. All sensitive fish species shall be collected by the biologist to be retained and preserved for submittal to DFG, if requested.
- 2.8 All temporary and permanent piles shall be a maximum of 42" and shall be set using a vibratory hammer only, where feasible. Due to the uncertainty of using vibratory hammer only, a Hydroacoustic Minimization/Mitigation Plan, and a Hydroacoustic Monitoring Plan must be submitted to DFG for approval prior to construction.

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- 2.9 Any mechanical equipment operated in the waterway shall not be submerged to a point above any axle of said mechanical equipment. Excavation equipment buckets may reach out into the waterway for the purpose of removing accumulated sediments or the retrieval of lost equipment.
- 2.15 Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the stream channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the waterway shall be positioned over drip-pans. Any equipment or vehicles driven and/or operated within or adjacent to the waterway must be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Vehicles must be moved away from the waterway prior to refueling and lubrication.
- 2.16 Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into State waters or its tributaries shall be contained in water tight containers or removed from the project site.
- 2.17 Debris, soil, silt, bark, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the State. Any of these materials, placed within or where they may enter a waterway, by Permittee or any party working under contract, or with the permission of the Permittee, shall be removed immediately.
- 2.20 If, in the opinion of DFG, conditions arise, or change, in such a manner as to be considered deleterious to the waterway or wildlife, operations shall cease until corrective measures approved by DFG are taken.

Reporting Measures

- 4.3 A Hydroacoustic Minimization/Mitigation Plan (Plan) shall be submitted to DFG for approval prior to construction. The Plan shall include mitigation and minimization measures. The Hydroacoustic Minimization/Mitigation Plan shall be sent via mail to the Regional office at 7329 Silverado Trail, Napa, CA 94558. Refer to Notification 1600-2011-0028-3 when notifying DFG. **[SAME HM/MP THAT WAS PREPARED FOR PROJECT CONSTRUCTION WILL BE USED FOR PROJECT MODIFICATIONS]**
- 4.4 A Hydroacoustic Monitoring Plan (Plan) shall be submitted to DFG for approval prior to construction. A final report shall be submitted within 30 days of completion. The Hydroacoustic Monitoring Plan shall be sent via mail to the Regional office at 7329 Silverado Trail, Napa, CA 94558. Refer to Notification 1600-2011-0028-3 when notifying DFG. **[SAME HMP THAT WAS PREPARED FOR PROJECT CONSTRUCTION WILL BE USED FOR PROJECT MODIFICATIONS]**
- 4.5 All temporary and permanent pile driving within 10 meters of the wetted channel shall be monitored (peak, rms, and SEL). Variations in substrate, water depth and pile driving intensity may increase peak SPLs above lethal levels and monitoring will allow the operator to modify pile

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driving activities and effectively implement appropriate minimization measures. Hydroacoustic data shall be submitted to DFG every other Monday. This data shall be submitted via email to mgrube@dfg.ca.gov. The Permittee shall report the distance to the 187 dB (SELaccumulated) contour for each day of pile driving.

- 4.6 The Permittee shall monitor appropriate implementation of hydroacoustic minimization methods daily and shall provide DFG a written log on a biweekly basis. The written log shall be sent to DFG every other Monday via email to mgrube@dfg.ca.gov.
- 4.8 An Accidental Spill and Discharge Plan shall be prepared and submitted to DFG prior to the start of construction. The Plan shall identify the actions which will be taken in the event of spill of petroleum products, or other material harmful to aquatic or plant life, and the emergency response materials which will be kept at the site to allow the rapid containment and clean-up of any spilled materials. The Accidental Spill and Discharge Plan shall be sent via mail to the Regional office at 7329 Silverado Trail, Napa, CA 94558. Refer to Notification 1600-2011-0028-3 when notifying DFG.

NMFS – Biological Opinion No. 2011/00766 (Issued April 2012)

- Ensure the hydroacoustic monitoring plan is properly implemented and assists in the evaluation of project effects on green sturgeon.
 - Prepare and submit plans and reports regarding the construction of the proposed project and the results of the fisheries and hydroacoustic monitoring program.
- 1a The permittee shall allow any NMFS employee(s) or any other person(s) designated by NMFS, to accompany field personnel to visit the project sites during construction activities described in this opinion.
- 1b. The permittee shall implement the August 2011 hydroacoustic monitoring plan that includes underwater sound measurements at various distances and depths from pile driving operations.
- 1c. The permittee shall make available to NMFS data from the hydroacoustic monitoring program on a real-time basis (i.e., daily monitoring data should be accessible to NMFS upon request).
- 1d. If any sturgeon are found dead or injured during visual observations, the biologist shall contact NMFS biologist Gary Stern by phone immediately at (707) 575-6060 or the NMFS North Central Coast Office at (707) 575-6050. All sturgeon mortalities shall be retained, placed in an appropriately-sized sealable plastic bag, labeled with the date and location of collection, fork length, and be frozen as soon as possible. Frozen samples shall be retained by the biologist until specific instructions are provided by NMFS. The biologist may not transfer biological samples to anyone other than the NMFS North Central Coast Office without obtaining prior written approval from the NMFS North Central Coast Office, Supervisor of the Protected Resources Division. Any such transfer will be subject to such conditions as NMFS deems appropriate.
- 2a. The Corps or permittee shall provide a written report to NMFS by January 15 of the year following construction of the project. The report shall be submitted to NMFS North Central

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Coast Office, Attention: Supervisor of Protected Resources Division, 777 Sonoma Avenue, Room 325, Santa Rosa, California, 95404-6528. The report shall contain, at a minimum, the following information:

- i. Construction related activities -- The report shall include the dates construction began and was completed; a description of any and all measures taken to minimize effects on ESA-listed fish; and the number of fish killed or injured during the project action.
- ii. Hydroacoustic monitoring -- The report shall include the a description of the methods used to monitor sound, the dates that hydroacoustic monitoring was conducted; the locations (depths and distance from point of impact) where monitoring was conducted; the total number of pile strikes per pile, total number of strikes per day, the interval between strikes, the peak/SPL, RMS and SEL per strike, and accumulated SEL per day for each hydroacoustic monitor.

RWQCB - Water Quality Certification ID No. 763287 (Issued August 2013)

- The Applicant will implement appropriate best management practices (BMPs) during construction activities to minimize construction debris from entering waterways. The Applicant will properly locate storage of the materials on-site, set up cutting stations with large tarps to capture debris and locate them away from the water to minimize transport of sawdust by wind, and remove promptly any debris which falls into the water. The removed piles and debris will be disposed of at a proper landfill.
 - The Applicant will also implement appropriate BMPs to minimize erosion sedimentation, turbidity, and pollutant transport to waters of the State during construction of the Project.
 - The Applicant has proposed to use air bubble curtain to minimize hydroacoustic adverse effects on sensitive species of fish during steel pile driving. Underwater sound levels will be continuously monitored during the entire duration of the operations. A National Marine Fisheries Service approved Hydroacoustic Monitoring Plan by Illingworth& Rodkin, Inc., dated September 2011, provides details on the sound attenuation system and the methods that will be used to monitor and verify sound levels during pile driving operations. The construction activities on the waterside will be conducted from a crane-mounted barge with pile-driving equipment, a tug boat, 3-4 small workboats, 1-2 floating work platforms, and equipment barge tied to the crane barge.
1. The Project shall be constructed in conformance with the Project description in the application materials, which were received over the period August 8, 2012 through August 1, 2013. Any additional work or variation from the described work is not authorized unless approved in writing by the Water Board Executive Officer prior to implementation.
 2. No debris, soil, sand, cement, concrete, or washings thereof, or other construction related materials or wastes, oil or petroleum products or other organic or earthen material shall be allowed to enter into, or be placed where it may be washed by rainfall or runoff into waters of the State. When operations are completed, any excess material shall be removed from the work

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area and any areas adjacent to the work area where such material may be washed into waters of the State.

3. All work performed within waters of the State shall be completed in a manner that minimizes impacts to beneficial uses and habitat; measures shall be employed to minimize disturbances that will adversely impact the water quality of waters of the State. No fueling, cleaning, or maintenance of vehicles or equipment shall take place within any areas where accidental discharge to waters of the State may occur.
4. The Certification does not allow for the take, or incidental take, of any special status species. The Applicant shall utilize the appropriate protocols, as approved by the National Marine Fisheries Service (NMFS) and California Fish and Wildlife, to ensure that Project activities do not adversely impact water quality or the beneficial use of the Preservation of Rare and Endangered Species. The NMFS issued a Biological Opinion No. 2011/00766 for the Project, dated April 4, 2012.

US Fish & Wildlife Biological Opinion No. 08FBDT00-2014-F-0014 (Issued April 8, 2014)

- 1) All in-water work will occur within the West Zone of the delta smelt which includes a work window of August 1 through January 31 **[THE WORK WINDOW HAS BEEN NARROWED BY OTHER AGENCIES TO August 1 to October 31]**.
- 3) The project will implement a water pollution control/spill contingency plan.
- 4) Pile driving with an impact hammer will employ a “soft start” technique. The soft start technique requires that the initial strikes of a piling with an impact hammer are not performed at full force, but at a significantly reduced force that slowly builds to full force over several strikes.
- 5) Unconfined bubble curtains will be used during the installation of all steel piles to reduce noise levels.
- 6) The applicant will implement hydro-acoustic monitoring during pile driving activities.

Mitigation Monitoring Plan (Revised December 2013)

- In-water work will occur within the work window of July 1 and October 30 (as allowed in the Streambed Alternation Agreement) **[THE WORK WINDOW HAS BEEN NARROWED BY OTHER AGENCIES TO August 1 to October 31]**.
- Pile driving with an impact hammer will employ a “soft start” technique. The soft start technique requires that the initial strikes of a piling with an impact hammer are not performed at full force, but at a significantly reduced force that slowly builds to full force over several strikes.
- Unconfined bubble curtains will be used during the installation of all steel piles to reduce noise levels.
- The applicant will implement a NMFS-approved hydro-acoustic monitoring plan. This plan will provide details on the sound attenuation system and the methods used to monitor and verify sound levels during pile driving activities. The sound monitoring results will be made available to NMFS.