

# Contract Documents

## Maintenance Dredging—Woodley Island Marina Humboldt Bay, California

### Including:

Notice to Contractors,  
Proposal and Agreement,  
General and Special Provisions

### Bid Opening:

2:00 p.m., July 14, 2020  
Humboldt Bay Harbor, Recreation & Conservation District  
601 Startare Drive Eureka, CA 95501

### Pre-Bid Meeting (Optional):

2:00 p.m., June 15, 2020  
Humboldt Bay Harbor, Recreation & Conservation District  
601 Startare Drive  
Eureka, CA 95501

Approved:



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Larry Oetker  
Executive Director

Humboldt Bay Harbor, Recreation and Conservation District  
601 Startare Drive  
Eureka, CA 95501

June 3, 2020



## NOTICE TO CONTRACTORS

Sealed proposals will be received by the Humboldt Bay Harbor, Recreation & Conservation District, 601 Startare Drive, Eureka, CA 95501, until **2:00 pm on Tuesday, the 14th day of July, 2020**, at which time they will be publicly opened and read, for performing work in accordance with the Plans and Specifications, therefore, as follows:

### **2020 Maintenance Dredging – Woodley Island Marina**

There will be an optional pre-bid meeting at the Humboldt Bay Harbor, Recreation & Conservation District, 601 Startare Drive, Eureka, CA 95501, at **2:00 pm on Monday, the 15<sup>th</sup> day of June, 2020**. A site inspection will be held following the pre-bid meeting.

Bids are required for the entire work as described herein:

#### **General Scope of Work**

The work consists of maintenance dredging of Woodley Island Marina (WIM) and dewatering/stockpiling of dredged material at Redwood Terminal II or disposal of dredged material at the Humboldt Open Ocean Disposal Site (HOODS). Work includes dredging activities, using closed clam shell bucket excavator, or crane. Dredging will remove between 7,192 and 11,500 cubic yards (cy) of material from WIM. The Work of this Contract may include work covered by lump sum and unit prices.

The foregoing quantities are approximate only, being given as a basis for the comparison of bids, and the HBHD does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work in accordance with the General Provisions, or to omit portions of the work, as may be deemed necessary or expedient.

Plans and Contract Documents, including this Notice to Contractors, Proposal Forms for bidding this project and Agreement can be reviewed at the Humboldt Bay Harbor, Recreation & Conservation District, 601 Startare Drive, Eureka, CA 95501; Telephone No. 707-443-0801. The aforementioned documents may be reviewed at the Humboldt Bay Harbor, Recreation & Conservation District as stated above, the Humboldt Bay Harbor, Recreation, and Conservation District website <[humboldtbay.org](http://humboldtbay.org)> or at the Humboldt Builders' Exchange in Northern California and the Daily Journal of Commerce in Oregon.

No bid will be considered unless it is made on the blank Bid Proposal forms included in this volume, bidders shall remove or copy the Bid Proposal and submit the completed Bid Proposal as part of the bid proposal package, and unless it is accompanied by a Proposal Guaranty in the form of cash, bid bond, certified check, or cashier's check made payable to the Humboldt Bay Harbor, Recreation & Conservation District, in an amount equal to ten percent (10%) of the bid amount.

Each bidder and subcontractor must be licensed as required by law, and each is required to obtain a Business License from the agency having jurisdiction over the area where the work is to be performed, and to submit a copy of the license to the District prior to performing any work on the project.

All Contractors shall possess appropriate Contractor's Licenses for their trade at the time the contract is awarded.

Each Bid Proposal, along with any required supporting bid materials shall be submitted in a sealed envelope bearing the title of the work – **2020 Maintenance Dredging –Woodley Island Marina** - and the name of the bidder.

The Humboldt Bay Harbor, Recreation and Conservation District reserves the right to reject any or all bids.

**This is a prevailing wage contract.**

The minimum wage rate to be paid under this contract shall be the current prevailing wage for each classification as determined by the Director of the California Department of Industrial Relations, pursuant to California Labor Code Part 7, Chapter 1, Article 2, Sections 1770, 1773 and 1773.1.

Copies of the current prevailing wage rates are available on the internet at the following URL:

<http://www.dir.ca.gov/DLSR/PWD/>

Out of State bidders shall note that, in accordance with California Revenue and Taxation Code (RT&C) Section 18662 and the related regulations requiring withholding of income or franchise tax on certain payments made to nonresidents of California for personal services performed in California, the Humboldt Bay Harbor, Recreation and Conservation District is required to withhold and send to the State seven percent (0.07) of all payments exceeding \$1,500. These provisions apply to payments for this project.

Dated: June 3, 2020

A handwritten signature in dark ink, appearing to read "Larry P. Oetker", is written over a horizontal line.

Larry Oetker  
Executive Director

# PROPOSAL REQUIREMENTS AND CONDITIONS

## 1. Bid Proposal Forms

All bid proposals shall be made upon the blank Bid Proposal forms included in this volume, which shall be copied or detached and submitted as part of the bid proposal package.

Please note that additional materials may be required to be submitted for a complete bid proposal package. Bidders are directed to read the contract provisions thoroughly to understand any additional funding agency or other project or bid requirements. Proposals submitted on forms other than those included in this volume will be disregarded. All proposals must give the proposed unit prices, both in writing and in figures, and shall contain original signatures in ink by the bidder, with bidder's address. Where required on the bid form, bidders must quote on all items, and they are hereby warned that failure to do so may disqualify the bid. When quotations on all items are not required, bidders shall insert the words "No Bid" in the space provided for any item on which no quotation is made. If the proposal is made by an individual, that individual's name and Post Office address shall be shown; if made by a firm or partnership, the name and Post Office address of each member of the firm or partnership shall be shown; or if made by a corporation, the proposal shall show the name of the State under the laws of which the corporation was chartered and the names, titles, and business addresses of the President, Secretary, and Treasurer.

Bids shall be delivered to the Humboldt Bay Harbor, Recreation and Conservation District, on or before the day and hour set for the opening of bids in the advertised "Notice to Contractors." The bids shall be submitted in a sealed envelope and shall bear the title of the work and the name of the bidder. It is the sole responsibility of the bidder to see that their bid is received by the proper time. All bids received after the scheduled closing time for receipt of bids shall be returned to the bidder unopened.

## 2. Approximate Estimate

The quantities given in the proposal and contract forms are approximate only, being given as a basis for any comparison of bids, and the Board of Commissioners does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work in accordance with the General Provisions, or to omit portions of the work, as may be deemed necessary or expedient.

## 3. Examination of Plans, Specifications, Special Provisions, and Site of the Work

The bidder shall carefully examine the site of the work contemplated and the proposal, plans, specifications, and contract forms therefor. It will be assumed that the bidder has investigated and is satisfied as to the conditions to be encountered regarding character, quality, and quantities of work to be performed and the materials to be furnished and as to the requirements of these Specifications, Special Provisions, and the Contract. It is mutually agreed that submission of a proposal shall be considered "prima facie" evidence that the bidder has made such examination.



**4. Proposal Guaranty**

Each proposal shall be accompanied by one of the following forms of bidder's security: cash, certified cashier's check, or a bidder's bond executed by an admitted surety insurer, made payable to the Humboldt Bay Harbor, Recreation and Conservation District for an amount equal to at least ten percent (10%) of the total bid amount. No bid will be considered unless such cash, certified cashier's check, or bidder's bond is enclosed therewith. The bidder's security shall be attached to page C - 12 of the Bid Proposal.

**5. Designation of Subcontractors**

All subcontractors doing work in excess of one-half of one percent (0.50%) of the total bid amount shall be designated on page C - 9 of the Bid Proposal.

**6. Rejection of Proposals**

Proposals may be rejected if they show any alterations of form, additions not called for, conditional bids, incomplete bids, erasures, or irregularities of any kind. The Humboldt Bay Harbor, Recreation and Conservation District reserves the right to reject any and/or all proposals.

**7. Withdrawal of Proposals**

Any bid may be withdrawn at any time prior to the hour fixed in the Notice to Contractors for the opening of bids provided that a request in writing, executed by the bidder or his duly authorized representative, for the withdrawal of such bid is filed with the Humboldt Bay Harbor, Recreation and Conservation District. The withdrawal of a bid will not prejudice the right of the bidder to file a new bid. Whether or not bids are opened exactly at the time fixed in the advertised "Notice to Contractors," a bid will not be received after that time, nor may a bid be withdrawn after the time fixed in such notice.

**8. Disqualification of Bidders**

More than one proposal from an individual, firm, partnership, or corporation, or combination thereof under the same or different names will not be considered. Reasonable grounds for believing that any bidder is interested in more than one proposal for the work contemplated will cause the rejection of all proposals in which such bidder is interested. If there is reason for believing that collusion exists among bidders, none of the participants in such collusion will be considered in future proposals. Proposals in which the prices obviously are unbalanced may be rejected.

**9. Competency of Bidders**

Bidders must be capable of performing the various items of work bid upon. If requested, the lowest bidder shall furnish, prior to the award of the contract, a satisfactory statement of their financial responsibility, technical ability, project references, and experience. The District reserves the right to disqualify bidders who do not exhibit proof of competency, or whose performance on past projects has not been satisfactory.

**10. Materials Guaranty**

Before any contract is awarded, the bidder may be required to furnish a complete statement of the origin, composition, and manufacture of any and all materials to be used in the construction of the work, together with samples, which may be subjected to tests provided for in these Specifications, to determine the quality and fitness of said materials for the work.

**11. Addenda**

If any person contemplating submitting a bid for the proposed contract is in doubt as to the true meaning of any part of the Plans and Specifications or other proposed Contract Documents or finds discrepancies in or omissions from the drawings or Specifications, they may submit to the District a written request for an interpretation or correction thereof. The person submitting the request shall deliver said request at least seven (7) days prior to the bid opening date. Any interpretation or correction of the proposed documents will be made only by an Addendum duly issued; and a copy of such Addendum will be mailed or delivered to each person receiving a set of such documents. The Board of Commissioners will not be responsible for any other explanations or interpretations of the proposed documents.

**12. Waste Reduction and Recycling Program**

The California legislation AB 939 (1989 CA Integrated Waste Management Act) requires all cities and counties in California to divert 50% of their waste streams away from landfills through recycling, reuse, and reduction programs. The Humboldt Bay Harbor, Recreation and Conservation District strongly recommends that applicable construction/demolition debris be diverted out of landfills whenever possible. To help facilitate the tracking of material diverted out of landfills for this project, a "MATERIAL RECYCLING INFORMATION FORM" is included in this contract on page C -10, which the Bidder shall fill out and submit as part of these bid documents.

## **AWARD AND EXECUTION OF CONTRACT**

### **1. Award of Contract**

The award of the contract, if it is awarded, will be to the bidder that will conduct the base bid items (pre-dredge surveys, post-dredge surveys, mobilization and demobilization, dredging and disposal) for the lowest total cost, and whose proposal complies with all prescribed requirements.

The Humboldt Bay Harbor, Recreation and Conservation District, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Department of Commerce (15 C.F.R., Part 8), issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the grounds of race, color, or national origin.

The Board of Commissioners, however, reserves the right to reject any or all bids and to waive any informality or irregularity in bids received. The Board of Commissioners also reserves the right to reject the bid of any bidder who has previously failed to perform properly or did not complete on time contracts with the Humboldt Bay Harbor, Recreation and Conservation District of a nature similar to this project.

Such award, if made, will be made within ten (10) days after the opening of the proposals, and a Notice of Award will be sent to the successful bidder. All bids will be compared on the basis of the Engineer's Estimate of the quantities of work to be done.

### **2. Contract Bonds**

See "Item 6: Bonds and Surety Qualifications" of the Contract Agreement on page C-16.

### **3. Execution and Return of Contract Agreement Package**

The following documents shall constitute the Contract Agreement Package:

- A. Contract Agreement
- B. Insurance Documentation (on forms acceptable to the District)
- C. Performance Bond
- D. Labor and Material Bond

The Contract Agreement shall be executed, and the Contract Agreement Package shall be returned to the District within ten (10) days (not including Sundays) after the bidder has received the Notice of Award.

The Contract Agreement will not be executed by the District until the required insurance certificates and all endorsements, or other sufficient proof that the Contract insurance provisions have been complied with, are submitted, approved, and filed with the District. No proposal shall be considered binding upon the District until the execution of the Contract Agreement by the District.

**4. Failure to Execute Contract Agreement or Provide Acceptable Bonds or Insurance**

Failure to execute and submit the Contract Agreement within ten (10) days (not including Sundays) after the successful bidder has received the Notice of Award shall be just cause for the annulment of the award. Failure of the successful bidder to provide acceptable bonds or insurance documents within 14 days (not including Sundays) after the bidder has executed and returned the Contract Agreement Package to the District shall also be just cause for the annulment of the award. In the event the award is annulled, the bidder's Proposal Guaranty shall be forfeited to the District.

If the successful bidder refuses or fails to execute the Contract Agreement, the Board of Commissioners may award the contract to the second lowest responsible bidder. If the second lowest responsible bidder refuses or fails to execute the Contract Agreement, the Board of Commissioners may award the contract to the third lowest responsible bidder. On the failure or refusal of the second or third lowest responsible bidder to whom any such contract is so awarded to execute the Contract Agreement, the bidders' Proposal Guaranties shall be likewise forfeited to the District, and the work may then be re-advertised or may be constructed by day labor, as the Board of Commissioners may decide.

**5. Return of Proposal Guaranties**

Within ten (10) calendar days after the award of the contract, the District will return the Proposal Guaranties accompanying the bids that were not considered in making the award. All other Proposal Guaranties will be held until the contract has been executed, after which they will be returned to the respective bidders.

**6. Insurance**

See "Item 8: Insurance" of the Contract Agreement.

**(BID PROPOSAL)**

**BIDDER'S SECURITY**

(Attach to this page)

**(BID PROPOSAL)**

**DESIGNATION OF SUBCONTRACTORS**

The Contractor must list all subcontractors doing work in excess of 0.50% of total bid amount. The undersigned certifies that he has used the sub-bids of the following listed subcontractors in making up his bid and that the subcontractors listed will be used for the work for which they bid, subject to the approval of the District, and in accordance with applicable provisions of these Specifications and Plans.

<u>Bid Item No.</u>	<u>Subcontractor</u>	<u>Address &amp; Tel. No.</u>	<u>State License No.</u>
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Date

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Bidder's Name

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Address

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Authorized Signature

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Type of Organization  
(Individual, Partnership or Corporation)

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Telephone Number

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State Contractor's Lic. No. & Exp. Date

**(BID PROPOSAL)**

**MATERIAL RECYCLING INFORMATION FORM**

**2020 Maintenance Dredging – Woodley Island Marina**

(Note: Recycling information requested and listed on this page is being collected for internal audit use only. It will not be used in any way related to the award of the project.)

Bid Item No.	Description of item to be recycled	Estimated tonnage of item to be recycled	Name & address of recycling facility

\_\_\_\_\_  
Date

\_\_\_\_\_  
Bidder's Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Type of Organization  
(Individual, Partnership or Corporation)

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
State Contractor's Lic. No. & Exp. Date

**(BID PROPOSAL)**

**NONCOLLUSION DECLARATION TO BE EXECUTED BY BIDDER**  
**AND SUBMITTED WITH BID**

**2020 Maintenance Dredging – Woodley Island Marina**

The undersigned declares:

I am the \_\_\_\_\_ of \_\_\_\_\_, the party making the foregoing bid. The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose. Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on \_\_\_\_\_ (DATE),

at \_\_\_\_\_ (DISTRICT), \_\_\_\_\_ (STATE).

\_\_\_\_\_  
Bidder's Name

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Address 1

\_\_\_\_\_  
Type of Organization  
(Individual, Partnership or Corporation)

\_\_\_\_\_  
Address 2

\_\_\_\_\_  
State Contractor's Lic. No. & Exp. Date



**(BID PROPOSAL)**

PROPOSAL TO THE BOARD OF COMMISSIONERS  
OF THE HUMBOLDT BAY HARBOR, RECREATION & CONSERVATION DISTRICT

FOR

**2020 Maintenance Dredging – Woodley Island Marina**

To the Board of Commissioners of the Humboldt Bay Harbor, Recreation and Conservation District:

The undersigned, as Bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm, or corporation; that he has carefully examined the location(s) of the proposed work and the proposed form of the contract and the plans and specifications; and he agrees if this proposal is accepted, that he will contract with the Humboldt Bay Harbor, Recreation and Conservation District, in the form of the contract annexed hereto, to provide all necessary machinery, tools, apparatus, and other means of construction and to do all the work and furnish all the materials specified in the contract in the manner and time prescribed and according to the requirements of the Engineer; that he will provide the bonds as required herein at the time he executes the contract; that he will provide proof of insurance as provided herein; that he will begin the work on the project within TEN (10) CALENDAR DAYS after receiving notice from the District to proceed and diligently prosecute the same to completion before the expiration of July 15-October 15 (unless extension is granted) from the date of commencement of the work; and that as provided for in the General Provisions, the liquidated damage shall be in the sum of **Two Hundred Fifty (\$250.00)** per day for each and every calendar day delay in finishing the work beyond the time described herein; and that he will take in full payment therefore the following unit or lump sum prices, as the case may be, to wit:

**SEE BID SCHEDULE ON FOLLOWING PAGE**

## (BID PROPOSAL)

<b>Bid Schedule</b> <b>Humboldt Bay Harbor, Recreation, and Conservation District</b> <b>2020 Maintenance Dredging–Woodley Island Marina</b>			
Bid Item No.	Quantity	Bid Item Description with Total Price Written in Words	Total Item Price
<b>Pre- and Post-Dredging Hydrographic Surveys (Base Bid)</b>			
1.	N/A	Hydrographic surveys fixed at _____ Dollars.	\$ _____
<b>Mobilization and Demobilization (Base Bid)</b>			
2.	N/A	Mobilization and Demobilization fixed at _____ Dollars.	\$ _____
<b>Dredging and Disposal (Base Bid)</b>			
3.	7,192 Cubic Yards	Dredging and disposal of 7,192 cubic yards fixed at _____ Dollars.	\$ _____
<b>Total Base Bid</b>			\$ _____
<b>Total Base Bid Amount in Words:</b>			
Stand-by time at \$ _____ per hour.			

4.	Up to 4,308 Cubic Yards	<b>Dredging and Disposal (Option Bid)</b> Dredging and disposal at _____ Dollars per cubic yard.	\$ _____ for 4,308 cubic yards
<b>Total Option Bid Amount in Words:</b>			
Stand-by time at \$ _____ per hour.			

- ❖ A contract for the Base Bid will be awarded to the Bidder with the Lowest Base Bid. At the District's discretion, the Option Bid or a portion of the Option Bid may also be awarded to the Bidder that is awarded the Base Bid.

It is further understood and agreed that:

- A. In case of a discrepancy between words and figures, the words shall prevail, and in case of a discrepancy between unit prices and totals, the unit price shall prevail.
- B. The District reserves the right to eliminate any section of this proposal from the contract without claim of the Contractor for profits lost.
- C. No verbal agreement or conversation with any officer, agent, or employee of the District, either before or after the execution of the Agreement, shall affect or modify any of the terms or obligations of this proposal.
- D. The District will not be responsible for any errors or omissions on the part of the undersigned in making up his bid, nor will the bidder be released on account of errors.
- E. The undersigned bidder is properly licensed in accordance with the State of California Contractors' State License Law providing for the registration of Contractors.
- F. If the proposal is accepted and the undersigned shall fail to contract as aforesaid and to give the two bonds in the sums to be determined as aforesaid, with surety satisfactory to the Board of Commissioners, within EIGHT (8) CALENDAR DAYS (not including Sundays) after the bidder has received the Notice of Award, the District may, at its option, determine that the bidder has abandoned the contract, and thereafter this proposal and the acceptance thereof shall be null and void.
- G. The undersigned bidder certifies that he has confirmed that the proposed form of contract and the Plans and Specifications are complete.

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Date

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Bidder's Name

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Address

---

Authorized Signature

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Type of Organization  
(Individual, Partnership or Corporation)

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Telephone Number

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State Contractor's Lic. No. & Exp. Date

THE ABOVE SIGNED ACKNOWLEDGES THAT THESE REPRESENTATIONS ARE MADE  
UNDER PENALTY OF PERJURY.

Purchase Order # \_\_\_\_\_

## **CONTRACT AGREEMENT**

### **HUMBOLDT BAY HARBOR, RECREATION, AND CONSERVATION DISTRICT WOODLEY ISLAND MARINA MAINTENANCE DREDGING**

This CONTRACT is made and entered into this \_\_\_\_\_ ( ) day of \_\_\_\_\_ 2020, by and between the Humboldt Bay Harbor, Recreation, and Conservation District, a California public entity ("HBHRCD"), and \_\_\_\_\_ as ("Contractor").

The parties agree as follows:

1. **Scope of Services:** Contractor agrees to complete all work as specified in the Technical Specifications, attached hereto and incorporated herein ("Work"). All work shall be completed in accordance with the Contract Documents.
2. **Contract Documents Include:** The contract documents include this Contract, all Plans and Specifications, including the Greenbook (BNI Publications, Inc., 2018 edition available on line), the Notice Inviting Proposals, the Certificates of Insurance, Workers' Compensation Certificate, and Bonds (if any) ("Contract Documents"). All of the provisions of the Contract Documents are hereby incorporated in and made a part of this Contract as if fully set forth herein.
3. **Compensation:** The HBHRCD shall pay Contractor for the price set forth by him/her in the accepted Bid. The total compensation to be paid will be computed on the basis of the quantity of work actually performed in accordance with the Contract Documents, and paid for at the stipulated contract unit or lump sum prices, as the case may be. Total compensation shall not exceed the Base Bid total and any amount of the Option Bid that the District awards.
4. **Payment:** Contractor shall submit monthly invoices for completed tasks as outlined in the submitted Bid Schedule. All invoices must include Purchase Order No. 1318. Invoices received without reference to correct Purchase Order Number will be returned to Contractor without processing. The HBHRCD agrees to pay invoices within 90 days upon receipt of invoice less 10% until approval and acceptance of completed project. The final invoice will be paid within 90 days from the HBHRCD's acceptance and approval of completed project. All payments are subject to final audit upon completion of services or other termination of this Contract.
5. **Commencement of Work, Time for Completion:** No Work shall be performed or furnished under this Contract until the HBHRCD has delivered a signed Contract and Notice to Proceed to the Contractor. The Contractor shall complete the Work by October 15, 2020, (*the "Completion Date"*). An extension to the Completion Date may be allowed in accordance with Section 34, Uncontrollable Circumstances. However, extension would need to be approved by regulatory agencies in addition to the District. The Contractor shall at all times employ such force, plant, materials, and tools as will be sufficient, in the opinion of the HBHRCD Representative, to perform required activities at a pace sufficient to complete the Work by the Completion Date. If in the opinion of the HBHRCD Representative, the Contractor has failed or is failing to employ sufficient force, materials, and tools, or, to maintain adequate progress, the HBHRCD Representative may, at no additional cost to the HBHRCD, require the Contractor to increase

progress of work. The Contractor shall implement action required to increase progress and report the action or actions to be taken to the HBHRCD Representative within two work days following the HBHRCD Representative's order to increase progress.

6. Bonds and Surety Qualifications: If indicated below, the successful Contractor shall, within 15 days of contract award and before execution of the contract, furnish a Bond for Faithful Performance and/or a Payment Bond (also called Labor and Materials Bond) on forms provided by the HBHRCD, each in the amount of 100 percent of the contract price. The Bond for Faithful Performance shall remain in effect during the performance of the work, and for 365 days after recordation of a Notice of Completion, or if a Notice of Completion is not recorded by the HBHRCD, within thirty days of completion of the Work. The Payment Bond shall remain in effect until recordation of the Notice of Completion, or if a Notice of Completion is not recorded by the HBHRCD, for 60 days after completion of the Work. All Bonds shall be furnished by the Contractor at its own cost and expense. All bonds shall be executed by such sureties as are admitted to transact surety insurance in the State of California. Should an objection as to the sufficiency of an admitted surety on a bond be made, California Code of Civil Procedure Section 995.660 shall apply.

Performance Bond Required: ☒ Payment Bond Required: ☒ [check only if required]

7. Independent Contractor: Parties intend that the successful Contractor, in performing Work, shall act as an independent contractor and shall have control of his work and the manner in which it is performed. Contractor shall be free to contract for similar services to be performed for others while under contract with HBHRCD, provided no conflict of interest is created. Contractor is not to be considered an agent or employee of HBHRCD.
8. Insurance: All Work shall be performed entirely at the Contractor's risk. Prior to the beginning of and throughout the duration of the Work, Contractor shall procure and maintain for the duration of the contract, and for a minimum of five (5) years after completion of all Work, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by the Contractor, his agents, representatives, employees, or subcontractors. All insurance carriers shall be admitted in the state of California and have an A.M. Best's rating of A- or better and minimum financial size VII. Coverage shall be at least as broad as the following minimum limits:
- (a) *Commercial General Liability*: Insurance Services Office (ISO) "Commercial General Liability" policy form CG 00 01 or the exact equivalent on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal and advertising injury with limits no less than \$2,000,000 per occurrence for all covered losses. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location, or the general aggregate limit shall be twice the required occurrence limit. Additional insured coverage for the HBHRCD shall not be limited to its vicarious liability. Defense costs must be paid in addition to limits.
  - (b) *Automobile Insurance*: ISO Auto Coverage Form CA 00 01 including symbol 1 (Any Auto) or the exact equivalent. Limits are subject to review, but in no event to be less than \$1,000,000 per

accident for bodily injury and property damage. If Contractor or Contractor's employees will use personal autos on this project, Contractor shall provide evidence of personal auto liability coverage for each such person.

- (c) *Workers Compensation Insurance*: covering all employees and volunteers as required by the State of California on a state-approved policy form, and Employer's Liability insurance with a limit of no less than \$1,000,000 per accident for bodily injury or disease.
- (d) *Excess or Umbrella Liability Insurance (Over Primary)*: if used to meet limit requirements, shall provide coverage at least as broad as specified for the underlying coverage. Such policy or policies shall include a drop down provision providing coverage above a maximum \$25,000 self-insured retention for liability not covered by primary but covered by the umbrella. Coverage shall be provided on a "pay on behalf of" basis, with defense costs payable in addition to policy limits. Such insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the HBHRCD before the HBHRCD's insurance or self-insurance shall be called upon to protect it as a named insured. There shall be no cross liability exclusion precluding coverage for claims or suits by one insured against another. Coverage shall be applicable to HBHRCD for injury to employees of Contractor, sub-contractors or others involved in performing Work under this Contract. The scope of coverage provided is subject to approval of HBHRCD following receipt of proof of insurance as required herein.
- (e) *General Conditions Pertaining to Insurance*:
  - (1) Contractor shall have its insurer endorse the third party general liability coverage to include as additional insureds the HBHRCD, its officials, employees, volunteers and agents, using standard ISO endorsement CG 20 10. The additional insured coverage under Contractor's policy shall be provided on a primary, non-contributing basis in relation to any other insurance or self-insurance available to the HBHRCD. Contractor's policy shall not seek contribution from the HBHRCD's insurance or self-insurance and shall be at least as broad as ISO form CG 20 01 04 13.
  - (2) It is a requirement under this Contract that any available insurance proceeds broader than or in excess of the specified minimum insurance coverage and/or limits required in this Section 8 shall be available to the HBHRCD as an additional insured. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this Contract, or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured, whichever is greater.
  - (3) All self-insured retentions (SIR) must be disclosed to the HBHRCD for approval and shall not reduce the limits of liability. Policies containing any SIR shall provide or be endorsed to provide that the SIR may be satisfied by either the named insured or the HBHRCD.
  - (4) The HBHRCD reserves the right to obtain a full certified copy of any insurance policy and any endorsement. Failure to exercise this right shall not constitute a waiver of the HBHRCD's right.
  - (5) Certificates shall contain a statement that the policy will not be cancelled except after thirty (30) days prior written notice to the HBHRCD.

- (6) Contractor agrees to waive subrogation rights against the HBHRCD regardless of the applicability of any insurance proceeds, and to require that all subcontractors and sub-subcontractors do likewise.
- (7) Proof of compliance with these insurance requirements, consisting of certificates of insurance evidencing all required coverages and an additional insured endorsement to Contractor's general liability policy, shall be delivered to the HBHRCD at or prior to the execution of the Contract.
- (8) All coverage types and limits required are subject to approval, modification and additional requirements by the HBHRCD, as the need arises. Contractor shall not make any reductions in scope of coverage (e.g. elimination of contractual liability or reduction of discovery period) that may affect the HBHRCD's protection without the HBHRCD's prior written consent.
- (9) The HBHRCD reserves the right at any time during the term of the Contract to change the amounts and types of insurance required by giving the Contractor ninety (90) days advance written notice of such change. If such change results in substantial additional cost to the Contractor, the HBHRCD will negotiate additional compensation proportional to the increased benefit to the HBHRCD.
- (10) In the event Contractor fails to obtain or maintain completed operations coverage as required by this Contract, the HBHRCD at its sole discretion may purchase the coverage required and the cost will be paid by Contractor.

(f) Maritime

The Contractor shall provide and maintain insurance under the United States Longshore and Harbor Workers' Compensation Act if the work covered by the Contract Agreement includes activities subject to that Act (work whole or in part upon the navigable waters of the United States, including any adjoining pier, wharf, dry dock, terminal, building way, marine railway, or adjoining areas) throughout the duration of the Contract Agreement.

The Contractor shall provide and maintain insurance under the Jones Act in the event that the work covered by the Contract Agreement includes activities covered by the Jones Act (including, but not limited to, work from ships, vessels, barges, or dredges) throughout the duration of the Contract Agreement. It is understood that the coverage may not specifically be named United States Longshore and Harbor Workers' Compensation Act insurance and/ or Jones Act Insurance. In order to insure compliance, Contractor shall supply documentation from the insurance carrier that the coverage is in compliance with the United States Longshore and Harbor Workers' Compensation Act and Jones Act.

9. Indemnity:

- (a) To the fullest extent allowed by law, Contractor shall indemnify, defend and hold harmless the HBHRCD and its officers, officials, employees, and volunteers through legal counsel reasonably acceptable to the HBHRCD, from and against any and all claims, damages and expenses, including attorney fees and costs of litigation, caused in whole or in part by any negligent act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for

whose acts any of them may be liable, except where caused by the active negligence, sole negligence, or willful misconduct of the HBHRCD.

- (b) Contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, etc., at his/her/its sole expense and agrees to bear all other costs and expenses related thereto.
- (c) Contractor's responsibility for defense and indemnity obligations shall survive the termination or completion of this Contract for the full period of time allowed by law.
- (d) The defense and indemnification obligations of the Contract are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained in this Contract.

10. Subcontracting:

- (a) Contractor shall comply with the Subletting and Subcontracting Fair Practices Act of Public Contracts Code Sections 4100 et seq.
- (b) Contractor shall submit to the HBHRCD the following information as part of its bid proposal:
  - (1) The name and location of the place of business of each subcontractor performing work, labor or rendering construction services and each subcontractor licensed by the State of California specially fabricating and installing improvements according to detailed drawings or the plans and specifications, in an amount in excess of one-half of one percent of the Contractor's total bid.
  - (2) The portion of the Work to be done by each subcontractor.
- (c) Contractor shall list only one subcontractor for each portion of the Work identified in the bid.
- (d) Contractor shall include in all subcontracts and require of all subcontractors all insurance and indemnity requirements and provisions of the Contract that are applicable to any subcontractor's scope of work. Subcontractor's responsibility for defense and indemnity obligations shall survive the termination or completion of this Contract for the full period of time allowed by law.
- (e) Each subcontractor shall be obligated to Contractor and the HBHRCD in the same manner and to the same extent as Contractor is obligated to the HBHRCD under the Contract Documents. If hiring a sub-subcontractor to perform any Work, the subcontractor shall include in the sub-subcontract all provisions of the Contract Documents including all insurance and indemnity provisions that are applicable to said sub-subcontractor's scope of work.
- (f) Contractor shall furnish a copy of the Contract insurance and indemnity provisions to any subcontractor upon request. Upon request from the HBHRCD, Contractor shall provide insurance certificates and endorsements of its subcontractors.



11. Registration with Department of Industrial Relations: Contractor and all subcontractors shall be currently registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.
12. Prevailing Wages: This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. A determination of the general prevailing rates of per diem wages and holiday and overtime work where the work is to be performed is available for review upon request at HBHRCD's Main office, 601 Startare drive Eureka Ca 95501. Contractor and subcontractors will not pay less than the prevailing rates of wages. Contractor will post one copy of the prevailing rates of wages at the job site. The statutory provisions for penalties for failure to comply with state's wage and hour laws will be enforced (Labor Code § 1813). Contractor shall forfeit as penalty to the HBHRCD the sum of up to two hundred dollars (\$200.00) for each calendar day or portion thereof, and for each worker paid less than the prevailing rates under the contract.
13. Payroll Records:
  - (a) Pursuant to California Labor Code Section 1776, Contractor and each subcontractor shall keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:
    - (1) The information contained in the payroll record is true and correct.
    - (2) The employer has complied with the requirements of Labor Code Sections 1771, 1811, and 1815 for any work performed by his or her employees on the public work project.
  - (b) The payroll records enumerated under paragraph (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:
    - (1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.
    - (2) A certified copy of all payroll records enumerated on paragraph (a) shall be made available for inspection or furnished upon request to the HBHRCD, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations.
    - (3) A certified copy of all payroll records enumerated in paragraph (a) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the HBHRCD, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (b)(2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the Contractor, subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal office of the Contractor.

- (c) The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as provided by the division.
  - (d) The Contractor or subcontractor shall file a certified copy of the records enumerated in paragraph (a) with the entity that requested the records within ten days after receipt of a written request.
  - (e) Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the HBHRCD, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of the Contractor awarded the contract or the subcontractor performing the contract shall not be marked or obliterated.
  - (f) Agencies included in the Joint Enforcement Strike Force on the Underground Economy and other law enforcement agencies investigating violations of law shall, upon request, be provided nonredacted copies of certified payroll records. The Contractor shall not be liable for damages due to good faith compliance with this subdivision.
  - (g) The Contractor shall inform the HBHRCD of the location of the records enumerated under paragraph (a), including the street address, HBHRCD and county, and shall, within five working days, provide a notice of change of location and address.
  - (h) The Contractor or subcontractor shall have ten days in which to comply subsequent to receipt of written notice requesting the records enumerated in paragraph (a). In the event that the Contractor or subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to the HBHRCD, forfeit \$100 for each calendar day, or portion thereof, for each worker until strict compliance is effectuated. Upon the request of the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. The Contractor is not subject to a penalty assessment pursuant to this section due to a failure of a subcontractor to comply with this section.
  - (i) The Contractor and each subcontractor shall furnish all personnel records specified in Labor Code section 1776, as described in this section 13, directly to the Labor Commissioner at least monthly, or more frequently if specified in this contract, and in a format prescribed by the Labor Commissioner.
14. Audit of Records: Contractor shall maintain complete and accurate records of all payrolls, expenditures, disbursements and other cost items charged to the HBHRCD or establishing the basis for an invoice, for a minimum of four years from the date of final payment to Contractor. All such records shall be clearly identifiable. Contractor shall allow HBHRCD representatives to inspect, examine, copy and audit such records during regular business hours upon 24 hours' notice.
15. Hours of Work:
- (a) Eight hours labor constitutes a legal day's work. Workers shall be paid at a rate of one and one-half times the basic rate of pay for work in excess of eight hours during a calendar day or 40 hours during a calendar week of the foregoing hours.

- (b) Contractor shall keep and make available an accurate record showing the name each worker and hours worked each day and each week by each worker.
  - (c) As a penalty, Contractor shall forfeit twenty-five dollars (\$25.00) for each worker, including subcontractors' workers, for each calendar day during which the worker is required or permitted to work more than eight hours in any one calendar day and 40 hours in any one calendar week in violation of Labor Code Sections 1810 through 1815.
16. Document Submission and Title to Documents: All documents, reports, plans, specifications, maps, estimates, manuscripts, drawings, descriptions and other final work products compiled under this Contract must be submitted electronically in MS Word and PDF formats and in hard copy format. Additionally, upon payment of fees and expenses due, title to all such documents shall be vested in the HBHRCD.
17. Materials and Equipment:
- (a) Unless otherwise specified, shown, or permitted by the HBHRCD, materials and equipment incorporated in the Work shall be new. The HBHRCD may request the Contractor to furnish manufacturer's certificates to this effect.
  - (b) The Contractor must furnish adequate equipment and facilities to properly perform the Work in a workmanlike manner in accordance with specifications set forth in this Contract. Such equipment and facilities must be in a good state of repair and maintained in such state during the progress of the Work and shall meet requirements of applicable ordinances and laws. No worn or obsolete equipment shall be used, and in no case shall the manufacturer's rating for equipment be exceeded.
  - (c) Materials furnished and Work performed shall be subject to inspection and testing by HBHRCD's authorized agents at HBHRCD's expense. If such inspection and testing reveals non-compliance with the requirements of this contract, the Contractor shall bear the cost of necessary corrective measures and the cost of subsequent inspecting and testing.
  - (d) The inspection of the Work shall not relieve the Contractor of the obligations under the contract. Even though equipment, materials, or Work required under the Contract have been inspected, accepted, and estimated for payment, the Contractor shall replace or repair such equipment, materials, or Work found to be defective or otherwise not to comply with the requirements of the contract up to the end of the maintenance and guarantee period.
  - (e) Materials for use in the Work shall be stored by Contractor to prevent damage from exposure to the elements, admixture of foreign materials or from any other cause. Contractor is responsible for damage to or loss of materials by weather or other causes.
18. Permits and Licenses: Prior to execution of the Contract, the Contractor shall obtain and maintain throughout the contract period a valid business license. Contractor shall apply for and procure permits and licenses necessary for the Work. Contractor shall give notices necessary and incidental to the due and lawful prosecution of the Work and shall comply duly with the terms and conditions of permits and licenses. Contractor shall pay charges and fees in connection with permits and licenses.

19. Contractor Qualifications and Standard of Work: Contractor warrants that it is fully qualified to perform the Work, and holds all applicable licenses, permits, and other necessary qualifications. Contractor shall perform and complete in a good and workmanlike manner all the Work described in the Contract Documents, to furnish at its cost and expense all tools, equipment, labor and materials necessary therefor, except such materials as are specifically stipulated in the Contract Documents to be furnished by HBHRCD, and to do everything required by this Contract and other contract documents. Contractor shall possess a valid Class C-12 and/or "A" (contractor license), or the appropriate special California contractor's license at the time of bid submission and for the duration of the Contract. The Contractor shall be responsible for complying with all applicable local, state, and federal laws and regulations whether or not expressly stated or referred to herein. Only competent workers shall be employed on the Work. Workers who are incompetent, intemperate, troublesome, disorderly or otherwise objectionable, or who fail to perform Work properly and acceptably, shall be immediately removed from the Work by the Contractor and not re-employed.
20. Apprentices: Contractor shall comply with the Labor Code concerning the employment of apprentices.
21. Supervision of Work by Contractor: Before starting the Work, Contractor shall designate, in writing, a representative having authority to act for Contractor, and may designate an alternate representative. The representative or alternate shall be present at the work site when Work is in progress. Orders or communications given to this representative shall be deemed delivered to the Contractor. In the absence of the Contractor or designated representative, directions or instructions may be given by the HBHRCD Representative to the superintendent or foreman having charge of the specific work to which the order applies. Such order shall be complied with promptly and referred to the Contractor or the representative.
22. HBHRCD Representative: The HBHRCD Representative, as designated by the HBHRCD Executive Director for the HBHRCD ("HBHRCD Representative"), shall decide questions about the quality of materials furnished and Work performed, manner of performance, rate of progress of the Work, interpretation of the plans and specifications, and the fulfillment of the Contract by the Contractor.
23. Inspection:
- (a) The HBHRCD Representative shall have access to the Work during construction and shall be furnished with reasonable facility for gaining knowledge of the progress, workmanship and character of materials used and employed in the work.
  - (b) When the Contractor varies the period during which Work is carried on each day, Contractor shall give notice to the HBHRCD Representative so proper inspection may be provided. Work done in the absence of the HBHRCD Representative is subject to rejection.
  - (c) No materials shall be installed until approved by the HBHRCD Representative. Installations to be backfilled shall be inspected and approved by the HBHRCD Representative prior to backfilling. The Contractor shall give notice in advance of backfilling to the HBHRCD Representative so proper inspection may be provided.
  - (d) The inspection of the Work shall not relieve the Contractor of obligations to fulfill the contract. Defective Work shall be made good, and unsuitable materials may be rejected notwithstanding the

fact such defective Work and unsuitable materials have been previously overlooked by the HBHRCD Representative and accepted.

24. Removal of Defective and Unauthorized Work:

- (a) Rejected Work shall be removed and replaced by Contractor in an acceptable manner and no compensation will be allowed for such removal or replacement. Work done beyond the lines and grades shown on the plans or established by the HBHRCD Representative, or Work done without written authority will be considered as unauthorized and not be paid for. Such Work may be ordered removed at Contractor's expense.
- (b) Upon failure on the part of Contractor to comply promptly with an order of the HBHRCD Representative under this section, the HBHRCD Representative shall have authority to cause defective Work to be removed and replaced, and unauthorized Work to be removed, and to deduct the costs from monies due Contractor.

25. Errors Or Discrepancies Noted By Contractor:

- (a) If the Contractor finds discrepancy between the specifications and the drawings, and the physical conditions at the site of the Work or finds errors or omissions in the drawings or in any survey, Contractor shall promptly notify the HBHRCD in writing of such discrepancy, error or omission. If the Contractor observes drawings or specifications at variance with applicable law, ordinance, regulation, order or decree, Contractor shall promptly notify the HBHRCD in writing of such conflict.
- (b) On receipt of any such notice, the HBHRCD shall promptly investigate the circumstances and give appropriate instructions to the Contractor. Until such instructions are given, Work done by the Contractor, after Contractor's discovery of such error, discrepancy or conflict will be at Contractor's own risk and Contractor shall bear costs arising therefrom.

26. Cleanup: On completion of the Work, Contractor shall remove debris and surplus materials from the work site.

27. Guarantees: Contractor guarantees Work from defect in workmanship for the period of one year from the date of acceptance by the HBHRCD and shall repair and replace such Work, together with other displaced work, without expense to the HBHRCD, ordinary wear and tear, usual abuse or neglect excepted. HBHRCD may have the defects repaired and made good at the expense of the Contractor, if Contractor fails to comply with the above-mentioned conditions within a week after being notified in writing.

28. Safety: Contractor and subcontractors shall comply with the provisions of the Safety and Health Regulations for Construction, promulgated by the Secretary of Labor under the Contract Work Hours and Safety Standards Act, as set forth in Title 29, C.F.R. and by the California Division of Industrial Safety. Contractor shall take all precautions necessary for the safety and prevention of damage to property on/or adjacent to the work site, and for the safety of and prevention of injury to persons, including HBHRCD's employees, Contractor's employees, and third persons, on/or adjacent to the work site.

29. Termination: Contractor at Fault:

- (a) The HBHRCD shall have the right to terminate the Contractor for cause under any one or more of the following circumstances:
- (1) Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, failure to adhere to the progress schedule as approved from time-to-time by the HBHRCD Representative, failure to adhere to the schedule of values as approved from time-to-time by the HBHRCD Representative);
  - (2) Contractor's disregard of applicable laws and regulations;
  - (3) Contractor's repeated disregard of the authority or orders of the HBHRCD Representative;
  - (4) Contractor's repeated or persistent default of any of the provisions of the Contract Documents;
  - (5) Contractor's material breach of any provision of the Contract Documents;
  - (6) Contractor's failure to perform Work for a period of five consecutive work days unless such failure is excused because of inclement weather or Uncontrollable Circumstance.
- (b) If one or more of the grounds for termination exist, the HBHRCD, after giving the Contractor and the performance surety five days written notice, may at its sole discretion, without liability for trespass or conversion, take any of the following actions: terminate the service of the Contractor; exclude the Contractor from the site; take possession of the site and Work; take possession of all of Contractor's tools, appliances, construction equipment, and machinery at the site; take possession of all materials and component parts, equipment, or machinery stored at the site or for which the Contractor has paid but which are stored elsewhere; use the site, tools, appliances, construction equipment, machinery, parts, and materials to the full extent they could be used by Contractor; finish the Work as the HBHRCD may deem expedient; or make demand on the performance bond surety to complete the Work. When the HBHRCD terminates Contractor's services under this Section, Contractor shall not be entitled to receive further payments until the Work is completed. If the unpaid balance of the Contract Price is greater than all claims, costs, losses, offsets and damages (including without limitation all fees and charges of engineers, architects, land surveyors, contractors and other providers of professional services) sustained by the HBHRCD arising out of or relating to completing the Work or exercising its rights under this Section, the excess will be paid to Contractor or the performance bond surety. If the unpaid balance of the Contract Price is less than all claims, costs, losses, offsets and damages (including without limitation all fees and charges of engineers, architects, land surveyors, contractors and other providers of professional services) sustained by the HBHRCD arising out of or relating to completing the Work or exercising its rights under this Section, Contractor will pay the difference to the HBHRCD. When exercising any rights or remedies under this Section, the HBHRCD shall not be required to obtain the lowest price for the Work performed.
- (c) The termination of Contractor's services under this paragraph will not affect any rights or remedies the HBHRCD may have against Contractor existing at the time of termination or which may later accrue. Any release of retention or payment by the HBHRCD will not release Contractor from liability.

30. Termination: Contractor Not at Fault:

- (a) Upon five days' written notice to Contractor, the HBHRCD may, without cause and without prejudice to any other of the HBHRCD's rights or remedies, terminate the Contract.
- (b) Upon the service of a notice of contract termination, Contractor shall discontinue the Work in the manner, sequence, and at such times as directed by the HBHRCD Representative. Contractor shall remain responsible for the quality and fitness of the Work performed by Contractor before termination of the Contract. All requirements of the Contract pertaining to Work completed or to be completed as directed by the HBHRCD Representative as of the time of termination shall survive the termination, including without limitation, all indemnities, warranties, requirements for preparation of record drawings and completion of any "punch-list" items directed by the HBHRCD Representative. Contractor shall cooperate with HBHRCD with respect to providing information about the work in progress at the time of termination, as requested by the HBHRCD Representative.
- (c) Upon termination of the Contract, HBHRCD shall use reasonable efforts to determine and pay to Contractor within 90 days, without duplication, for the following items:
  - (1) For completed and acceptable Work executed in accordance with the contract Documents before the effective date of termination, including a fair and reasonable amount for overhead and profit on such Work, less any prior payments for the Work. The determined value of the Work, including overhead and profit, shall be consistent with the Contract Documents, including any schedule of payments or schedule of values.
  - (2) For documented direct expenses sustained before the effective date of termination in performing services or furnishing labor, materials, or equipment as required by the Contract Documents necessary for the execution of the uncompleted Work. The determined value of the documented direct expenses, including overhead and profit, shall be consistent with the Contract Documents, including any schedule of payments or schedule of values.
  - (3) For reasonable and documented direct expenses, including damages, incurred in settlement or as a consequence of terminated subcontracts;
  - (4) For other actual expenses reasonably incurred as a direct consequence of the termination.
- (d) Notwithstanding the foregoing, Contractor shall not be entitled to recover any loss of anticipated profit or revenue or other economic loss arising out of or resulting from the termination, including without limitation any claim for anticipated profits on the Work not performed or lost business opportunity.
- (e) If the Contractor is terminated under this Section, the HBHRCD may purchase from the Contractor all consumable supplies of the Contractor on hand, or in transit, or on definite commitment, including fuel, lubricants, and materials of construction not incorporated in the Work which, in the opinion of the HBHRCD Representative, are suitable and required to complete the Work; and the HBHRCD shall pay to the Contractor for such consumable supplies the prices paid therefore by the Contractor.

- (f) If the Contractor is terminated under this Section, upon request by the HBHRCD Representative, the Contractor shall provide the HBHRCD Representative with an itemized inventory and cost account of all plant, tools, equipment, labor and consumable supplies that have been used, are then in use, and were planned to be used on the Work. Further, upon request, the HBHRCD shall have the right to audit all of the Contractor's records relating to costs incurred or planned to be incurred in performing the Work.
31. Authority to Execute this Contract: The person or persons executing this Contract on behalf of Contractor warrants and represents that he/she has the authority to execute this Contract on behalf of Contractor and has the authority to bind Contractor to the performance of its obligations hereunder.
32. Representations: The parties acknowledge and agree that neither of them has made any representation with respect to the subject matter of this Contract or any representations inducing the execution and delivery hereof except such representations as are specifically set forth herein; and each party acknowledges that it has relied on its own judgment in entering into this Contract. The parties further acknowledge that any statements or representations that may have heretofore been made by either of them to the other are void and of no effect and that neither of them has relied thereon in connection with its dealings with the other.
33. Notices: Any notice or instrument required to be given or delivered by this contract may be given by depositing the same in any United States Post Office, registered or certified, postage prepaid, address to:
- To HBHRCD:  
Attn: Executive Director  
Humboldt Bay Harbor, Recreation, and Conservation District  
PO Box 1030  
Eureka Ca 95502
- To Contractor: \_\_\_\_\_
34. Assignment: Contractor shall not assign this contract or payments under this contract. Contractor and each subcontractor hereby assign to the HBHRCD rights, title, and interest in and to causes of action under Section 4 of the Clayton Act (15 U.S.C.A. Sec. 15) or under the Cartwright Act (Chapter 2 commencing with Section 16700 of Part 2 of Division 7 of the California Business and Professions Code), arising from purchases of goods, services, or materials for this contract or the subcontract. This assignment shall be made and become effective without further acknowledgement by the parties at the time HBHRCD tender's final payment to Contractor.
35. Amendment: No waiver or modification of this Contract shall be valid unless agreed upon and signed by both the HBHRCD and Contractor.
36. Nondiscrimination: Contractor shall ensure equal employment opportunity for all persons, regardless of race, color, religion, sex, creed, national origin, ancestry, age, medical condition, physical or mental disability, Vietnam-era veteran or special disabled veteran status, marital status or citizenship, within the limits imposed by law. These principles are to be applied by Contractor in all employment practices including recruiting, hiring, transfers, promotions, training, compensation, benefits, layoffs, and terminations. Contractor agrees to comply with Title VII of the Civil Rights Act of 1964, as amended, the



California Fair Employment Practices Act, the Americans With Disabilities Act of 1990, and any other applicable federal and state laws and regulations pertaining to nondiscrimination.

37. Uncontrollable Circumstances:

- (a) Upon Contractor's written request and submission of substantiating documentation of a delay resulting from an Uncontrollable Circumstance, the HBHRCD Representative shall give Contractor a non-compensable extension of time. Contractor shall submit a written request within seven days of the commencement of the Uncontrolled Circumstance.
- (b) Prior to completion and acceptance of the Work, Contractor is responsible for, and bears the risk of loss associated with, damage or loss to any portion of the Work regardless of the cause, except that Contractor may request an extension of any required Completion Date specified, as set forth in Section 36(a). Contractor shall repair or replace such damages or destroyed Work to its prior undamaged condition before being entitled to additional progress payments or final payment. Total or partial destruction or damage shall not excuse Contractor from completion of Work.
- (c) "Uncontrollable Circumstance" means any act, event or condition that is:
  - (1) beyond the reasonable control of the Contractor that justifies Contractor not timely performing an obligation or complying with any condition required under the contract documents, and
  - (2) materially expands the scope of, interferes with, or delays the Contractor's performance of obligations under the contract documents, but only if such act, event or condition is not the result of the willful or negligent act, error or omission, failure to exercise reasonable diligence, or breach of the contract documents on the part of the Contractor.
- (d) Examples of acts, events or conditions that typically qualify as uncontrollable circumstances include: naturally occurring events such as landslides, underground movement, earthquakes, fires, tornadoes, hurricanes, floods, lightning, epidemics, and extreme weather that threatens worker safety, property and/or project integrity in Contractor's sole determination; explosions, terrorism, sabotage, or similar acts of a declared public enemy; extortion; war; blockade; insurrection, riot or civil disturbance; labor disputes, except labor disputes involving employees of the Contractor, its affiliates, or subcontractors, vendors and suppliers; the failure of any subcontractor to furnish services, materials, chemicals or equipment on the dates agreed to, but only if such failure is the result of an event that would constitute an uncontrollable circumstance if it affected Contractor directly, and Contractor is not able after exercising all reasonable efforts to timely obtain substitutes; the preemption, confiscation, diversion, destruction or other interference in possession or performance of materials or services by a government agency in connection with a public emergency or any condemnation or other taking by eminent domain of any material portion of the Work.
- (e) Examples of acts, events or conditions that do not typically qualify as an uncontrollable circumstances include: weather conditions normal for the area where the Work is being performed; any delay that would not have occurred but for the Contractor's failure to comply with its obligations under the contract documents; Contractor's inability to obtain timely materials or equipment; any work related injuries, accidents or safety violations; any changes in interest rates,

inflation rates, wage rates, insurance premiums, commodity prices, currency values, exchange rates or other general economic conditions that significantly increase Contractor's cost of performing the Work; any change in the financial condition of the Contractor or any subcontractor affecting their ability to perform timely their respective obligations; the consequences of error, neglect or omissions by the Contractor, any subcontractor, or any other person in the performance of the Work; any change of union or labor work rules, requirements or demands which have the effect of increasing the number of employees employed on the Work or otherwise increasing the cost to the Contractor of performing the Work; inclement weather conditions normal for the area where the Work is being performed; any mechanical failure of equipment; or any electric utility power outages except as a direct result of an independent uncontrollable circumstance.

38. Extra, Changed Work:

- (a) The HBHRCD may require changes in, additions to, or deductions from the Work to be performed or to the materials to be furnished under this contract. No extra work shall be performed or change made except pursuant to a written order from the HBHRCD stating the extra work or change is authorized, and setting forth the basis upon which payment is to be made. No claim for additional compensation shall be valid unless pursuant to such a change order. Nothing in this section shall excuse the Contractor from proceeding with the prosecution of the changed work. When required by the HBHRCD, the Contractor shall furnish an itemized breakdown of the quantities and prices used in computing the value of any ordered change.
- (b) Adjustments in the amounts to be paid to the Contractor by reason of any such change, addition or deduction shall be determined by one or more of the following methods:
  - (1) By an acceptable lump sum proposal from the Contractor.
  - (2) By unit prices contained in the Contractor's original bid and incorporated in the contract documents or fixed by subsequent agreement between the HBHRCD and the Contractor.
  - (3) By ordering the Contractor to proceed with the work and to furnish daily reports of extra work. The reports shall itemize all costs for labor, material, and equipment rental. The reports for workers shall include hours worked, rates of pay, names and classification; and for equipment shall include size, type, identification number and hours of operation. Records and reports shall be made immediately available to the HBHRCD Representative upon his request.
- (c) When the HBHRCD orders extra work and there is an agreement between the HBHRCD and the Contractor to perform the extra work, the HBHRCD may approve the method used by the Contractor to accomplish the work. At the request of the HBHRCD, the method to be used shall be memorialized in writing prior to work being performed.

39. Governing Law and Venue: This Contract and performance hereunder and all suits and special proceedings shall be construed in accordance with the laws of the State of California. If any action is brought to enforce the terms of this contract it shall be brought in Humboldt County Superior Court.

40. Attorney's Fees: Should any litigation or arbitration be commenced between the parties hereto concerning this contract, or the rights and duties of any party in relation thereto, the party prevailing in

such litigation or arbitration shall be entitled, in addition to such other relief as may be granted to a reasonable sum as and for attorney's fees in such litigation or arbitration.

This Contract contains the sole and entire agreement between the parties. It supersedes any and all other agreements between the parties.

Executed in Eureka, California on \_\_\_\_\_ (date)

**HBHRCD:**

By: Larry Oetker  
Executive Director

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Board of Commissioners, Board President

Signature \_\_\_\_\_

Date: \_\_\_\_\_

**CONTRACTOR:**

Firm Name: \_\_\_\_\_

By: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Email: \_\_\_\_\_

Phone : \_\_\_\_\_

Contractor's License #: \_\_\_\_\_

Employer Tax ID#: \_\_\_\_\_

DIR ID #: \_\_\_\_\_

**(CONTRACT AGREEMENT PACKAGE)**

(Attach completed Contractor's "Certificate of Insurance" to this page)

<b>CERTIFICATE OF INSURANCE</b> <b>THE HUMBOLDT BAY HARBOR, RECREATION &amp; CONSERVATION DISTRICT, CALIFORNIA</b>					ISSUE DATE (MM/DD/YY) _____									
<b>PRODUCER</b>			THIS CERTIFICATE OF INSURANCE IS NOT AN INSURANCE POLICY AND DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.  INSURERS AFFORDING COVERAGE: _____ <b>BEST'S RATING</b> _____ INSURER A: _____ INSURER B: _____ INSURER C: _____ INSURER D: _____ INSURER E: _____											
<b>INSURED</b>			THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.											
INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXP. DATE (MM/DD/YY)	ALL LIMITS IN THOUSANDS									
	<b>GENERAL LIABILITY</b> <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCURRENCE <input type="checkbox"/> OWNER'S & CONTRACTOR'S PROT. <input type="checkbox"/> OTHER				EACH OCCURRENCE	\$ _____								
					DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ _____								
					MED. EXP. (Any one person)	\$ _____								
					PERSONAL & ADV INJURY	\$ _____								
					GENERAL AGGREGATE	\$ _____								
					PRODUCTS COMP/OP AGG.	\$ _____								
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS <input type="checkbox"/> GARAGE LIABILITY				COMBINED SINGLE LIMIT (Ea accident)	\$ _____								
					BODILY INJURY (Per person)	\$ _____								
					BODILY INJURY (Per accident)	\$ _____								
					PROPERTY DAMAGE	\$ _____								
	<b>EXCESS/UMBRELLA LIABILITY</b> <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCURRENCE  <input type="checkbox"/> DEDUCTIBLE <input type="checkbox"/> RETENTION				EACH OCCURRENCE	\$ _____								
					AGGREGATE	\$ _____								
	<b>WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICERS/MEMBER EXCLUDED?  If yes, describe under SPECIAL PROVISIONS below.				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">WC STATUTORY LIMITS</td> <td style="width: 40%;">OTHER</td> </tr> <tr> <td colspan="2">EACH ACCIDENT</td> </tr> <tr> <td colspan="2">DISEASE-POLICY LIMIT</td> </tr> <tr> <td colspan="2">DISEASE-EACH EMPLOYEE</td> </tr> </table>	WC STATUTORY LIMITS	OTHER	EACH ACCIDENT		DISEASE-POLICY LIMIT		DISEASE-EACH EMPLOYEE		
WC STATUTORY LIMITS	OTHER													
EACH ACCIDENT														
DISEASE-POLICY LIMIT														
DISEASE-EACH EMPLOYEE														
	<b>PROPERTY INSURANCE</b> <input type="checkbox"/> COURSE OF CONSTRUCTION				AMOUNT OF INSURANCE	\$ _____								
DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS														
<b>THE FOLLOWING PROVISIONS APPLY:</b> 1. None of the above-described policies will be canceled until after 30 days' written notice has been given to the District at the address indicated below. 2. The District, its officials, officers, employees, and volunteers are added as insureds on all liability insurance policies listed above. 3. It is agreed that any insurance or self-insurance maintained by the District will apply in excess of and not contribute with the insurance described above. 4. The District is named a loss payee on the property insurance policy listed above, if any. 5. All rights of subrogation under the property insurance policy listed above have been waived against the District. 6. The workers' compensation insurer named above, if any, agrees to waive all rights of subrogation against the District for injuries to employees of the insured resulting from work for the District or use of the District's premises or facilities.														
<b>CERTIFICATE HOLDER/ADDITIONAL INSURED</b> <b>The Humboldt Bay Harbor, Recreation &amp; Conservation District, 601 Startare Drive, Eureka, CA 95501</b>				<b>AUTHORIZED REPRESENTATIVE</b> SIGNATURE _____ TITLE _____ PHONE NO. _____										

Rev. 6/08

**(CONTRACT AGREEMENT PACKAGE)**

(Attach completed Contractor's "Commercial General Liability Endorsement" to this page.)

INSURER:  
POLICY NUMBER:  
ENDORSEMENT NUMBER:

ISO FORM CG 20 10 22 85: (MODIFIED)  
COMMERCIAL GENERAL LIABILITY

**THIS ENDORSEMENT CHANGES THE POLICY, PLEASE READ IT CAREFULLY**

**ADDITIONAL INSURED – OWNERS, LESSEES, OR  
CONTRACTORS (FORM B)**

THIS ENDORSEMENT MODIFIES INSURANCE PROVIDED UNDER THE FOLLOWING:

COMMERCIAL GENERAL LIABILITY COVERAGE PART.

**SCHEDULE**

**NAME OF ORGANIZATION:**

**HUMBOLDT BAY HARBOR, RECREATION & CONSERVATION DISTRICT  
601 Startare Drive, Eureka, California 95501**

**WHO IS AN INSURED** (Section II) is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" for that insured by or for you.

Modifications to ISO form CG 20 10 11 85:

1. The insured scheduled above includes the Insured's officers, officials, employees, and volunteers.
2. This insurance shall be primary as respects the insured shown in the schedule above, or if excess, shall stand in an unbroken chain of coverage excess of the Named Insured's scheduled underlying primary coverage. In either event, any other insurance maintained by the Insured scheduled above shall be in excess of this insurance and shall not be called upon to contribute with it.
3. The insurance afforded by this policy shall not be canceled except after thirty days prior written notice by certified mail return receipt requested has been given to the District.

\_\_\_\_\_  
Signature-Authorized Representative

\_\_\_\_\_  
Address

(Attach completed Contractor's "Automobile Liability Special Endorsement" to this page.)

C-34

(Attach completed Contractor's "Workers' Compensation and Employer's Liability Special Endorsement" to this page.)

REV. 1/93



**(CONTRACT AGREEMENT PACKAGE)**

**PERFORMANCE BOND**

WHEREAS, the Humboldt Bay Harbor, Recreation and Conservation District, County of Humboldt, State of California, by motion passed \_\_\_\_\_, 20 \_\_\_\_, has awarded to \_\_\_\_\_

\_\_\_\_\_ hereinafter designated as the "Principal," a contract for constructing

**2020 Maintenance Dredging – Woodley Island Marina**

AND WHEREAS, said Principal is required under the terms of said contract to furnish a bond for the faithful performance of said contract,

NOW THEREFORE, we,

\_\_\_\_\_  
as Principal, and \_\_\_\_\_,  
as Surety, are held and firmly bound unto the Humboldt Bay Harbor, Recreation and Conservation District, California, hereinafter called the "Owner," to the penal sum of

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)  
lawful money of the United States of America, for which sum well and duly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if the hereby bounded Principal, his or its heirs, executors, administrators, successors, or assigns shall in all things stand to and abide by and well and truly keep and perform all the undertakings, terms, covenants, conditions, and agreements in the said contract and any alteration thereof, made as therein provided, all within the time and in the manner therein designated and in all respects according to their true intent and meaning, then this obligation shall become null and void; otherwise, it shall be and remain in full force and virtue.

FURTHER, THE SAID SURETY, FOR VALUE RECEIVED, HEREBY STIPULATES AND AGREES that no change, extension of time, or alteration or modification of the Contract Documents or of the work to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or modification of the Contract Documents or of work to be performed thereunder.

**(CONTRACT AGREEMENT PACKAGE)**

IN WITNESS WHEREOF five (5) identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety herein named, on the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

\_\_\_\_\_  
Principal

By \_\_\_\_\_

\_\_\_\_\_  
Title

\_\_\_\_\_  
Surety

By \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Address of Surety

**(CONTRACT AGREEMENT PACKAGE)**

**LABOR AND MATERIAL BOND**

KNOW ALL MEN BY THESE PRESENTS: That

WHEREAS, the Humboldt Bay Harbor, Recreation and Conservation District, by motion passed \_\_\_\_\_, 20 \_\_\_\_, has awarded to

\_\_\_\_\_ hereinafter designated as the "Principal," a contract for constructing

**2020 Maintenance Dredging – Woodley Island Marina**

AND WHEREAS, said Principal is required to furnish a bond in connection with said contract, providing that if said Principal, or any of his or its subcontractors, shall fail to pay for any materials, provisions, provender, or other supplies or teams used in, upon, or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, the Surety on this bond will pay the same to the extent hereinafter set forth;

NOW THEREFOR, we, \_\_\_\_\_,

as Principal, and \_\_\_\_\_,  
as Surety, are held and firmly bound unto the Humboldt Bay Harbor, Recreation and Conservation District, California, hereinafter called the "Owner," to the penal sum of

\_\_\_\_\_ Dollars (\$\_\_\_\_\_) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, his or its subcontractors, heirs, executors, administrators, successors, or assigns shall fail to pay any of the persons named in Section 3181 of the Civil Code, or amounts due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant, or for any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Section 18806 of the Revenue and Taxation Code with respect to such work and labor as required by Section 3247 et seq. of the Civil Code of California, then said Surety will pay for the same, in or to an amount not exceeding the amount hereinabove set forth, and also will pay in case suit is brought upon this bond such reasonable attorney's fees, as shall be fixed by the court, awarded and taxed as in the above-mentioned statutes provided.

**(CONTRACT AGREEMENT PACKAGE)**

FURTHER, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, or alteration or modification of the Contract Documents or of the work to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, or alteration or modification of the Contract Documents or of work to be performed thereunder.

IN WITNESS WHEREOF five (5) identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety

herein named, on the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

\_\_\_\_\_  
Principal

By \_\_\_\_\_

\_\_\_\_\_  
Title

\_\_\_\_\_  
Surety

By \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Address of Surety

(CONTRACT AGREEMENT PACKAGE)

**GUARANTY BOND**

KNOW ALL MEN BY THESE PRESENTS: That

WHEREAS, the Humboldt Bay Harbor, Recreation and Conservation District, County of Humboldt, State of California, by motion passed \_\_\_\_\_, 20 \_\_, has awarded to

\_\_\_\_\_,  
hereinafter designated as the "Principal," a contract for constructing

**2020 Maintenance Dredging – Woodley Island Marina**

AND WHEREAS, said Principal is required under the terms of said contract to furnish a bond for correction of deficiencies during the specified guaranty period;

NOW THEREFORE, we,

\_\_\_\_\_,  
as Principal, and \_\_\_\_\_, as Surety,  
are held and firmly bound unto the Humboldt Bay Harbor, Recreation and Conservation District, California,  
hereinafter called the "Owner," to the penal sum of

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)  
lawful money of the United States of America, for which sum well and duly to be made, we bind ourselves, our  
heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if the hereby bounded Principal, his or its heirs, executors,  
administrators, successors, or assigns shall in all things stand to and abide by and well and truly keep and  
perform all the undertakings, terms, covenants, conditions, and agreements in the said guaranty of the contract,  
all within the time and in the manner therein designated and in all respects according to their true intent and  
meaning, then this obligation shall become null and void; otherwise, it shall be and remain in full force and  
virtue.

**(CONTRACT AGREEMENT PACKAGE)**

IN WITNESS WHEREOF five (5) identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety

herein named, on the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

\_\_\_\_\_  
Principal

By \_\_\_\_\_

\_\_\_\_\_  
Title

\_\_\_\_\_  
Surety

By \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Address of Surety

# **Contract Documents**

# Technical Specifications



## **Section 02 48 20**

### **Dredging and Disposal**

#### **PART 1-GENERAL**

##### **1.01 WORK INCLUDED**

- A. The work under this Section consists of providing all labor, plant, equipment, supplies, and materials necessary to dredge, haul, and dispose of all shoaled materials within designated limits of dredging from the Humboldt Bay Harbor, Recreation and Conservation District's (District) Woodley Island Marina (WIM). The quantity of dredging will be 7,192 cubic yards (cy) with an option for the District to award up to an additional 4,308 cy depending on the value of bids received. Dredging will occur in the shoreward side of the fairways between WIM Docks C-G. Specific locations of dredging will be determined by the District in consultation with the Contractor. There are several dredged material disposal options. Attachment D includes project descriptions previously permitted and proposed amendments that are currently in the permitting process.

##### **1.02 MOBILIZATION AND DEMOBILIZATION**

- A. As applicable, mobilization shall consist of all work required to prepare the Contractor's dredging plant and equipment for transfer to the job site; transport dredging plant and equipment, labor, supplies and incidentals to the job site; prepare equipment for dredging and slurry pumping to dewatering units; and maintaining dredging plant and equipment in working condition at the job site during the dredging period.
- B. Demobilization shall consist of all work required to prepare the Contractor's dredging plant and equipment for transfer and removing all dredging plant, equipment, labor and unused supplies and incidentals from the job site at the completion of contract work, including the cleanup of all land based staging areas and other areas used in the execution of the work.

##### **1.03 SEQUENCE OF WORK**

- A. Prior to initiation of work, the District must approve, in writing, the Contractor's proposed sequence of dredging work. Changes to the proposed sequence may be made only with the District's written approval.

- B. The District reserves the right to make reasonable changes to the Sequence of Work at no extra cost to the District.

#### **1.04 RELATED DOCUMENTS**

- A. Section 01 10 00–Summary of Work
- B. Section 01 22 00–Measurement and Payment

#### **1.05 SUBMITTALS**

- A. Within seven (7) calendar days following Notice of Award, the Contractor shall submit the following submittals to the District for review and comment. The District will review and forward the documents to the U.S. Army Corps of Engineers (USACE) for approval. After receipt and District approval of these documents, the USACE will issue an Authorization to Dredge (ATD) letter. This letter will supplement the existing USACE permit and confirm the approved disposal volume appropriations and disposal site restrictions. Dredging may not commence prior to receipt of the ATD.

1. **DREDGING OPERATIONS PLAN:** Shall incorporate all permit constraints and restrictions. The dredging operations plan shall include, but not be limited to, the following items:
  - a. U.S. Army Corps of Engineers permit and other applicable permits numbers (a copy of all existing District provided permits is contained in Attachment D of these Contract Documents. Other permits to be provided by the District are expected to be received August 18, 2020 or earlier).
  - b. Episode number: This is the second dredging episode to occur under the U.S. Army Corps of Engineers permit.
  - c. The Contractor's business name, telephone number, dredging site representatives and emergency contact phone numbers.
  - d. Anticipated dredging schedule (schedule to include submittal dates, pre-dredge survey date, dredging start date, dredging finish date and post-dredge survey date.)
  - e. Proposed equipment and method of dredging, including proposed dredge cuts. The equipment description should contain, at a minimum, the type, name or number, capacity, overall dimensions, radio call signs,

and other relevant specifications as may be required by permit conditions.

- f. The method and equipment utilized to transport the dredged material to the Humboldt Open Ocean Disposal Site (HOODS) and/or to upland dewatering sites.
- g. The method and equipment to be used for dredging position control indicating how horizontal and vertical position control will be maintained.
- h. The method and equipment used for determining the positioning by electronic methods of the dredge and dump scow(s) during entire dredging and disposal operation.
- i. Documentation of quality control procedures, including samples of daily and weekly forms, reports and submittals.
- j. Security and safety methods to keep the public away from and clear of all dredging and disposal activities including compliance with appropriate U.S. Coast Guard rules.
- l. A copy of the Notice to Mariners.
- m. Any and all other information required by the U.S. Army Corps of Engineers for approval of the Dredging Operations Plan.

2. **SOLID DEBRIS MANAGEMENT PLAN:** Shall incorporate all permit constraints and restrictions. The solid debris management plan shall include, but not be limited to, the following items:

- a. U.S. Army Corps of Engineers permit number
- b. Episode number (to be provided by the District).
- c. Source and expected type of debris.
- d. Debris retrieval and separation method
- e. Debris disposal method and location.
- f. Schedule for disposal operations.
- g. Debris containment method to be used, if floatable debris is involved.

3. Disposal at HOODS: For disposal of material at HOODS, the Contractor shall follow the requirements in EPA Standard Ocean Disposal Conditions for HOODS in Attachment C.

4. Dredge Operations Daily Reports: The Contractor will be required to prepare and maintain a daily report of operations and furnish a copy thereof to the District. Forms to be used shall be developed by the Contractor and accepted by the District prior to start of work. Copies of the daily reports shall be provided to the District on a weekly basis. Progress payments for dredging will not be made until a complete set of reports covering the payment period are in the District's possession.
5. Vessel Traffic Control Log: The Contractor shall submit a copy of the Vessel Traffic Control Log to the District on a weekly basis.
6. Special Notices: The Contractor shall provide immediate written notification with documentation of work stoppages and delays that may affect the dredging plan and schedule.

#### **1.06 SITE CONDITIONS**

- A. The material to be removed is the material which composes the shoaling that has occurred since the areas were last dredged. Debris, rubbish, anchors, chain, and other articles typical of ship channels and berthing areas may also be encountered. Such material removed from the areas to be dredged shall become the property of the Contractor and shall be removed from the project site and disposed of in an acceptable manner.
- B. The records of previous maintenance dredging for the Woodley Island Marina are available for inspection at the U.S. Army Corps of Engineers, San Francisco District, 1455 Market Street, San Francisco, CA 94103-1398.
- C. The Contractor is responsible for contacting all agencies and utility companies having jurisdiction or services in the project area for additional information.

#### **1.07 PERMIT REQUIREMENTS**

- A. All project activities shall comply with all project permits including the requirements of applicable codes, ordinances and requirements of local, state, and federal agencies.
- B. Most District provided permits have been obtained. Remaining District provided permits are expected to approved by the California Coastal Commission during their July 8-10, 2020 or August 12-14, 2020 meetings. District provided permits will include Clean Water Act Section 401 Certification, Clean Water Act Section 404 Permit (Army Corps Permit) and Coastal Act Coastal Development Permit. The Contractor shall be responsible for obtaining any other required permits. Permit status is further described in Attachment D.

- C. Current District provided permits generally allow for (1) dredging using a clamshell bucket; (2) dredged material disposal at the Humboldt Open Ocean Disposal Site (HOODS); and (3) dredged material offloading and disposal at Redwood Marine Terminal II using a dredged material reslurry / pump offloading method. Permit amendments are being pursued to (1) allow for dredged material offloading using an excavator or crane; and (2) increase the allowable area for temporary dredged material dewatering basins.
- D. The Contractor shall be prepared for, and allow for, U.S. Army Corps of Engineers, Regional Water Quality Control Board, State Department of Fish and Wildlife, NOAA Fisheries, and/or other regulatory agencies inspection at any time during dredging operations.

## **PART 2-PRODUCTS**

(Not Used)

## **PART 3-EXECUTION**

### **3.01 GENERAL**

- A. Contractor shall excavate and dredge to the amounts determined by the bid or as directed by the District. Only fairways (open areas between docks and slips) will be dredged, not boat slips. The District is requesting Base Bids to dredge 7,192 cy of material. The District is also requesting Option Bids to dredge up to an additional 4,308 cy (total of 11,500 cy). The District may make an award for between 7,192 cy and 11,500 cy bid. Prioritization of areas to be dredged is dependent on the award that is made. The District will work with the Contractor to identify areas to be dredged within the four fairways between Docks C-G.

- B. All material that sloughs into dredged areas from outside the dredging limits shall, prior to acceptance and at no additional cost to the District, be removed to the required dredge limits.
- C. Dredging operations shall be conducted using equipment and procedures designed to minimize water turbidity. Turbidity monitoring and reporting as described in the permits will be conducted by the contractor.
- D. The Contractor shall comply with all permit conditions, as set forth in the permits.
- E. The Contractor shall operate and maintain proper lighting and signals during both daytime and nighttime operations on all floating equipment, ranges, markers, and buoys in accordance with U.S. Coast Guard requirements. The Contractor shall be responsible for all damage resulting from negligence or failure in this respect.
- F. The Contractor shall comply with all permit conditions, as set forth in the permits, regarding participation in the Coast Guard's Vessel Traffic Control Service (VTS).

### **3.02 DISPOSAL OF DREDGED MATERIAL**

- A. Unless noted or specified otherwise, all dredge material shall be transported from the dredge site and disposed of at the Humboldt Open Ocean Disposal Site (HOODS) and/or Redwood Marine Terminal II (RMT II). There are two options for disposal at RMT II (RMT II Option 1 and RMT II Option 2). Permits provided in Attachment D provide further details regarding approved methods and constraints.

#### Disposal at HOODS

Contractor shall read Attachment C, EPA Standard Conditions for Disposal at HOODS.

#### RMT II Option 1 – Offload Material With Excavator or Crane with Clamshell Bucket (Figures 1 and 2)

*Dock Preparation.* This option would involve trucks travelling on the RMT II dock. Contractor would be responsible to ensure that the dock can bear the weight of the trucks without damage. This may involve replacing deck boards, using crane mats, and other methods. After dredging operations, the Contractor will restore the dock to the same or better condition than before the project.

*Mooring.* A barge and hopper containing dredged material would moor near the RMT II dock. Equipment may not be moored over or within 20 feet of eelgrass. Additionally, spud poles, anchors and other equipment may not be located within 20 feet of eelgrass.

*Offloading.* An excavator or crane on a barge would offload dredged material to trucks on the dock that would transport the material and deposit it in temporary dewatering basins constructed by the contractor.

So as not to substantially impact use of the dock by existing tenants, the following offloading restrictions must be accommodated:

1. During times in which existing dock tenants (Taylor Shellfish and Pacific Flake) may require access to the dock, off-loading will be limited as follows.
  - a. Within any 24 hour period, there will be a maximum of four dredged material off-loading events.
  - b. During each off-loading event, contractor will work with existing dock tenants to minimize impacts to access. For example, pedestrians, bikes and forklifts will be allowed to pass after individual trucks are loaded.
  - c. Contractor will notify existing tenants regarding the estimated schedule of off-loading events and one day a week will limit operations between the hours of 8:00 am to noon in order to accommodate Taylor Shellfish's shipping schedule and related fork lift activity on the dock.

*Dewatering.* Contractor would construct temporary dewatering basins, as described in the permits. In general, the dewatering basins would be built with K-Rails or similar structures and lined. Bay water would be returned to the bay gradually through an existing drain inlet. Currently, only the area shown in Figure 3 is permitted for dewatering. Once permitted, the area shown in Figure 1 could be used.

*Debris Management.* At some point in the movement of the dredged material, the material will be filtered through a "trash rack". Debris (e.g., ropes, anchors) shall be segregated from the dredged material and appropriately recycled or disposed of.

*Stockpiling.* After dewatering the dredged material, Contractor would remove dewatering equipment and stockpile the material at the site. The contractor would move the material into mound(s), cover it, and establish a mechanical filtration system to prevent stormwater discharge. District would work with the Contractor to identify locations for stockpiling within the dewatering area.



Figure 1. Potential project elements for RMT II Option 1.



Figure 2. Close up of potential barge mooring area and buffers from mapped eelgrass that must be maintained for RMT II Option 1.



## RMT II Option 2 – Offload Material with Pumps (See Figure 3)

*Mooring.* Contractor would moor the barge with dredged material at the RMT II dock.

*Reslurry dredged material.* Contractor would reslurry the dredged material with bay water. District would provide a fish protection screen for the water intake to be placed in. Permits restrict the rate of pumping and require testing of water velocities near the screen face. Contractor would be responsible for compliance with these (and all other) permit conditions. Contractor would provide all other equipment (e.g., power, pump(s), valves, nozzles, piping, etc.) to pump water to the hopper.

*Pumping of dredge slurry to dewatering units.* District would provide piping from the end of the Redwood Marine Terminal II dock to the temporary dewatering basins or water clarifiers described below. Contractor would provide any other required equipment including power, pump(s), couplers, etc. Contractor would conduct the pumping of the dredge slurry to the dewatering units.

*Option 2a. Temporary Dewatering Basins.* Contractor would construct and use temporary dewatering basins and implement stockpiling as described above for RMT II Option 1. Currently, only the area shown in Figure 3 is permitted for dewatering. The area shown in Figure 1 could be used once permits are obtained.

*Option 2b. Water Clarifiers.* Contractor would pump the water to existing water clarifiers on site. Contractor would be required to prepare the clarifiers to receive the water prior to use. This would include (1) removing existing water from the clarifiers, (2) ensuring the clarifiers will not refill with water from the RMT II water system, and (3) removing obstructions from the clarifiers that would impede removal of the dredged material once it is dried. Decant water would be gradually drained back to the bay as described in the permits (Attachment D). Contractor would cover the filled clarifiers so rainwater could not enter them.



**Figure 3. Potential barge location, dewatering area and drain inlet for RMT II Option 2. Permits are being pursued for the larger dewatering area shown in Figure 1 and that larger area could be used once permitted. The water intake to the barge could optionally be suspended from the barge.**

- B. Contractor shall record and maintain electronic positioning records of the dredge or dump scow during entire dredging operation at the dredge site, disposal site and in route to and from disposal site. These records are to be submitted on a weekly basis each Friday during dredging to the U.S. Army Corps of Engineers, with a copy to the District. Electronic positioning records shall conform to all requirements in effect at the time of dredging, as set forth in the U.S. Army Corps of Engineers Permit.
- C. The Contractor shall comply with all permit conditions, as set forth in the permits, regarding overflow requirements.
- D. Misplaced Material: Any dredged material that escapes, sloughs, or is lost at any time while dredging, loading, or transporting shall be re-dredged or retrieved, and disposed as directed by the District, at the Contractor's expense. Likewise, any material disposed of in an area other than that designated on the Contract Drawings or stated in the Permit, unless approved in writing by the District, shall be re-dredged or retrieved and disposed as directed by the District, at the Contractor's expense.

### 3.03 DREDGING OPERATIONS

- A. Excavate the channel material within the required dredging limits as determined by the District, but not to exceed the volume described in the bid document.

### **3.04 OVERDEPTH AND SIDE SLOPES**

- A. Overdepth: Horizontal plane overdepth allowance shall be 1 foot in all dredging areas. Material actually removed from within the specific areas to be dredged to a depth of not more than the allowable overdepth limit, as shown on the Contract Drawings, will be measured and paid for at the Contract unit price. However, total compensation shall not exceed the bid amount unless approved in writing by the District.
- B. Side Slopes
  - 1. Material actually removed within limits of dredging on the side slopes will be measured and paid for at the Contract unit price. However, total compensation shall not exceed the bid amount awarded unless approved in writing by the District.
  - 2. Side slopes are given for measurement and payment purposes only and are not necessarily the angle of repose of the soil. Sloughing side slopes shall not be the basis for claims against the District. End slopes, where indicated on the Contract Drawings, shall be treated in the same manner as side slopes.
  - 3. Measurement for payment will be to the limits of dredging as shown on the Contract Drawings.
- C. Excessive Dredging: Material taken from beyond the allowable overdepth set forth in subparagraphs "Overdepth" and "Side Slopes" above, will not be paid for.

### **3.05 EQUIPMENT**

- A. Dredging equipment shall be limited to clam shell bucket, excavator, or alternate method approved by the Executive Director. Suction dredge equipment is not permitted for this Project.
- B. The Contractor's equipment shall be of sufficient size and capacity to meet the productivity, tolerance, and schedule requirements of the Work, and shall be kept in good working condition in order to perform the Work efficiently.
- C. If an electric dredge is to be used, the Contractor shall make all arrangements and pay all costs associated with installing, removing and operating the electrical service for the dredge.
- D. If a pump(s) is used to pump dredge slurry to dewatering unit(s), the Contractor shall make all arrangements and pay all costs associated with installing, removing and operating the pump(s).

- E. If a diesel dredge, pumps or generator is to be used, Contractor shall observe all applicable standards and regulations regarding air quality emissions and fueling of dredge and other attendant plant.
- F. The Contractor shall provide a positioning system for horizontal control capable of functioning during all waterborne activity hours. The Contractor shall establish and maintain all survey monuments, shore stations and control points necessary to operate the waterborne positioning system.
- G. The District shall be given free access to monitor positioning and measuring activities on the Contractor's positioning system. The Contractor shall provide copies of calibration, positioning and measuring data and results to the District upon this request. The Contractor shall place and maintain the positioning system and all gauges, range lights, buoys and other markings required to assure the accuracy of the surveys. The Contractor shall submit a description of the positioning system equipment, including accuracy's, to the District for review and acceptance. The Contractor shall take necessary measures to confirm that the selected system is operational at all times during dredging and can operate under the conditions present at the dredging site.
- H. Should the Contractor (during the progress of the Work) lose, dump, throw overboard, sink or misplace any material, plant, machinery or appliance which may be dangerous to intended uses of the waterway, or cause pollution of the waters, the Contractor shall give immediate notice, with a description and location of such obstructions, to the District, and, when required, shall mark, boom or buoy such obstructions until they are removed. The Contractor shall remove such obstructions within three (3) days after being directed to do so by the District. Should the Contractor refuse, neglect or delay compliance with the above requirements, such obstructions may be removed by the District, and the cost of such removal may be deducted from any money due or become due to the Contractor.

### **3.06 HYDROGRAPHIC SURVEYS**

- A. The Contractor will be required to perform a pre-dredge survey of the Marina dredging limits within ten (10) calendar days after receipt of Notice to Proceed in accordance with Specification Section 00 31 21. For all surveys, the Contractor shall notify the District at least five (5) days prior to performance of work.
- B. Immediately after completion of the entire work, the Contractor shall perform a post-dredge survey. All areas found to be in compliance with the contract requirements will be accepted and be measured for payment as stated in "Section 01 22 00: Measurement and Payment."

### **3.07 SCHEDULE**

- A. The schedule for the dredging work may be subject to regulatory dredging "windows"; these will be described in the U.S. Army Corps of Engineers permit, if applicable, and shall be adhered to by the Contractor. It is expected that the dredging work window will be between July 1 - October 15, 2020.

**\*\*\* End of Section \*\*\***

## **Section 01 10 00**

### **Summary of Work**

#### **PART 1 GENERAL**

##### **1.01 RELATED DOCUMENTS**

- A. Contract Documents and Plans, including Invitation For Bids, Notice To Bidders, Proposal, Bidder Certifications, Agreement, General Conditions and other sections of the Technical Provisions, apply to this Section.

##### **1.02 WORK COVERED BY THE CONTRACT DOCUMENTS**

- A. Description. The Work of this Contract includes work covered by lump sum and unit prices. The Work of this Contract comprises dredging activities, using a closed clam shell bucket with excavator or crane, of all areas described by the Contract Documents and dredged material disposal, dewatering and/or stockpiling. Work of the Contract also includes pre- and post- hydrographic surveys. Prior to initiation of dredging activities, contractor is to attend a pre-construction meeting at Woodley Island with the HBHRCD, and the permitting agencies if available to review the permit conditions of approval. Contractor to review information from pre-dredge hydrographic survey with HBHRCD to confirm dredge location, volumes and schedule. Work must be completed by October 15, 2020 unless extended by District and other regulatory agencies.
- B. Location of Project. Project dredging is located at the Woodley Island Marina in Eureka, California and encompasses marina fairways between Docks C and G. Dredged material disposal may occur at the Humboldt Open Ocean Disposal Site or at Redwood Marine Terminal II. All work is within Humboldt County, California.

##### **1.03 WORK RESTRICTIONS**

- A. Access: Access shall be shared access with the access required by District Tenant's and other Contractors in connection with activities being performed by other District Tenant's and Contractors at the Site and adjacent sites and access shall be through project sites where there are activities being performed by others. Access may be moved at the District's discretion to accommodate adjacent work activities. Access to the site from the Bay shall be in accordance with the requirements of all permits obtained at the time of the work, including requirements of the Permits listed in Paragraph 1.05 "PERMITS" and U.S. Coast Guard. Permits have not yet been obtained for all project options. It is expected that all permits will be obtained by August 18, 2020.
- B. Notification: Contractor to notify HBHRCD a minimum of 72 hours prior to dredging. HBHRCD will be responsible for notifying boat owners and clearing sites prior to dredging activities as needed.

#### **1.04 SPECIAL CONDITIONS AND RESTRICTIONS PERTAINING TO WORK**

- A. Contractor shall attend a mandatory preconstruction meeting with HBHRCD and permitting agencies as available to review permit conditions.
- B. Contractor shall comply with the United States Coast Guard requirements for the safe boating and other navigational operations while performing work on Humboldt Bay or any other area where the Coast Guard has jurisdiction.
- C. Contractor will not be compensated for materials removed beyond limits of dredging or greater than one foot of overdraft. Contractor will not be compensated beyond the Base Bid Total and any amount awarded by the HBHRCD for the Option Bid.

#### **1.05 PERMITS**

- A. The Contractor will be responsible for complying with the following permits: A U.S. Army Corps of Engineers Dredging Permit, a Regional Water Quality Control Board Water Quality Certification, a California Coastal Commission Coastal Development Permit, a Humboldt Bay Harbor District Permit and standard conditions for use of HOODS. Obtained permits and permit amendments as of the time of this solicitation are included in Attachment D. It is expected that all permits will be acquired by August 18, 2020, likely earlier. The Project is exempt from the California Environmental Quality Act.
- B. Contractor acknowledges that the Scope of the Work includes services not provided under specific Bid items that are reasonably necessary to comply with the Environmental Permits. In the event that an additional Environmental Permit necessary for the performance of the Work is issued, or an existing Environmental Permit is modified, after the Bid Submission date, the Contractor recognizes the terms, conditions and requirements of such Environmental Permit or modification may require the Contractor to perform services or to provide services or to provide materials which are different from the Scope of Work in the Contract Documents. In such event, the Contractor shall not be entitled to any adjustment in the Contract Sum or Contract Times unless such change in the Work materially differs from the Work in the Contract Documents and such change could not be reasonably expected by the Contractor given the ordinarily encountered and generally recognized implementation of similar Environmental Permits. Contractor shall be responsible for its costs of evaluating the implications for the Work of the terms, conditions, and restrictions of the Environmental Permits, and of responding to any Requests for Proposals or Field Changes of the District which are issued in connection with the issuance of the Environmental Permits.
- C. The specification of specific permits applying to the Work shall not limit or restrict the obligation of the Contractor in the performance of the Work to comply with any and all other laws, regulations or permits which are described in the Contract Documents or which apply to the performance of the Work.

## **1.06 GEOTECHNICAL/PARTICLE SIZE INFORMATION**

- A. Particle-size information was obtained from dredged material samples collected within the District's Woodley Island Marina in January, 2017. Dredged material samples were tested by SHN according to ASTM D422 Method—Particle Size Analysis. A copy of the particle-size information is attached as Attachment E. Results of these investigations may be used as a general guide for classifying materials for the intended purposes, but should not be relied upon to provide a complete and total representation of the project site subsurface conditions. Contractor shall make his or her own interpretation and conclusions on the information presented in the report. The report is available for review at the offices of the District.

**End of Section**



## **Section 01 22 00 Measurement and Payment**

### **PART 1 GENERAL**

#### **1.01 General:**

- A. Unless otherwise specified in other individual sections of these Specifications, quantities of work shall be determined from measurements or dimensions in horizontal planes.
- B. Units of measurement shall be in accordance with U.S. Standard Measures.
- C. Materials and unit price items of work that are to be paid for on a measurement basis in accordance with Part 2 of this section.

#### **1.02 Lump Sum Price Breakdown:**

- A. Immediately after award of the Contract and prior to approval of initial payment request, the Contractor shall submit a cost breakdown list to the District for lump sum bid items. This list shall consist of the major components of work that make up the bid items and shall be used for determining progress pay estimates. The Contractor shall fill in the amounts for each component, prorating general costs such as setup, overhead, and profit in each component. The total of all components of each lump sum bid item shall equal the total of that lump sum bid item. If the amount indicated in the Contract for any item on the list appears unbalanced, it may be revised as deemed necessary by the District, unless the Contractor can substantiate these costs.
- B. Only work items of value to the Owner shall be included in the list. An item for cleanup shall be listed in the breakdown, in the amount of at least 1/4 of 1 percent (0.25%) of the total bid item. If cleanup proceeds as the job progresses, then partial payments of these amounts will be made accordingly.

### **PART 2 PRODUCTS**

#### **2.01 General:**

- A. All work shall be completed and placed in compliance with the Plans and Specifications, and as directed by the District.

## 2.02 Measurement and Payment Items:

A. Bid items are defined and measured as follows:

### **Item 1. Pre- and Post-Dredging Hydrographic Survey (Base Bid)**

Measurement shall be on the basis of a fixed lump sum bid price less retention, and shall be considered as full compensation for furnishing all labor, equipment, and materials necessary to conduct one pre-dredging hydrographic survey, and one post-dredging hydrographic survey of Woodley Island Marina, as shown on the Plans, as specified in the Contract Documents and these Technical Specifications, as required for volume estimates of dredge material removed, and as directed by the District. Fifty percent (50%) of the Bid Amount for this item shall be paid upon completion of the pre-dredging Hydrographic Survey satisfactory to the District, and fifty percent (50%) of the Bid Amount for this item shall be paid upon completion of the post-dredging Hydrographic Survey satisfactory to the District.

### **Item 2. Mobilization and Demobilization (Base Bid)**

Payment for mobilization shall be on the basis of a fixed lump sum bid price less retention, and shall be considered as full compensation for furnishing all labor, equipment, and materials necessary to establish and maintain a physical presence at the project site for the duration of the work, including, but not limited to attendance at periodic project meetings, compliance with applicable project reporting, invoicing, and progress payment processes, mobilization, temporary shelters, temporary office space and utilities for construction management personnel, temporary fencing as required, costs associated with acquiring additional work and staging areas as necessary, preparation of submittals, and demobilization. Two-thirds (67%) of the bid amount for this item shall be paid to the Contractor in the first progress payment. Upon completion of demobilization and complete project clean-up satisfactory to the District, one-third (33%) of the bid amount for this item shall be paid to the Contractor in the final progress payment.

### **Items 3 and 4. Dredging and Disposal (Base Bid and Option Bid)**

1. Measurement: All dredge areas found to be in compliance with the contract requirements, as verified by the District, will be measured for payment. Payment will be made for all material removed within the limits of dredging, including the allowable overdepth and side slopes as specified in Paragraph "3.04: Overdepth and Side Slopes," of "Section 02 48 20: Dredging and Disposal" as measured by the in situ cubic yard based on the difference between pre- and post-dredge surveys. However, in no case will compensation exceed the Base Bid Total Cost and any amount awarded by the District for the Option Bid unless pre-approved by the District.
2. Project plans (Attachment A) show the proposed dredging elevation and 2019 existing ground surface. Raw 2019 ground surface data is available and can be provided by the District upon request. The depths shown thereon shall be verified and corrected by soundings taken during pre-dredge surveys. Determination of quantities removed and the deductions made therefrom to determine quantities by in-place measurements to be paid in the area specified, after having once been made, will not be reopened, except on evidence of collusion, fraud, or obvious error. Should the pre-dredge survey indicate bottom

conditions and/or dredge quantities significantly different than shown on the plans, the contractor shall notify the District immediately before proceeding further.

3. Monthly Partial Payment less retainage will be based on approximate quantities determined by soundings taken from completed dredged areas. Copies of all field notes, field computations, other records taken in the field by the contractor for the purpose of layout and progress shall be furnished to the Engineer at the site of work for his use to the extent necessary in determining the proper amount of progress payments due to the Contractor.
4. Payment for dredging will be made at the respective Contract unit price for "Dredging" in the schedule under which contract award is made, which price and payment thereof shall constitute full compensation for dredging and disposing at Redwood Marine Terminal II and/or HOODS of all materials above project depth, including overdepth and materials removed from side slopes in accordance with the drawings and these specifications. In no case will compensation exceed the Base Bid Total and any amount awarded by the District for the Option Bid unless pre-approved by the District.

#### **END OF SECTION**

**Project Plans**

**A**

## **Description**

Included below are cross sections for dredging of Woodley Island Marina. This Request for Proposals is for dredging in the fairways between Docks C-G (i.e., the C-D fairway, D-E fairway, E-F fairway, and F-G fairway). In 2019, dredging was started within these fairways. Also below is the post-dredging 2019 hydrographic survey results and volume measurements within these fairways. The District will work with the contractor to identify priority dredging areas within these fairways. It is important that the dredging contractor will be able to reach shallow areas on the shoreside of the fairways.

# HUMBOLDT BAY HARBOR RECREATION AND CONSERVATION DISTRICT

## MAINTENANCE DREDGING

EUREKA, CALIFORNIA

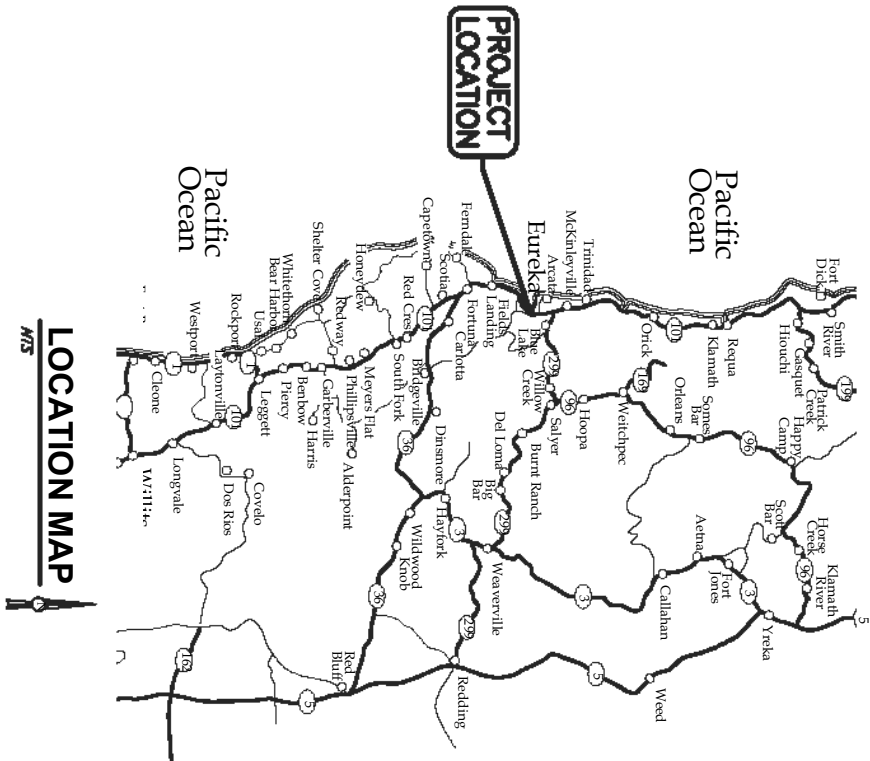
PREPARED BY:



AUGUST 2018

### INDEX OF SHEETS

SEQ	SHEET	TITLE
1	G-1	COVER
2	C-1	WOODLEY ISLAND LIMITS OF WORK
3	C-2	WOODLEY ISLAND DREDGING PLAN AND PROFILE
4	C-3	WOODLEY ISLAND DREDGING SECTIONS
5	C-4	FIELDS LANDING BOAT LIFT DOCK ALTERNATE BID



LOCATION MAP  
M/S



VICINITY MAP  
M/S

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& GEOLOGISTS, INC.

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EUREKA, CA. 95501

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707-441-8855

DSGN	CJL
DR	CJL/CON
CHK	MKF
APVD	

NO.	DATE	REVISION	BY
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HBHRC D  
DREDGING MAINTENANCE  
EUREKA, CALIFORNIA

COVER



SHEET	G-1
SEO	
DATE	08/2018
PROJ. NO.	016240.020





PLAN  
 1"=100'



SHEET	C-1
DATE	08/2018
PROJ. NO.	016240.020

HBHRCD DREDGING MAINTENANCE EUREKA, CALIFORNIA <b>WOODLEY ISLAND LIMITS OF WORK</b>
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DSGN	CJL				
DR	CJL/CDN				
CHK	MKF				
APVD					
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 EUREKA, CA. 95501

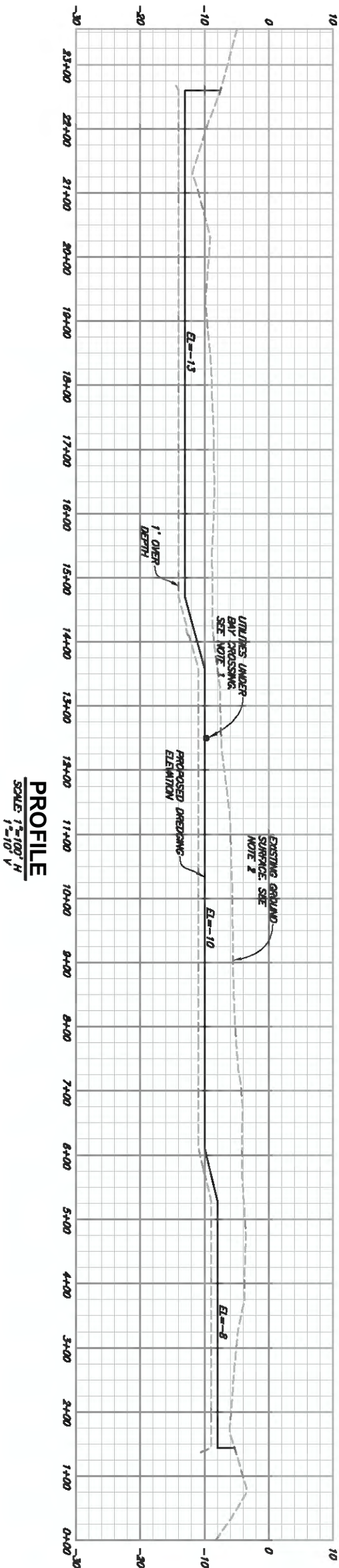
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PLAN  
 1"=100'



- NOTES:
- Existing ground surface elevations based on SHN 2014 hydrographic survey. Raw 2018 data is available upon request from the District.



SHEET	C-2
DATE	08/2018
PROJ. NO.	016240.020

HBHRCD  
 DREDGING MAINTENANCE  
 EUREKA, CALIFORNIA  
**WOODLEY ISLAND DREDGING  
 PLAN AND PROFILE**

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DR	CJL/CDN
CHK	MKF
APVD	

NO.	DATE	REVISION	BY

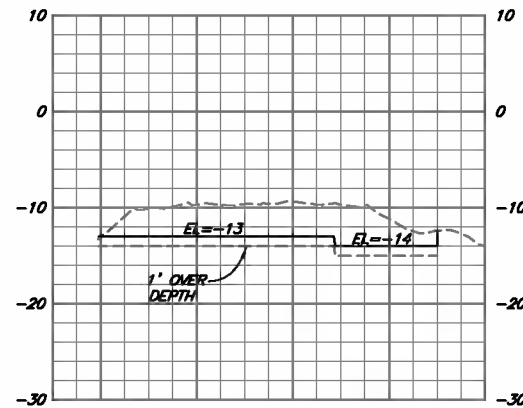


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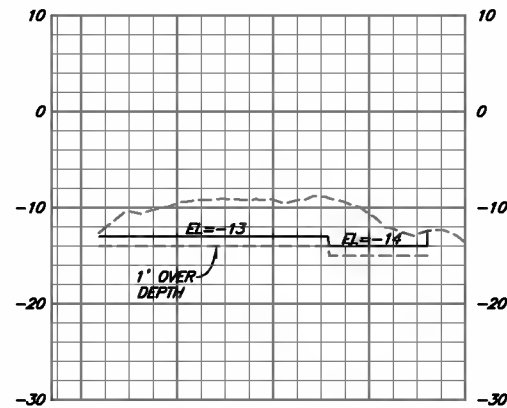
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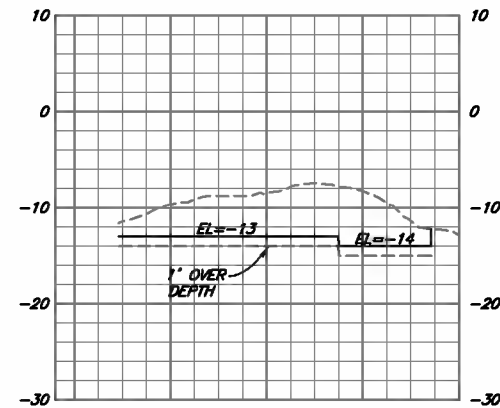
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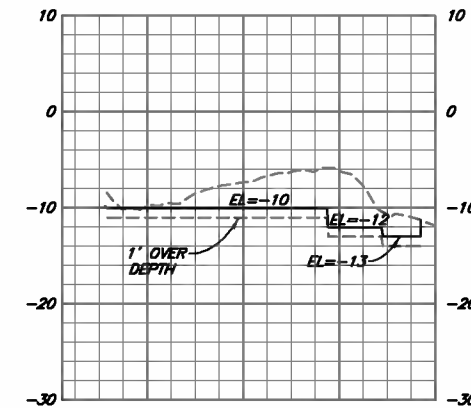
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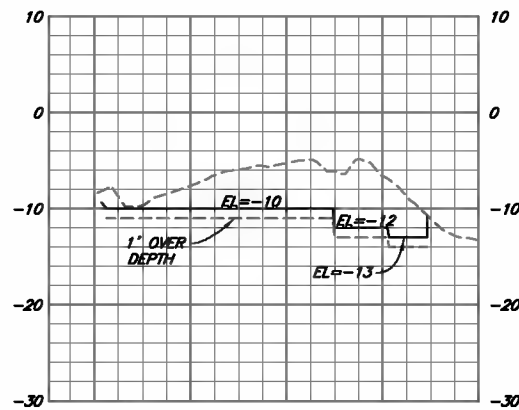
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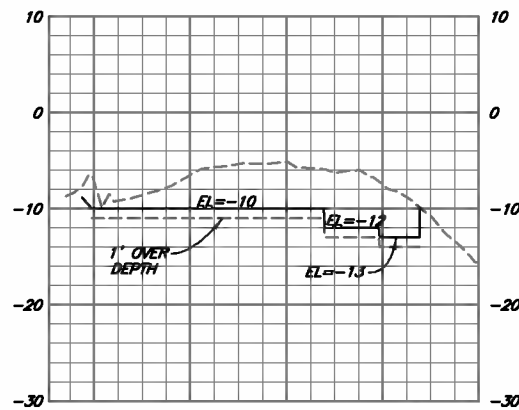
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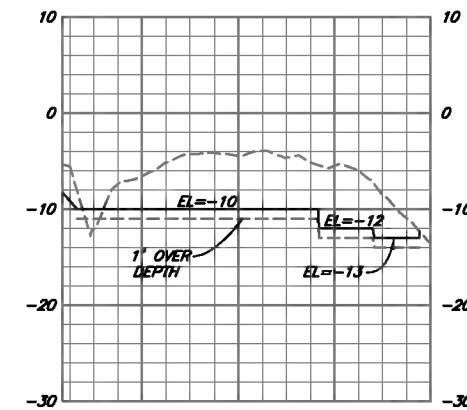
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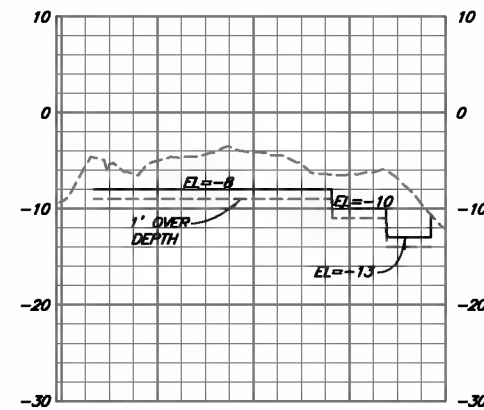
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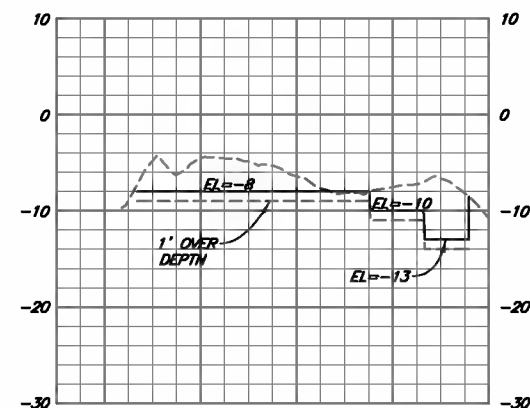
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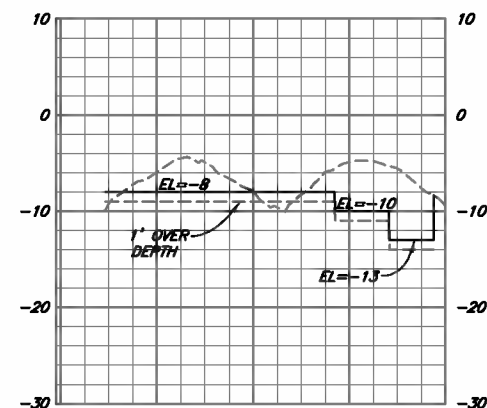
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**SECTION I**  
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C-2



**SECTION J**  
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NOTES:  
1. Existing ground surface elevations based on SHN 2014 hydrographic survey. Raw 2018 data is available upon request from the District.



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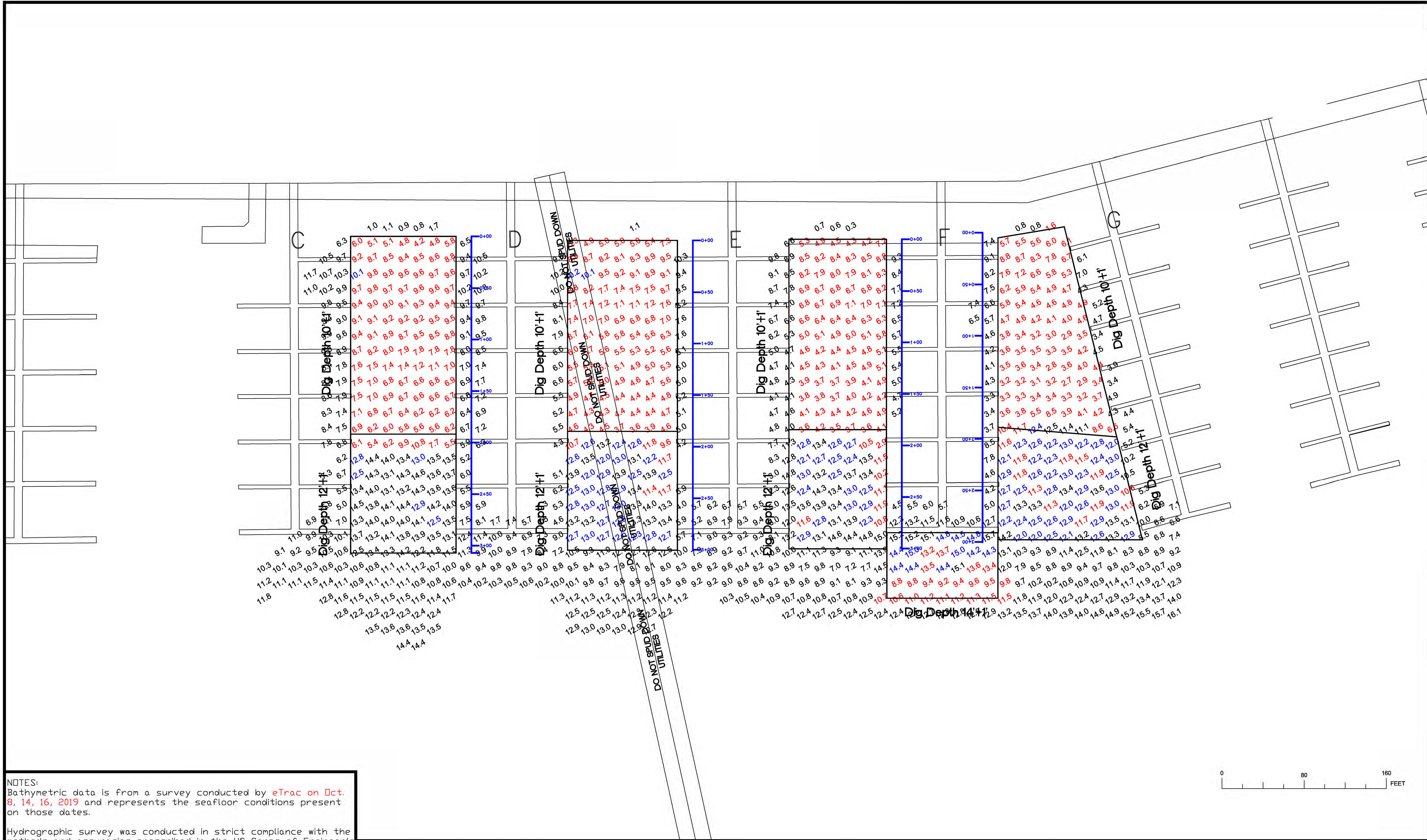
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NKF

HIGHWAY  
DREDGING MAINTENANCE  
EUREKA, CALIFORNIA  
WOODLEY ISLAND  
DREDGING SECTIONS

C-3

016240.020





NOTES:  
Bathymetric data is from a survey conducted by eTrac on Oct. 8, 14, 16, 2019 and represents the seafloor conditions present on those dates.

Hydrographic survey was conducted in strict compliance with the methods and accuracies prescribed in the US Corps of Engineer's Hydrographic Surveying Manual EM 1110-2-1003.

Soundings are shown in Feet Below MLLW as referenced.  
Mean Lower Low Water Based on NOAA monument tide gauges

Grid coordinates are based on the California State Plane System Zone I, NAD 83-Feet.

**FIELDS LANDING BOAT YARD & WOODLEY ISLAND MARINA**  
**USACE Contract #1996-22216**  
**FY-2019**

Surveyed	DATE:	Surveyed by:
OCT. 8, 14, 16	2019	eTrac
DRAWN:	DATE:	
OCT. 19, 2019		
		Chris Milam PROJECT MANAGER

SCALE:  
1"=40'  
Dig Depth  
10'+1'  
12'+1'

**The Dutra Group**  
**DEPARTMENT OF ENGINEERING/SURVEYING**  
2350 KERNER BLVD, STE. 200  
SAN RAFAEL, CALIFORNIA 94901  
415-258-6876  
[WWW.DUTRAGROUP.COM](http://WWW.DUTRAGROUP.COM)

CONTRACT NO.
DRAWING NO.
SHEET OF SHEETS



DUTRA DREDGING  
FIELDS LANDING AND WOODLEY ISLAND MARINA  
2019 MAINTENANCE DREDGING

VOLUME REPORT  
PRE-DREDGE 8/29/2019-8/30/2019 PACIFIC AFFILIATES AND ETRAC  
POST-DREDGE SURVEYS ETRAC

VOLUMES CALCULATED USING HYPACK (CHANNEL FILES): TIN TO CHANNEL

ALL VOLUMES IN CUBIC YARDS

DREDGE AREAS

				TOTAL
FIELDS LANDING	Dates	GRADE (14')	OVERDEPTH (1')	VOLUME
BD VOLUME AVAILABLE	8/29/19	3,956	170	6,126
AD VOLUME REMAINING	10/05/19	50	72	122
SURVEY VOLUME REMOVED		5,906	98	6,004
WOODLEY ISLAND MARINA				
				TOTAL
FAIRWAY CD		GRADE (VARIED)	OVERDEPTH (1')	VOLUME
BD VOLUME AVAILABLE	10/03/19	3,966	1,155	5,121
AD VOLUME REMAINING	10/08/19	1,914	834	2,748
SURVEY VOLUME REMOVED		2,052	322	2,373
				TOTAL
FAIRWAY DE		GRADE (VARIED)	OVERDEPTH (1')	VOLUME
BD VOLUME AVAILABLE	10/03/19	5,655	1,182	6,837
AD VOLUME REMAINING	10/16/19	3,016	903	3,919
SURVEY VOLUME REMOVED		2,639	279	2,918
				TOTAL
FAIRWAY EF		GRADE (VARIED)	OVERDEPTH (1')	VOLUME
BD VOLUME AVAILABLE	10/03/19	5,898	1,053	6,951
AD VOLUME REMAINING	10/16/19	3,154	787	3,941
SURVEY VOLUME REMOVED		2,744	266	3,010
				TOTAL
FAIRWAY FG		GRADE (VARIED)	OVERDEPTH (1')	VOLUME
BD VOLUME AVAILABLE	10/03/19	7,172	1,137	8,309
AD VOLUME REMAINING	10/14/19	3,408	894	4,302
SURVEY VOLUME REMOVED		3,764	243	4,007
				TOTAL
FACE OF DOCK F		GRADE (VARIED)	OVERDEPTH (1')	VOLUME
BD VOLUME AVAILABLE	10/03/19	1,549	254	1,804
AD VOLUME REMAINING	10/14/19	352	183	535
SURVEY VOLUME REMOVED		1,197	71	1,269
				TOTAL
VOLUME AVAILABLE		30,105	4,952	35,148
VOLUME REMAINING		11,894	3,673	15,566
PAY VOLUME REMOVED		18,302	1,280	19,581
				TOTAL
CONTRACT VOLUME		37,000		
PAY VOLUME REMOVED		19,581		
VOLUME REMAINING ON CONTRACT		2,419		

**Particle Size Analysis B**



# CONSULTING ENGINEERS & GEOLOGISTS, INC.

812 W Wabash Eureka, CA 95501-2138 Tel: 707/441-8855 FAX: 707/441-8877 E-mail: shninfo@shn-engr.com

## Particle Size Analysis (ASTM D422)

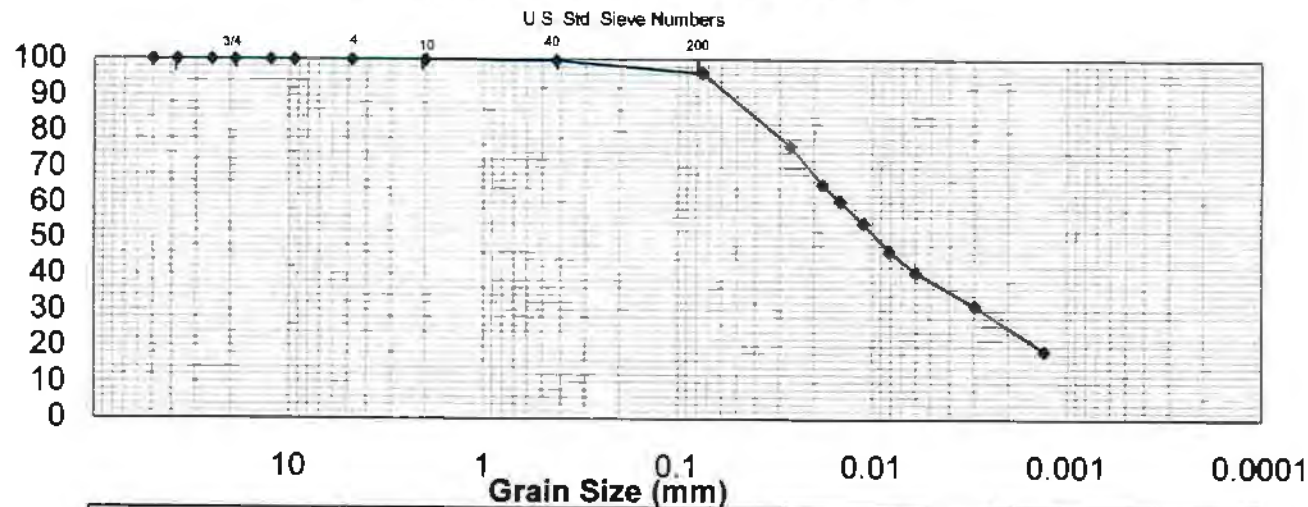
Project Name: **Woodley Island Marina**  
 Boring ID: **--**  
 Sample Depth: **--**  
 Sample Number: **WIM-A**

Project Number: **016240.021**  
 Lab #: **17-059**  
 Checked By: **DH**  
 Date: **2-9-17**

SIEVE	2"	1.5"	1"	0.75"	0.5"	0.375"	#4	#10	#40	#200								
SIEVE SIZE (mm)	50	37.50	25	19.00	12.5	9.5	4.75	2.00	0.425	0.075	0.0265	0.0181	0.0147	0.0111	0.0082	0.0060	0.0030	0.0013
PERCENT PASSING	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	98.5	76.1	65.2	60.5	54.3	46.6	40.6	31.4	19.0

## Gradation Test Results

Percent Passing by Weight



GRAVEL		SAND			SILT	CLAY
Coarse	Fine	Coarse	Medium	Fine		

% Gravel 0.0

% Sand 3.5

% Silt 70.9

% Clay 25.6



# CONSULTING ENGINEERS & GEOLOGISTS, INC.

812 W. Wabash Eureka, CA 95501-2136 Tel: 707/441-8855 FAX: 707/441-8877 E-mail: shninfo@shn-engr.com

## Particle Size Analysis (ASTM D422)

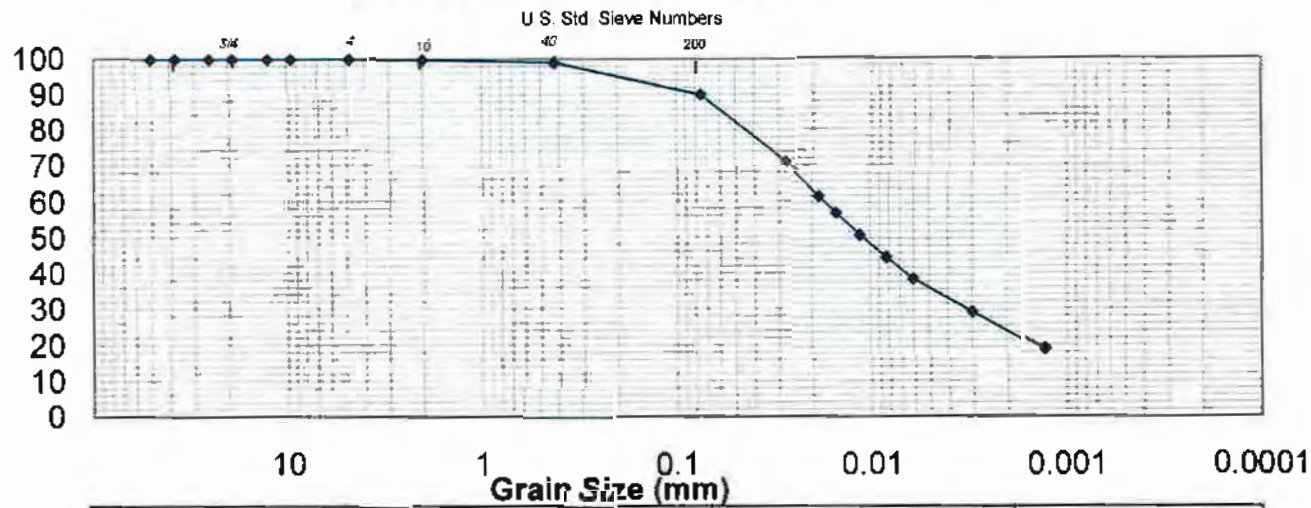
Project Name: **Woodley Island Marina**  
 Boring ID: **--**  
 Sample Depth: **--**  
 Sample Number: **WIM-B**

Project Number: **016240.021**  
 Lab #: **17-060**  
 Checked By: **DG**  
 Date: **2-9-17**

SIEVE	2"	1.5"	1"	0.75"	0.5"	0.375"	#4	#10	#40	#200								
SIEVE SIZE (mm)	50	37.50	25	19.00	12.5	9.5	4.75	2.00	0.425	0.075	0.0274	0.0184	0.0150	0.0113	0.0063	0.0030	0.0013	0.00075
PERCENT PASSING	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	99.1	90.1	71.3	61.9	57.3	51.0	45.0	38.9	29.7	19.0

## Gradation Test Results

Percent Passing by Weight



GRAVEL		SAND			SILT	CLAY
Coarse	Fine	Coarse	Medium	Fine		

% Gravel 0.0

% Sand 9.9

% Silt 65.6

% Clay 24.5



# CONSULTING ENGINEERS & GEOLOGISTS, INC.

812 W. Webash Eureka, CA 95501-2138 Tel: 707/441-8855 FAX: 707/441-8877 E-mail: shninfo@shn-engr.com

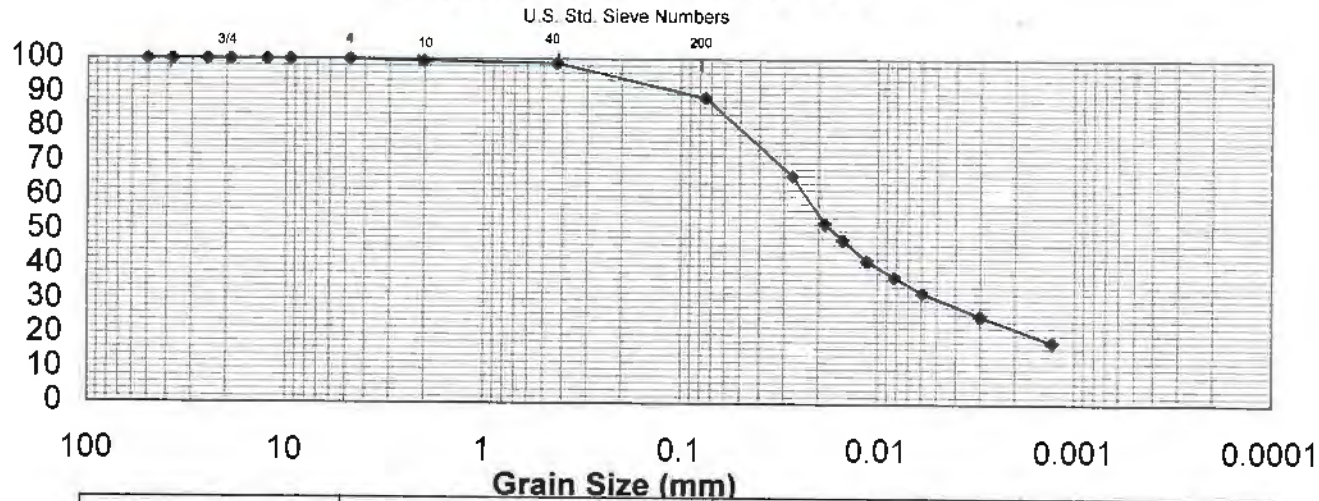
Project Name: **Fields Landing Boat Yard**  
 Boring ID: **FLBY**  
 Sample Depth: **1'**  
 Sample Number: **FLBY-1**

Project Number: **016240.020**  
 Lab #: **18-551**  
 Checked By: **NAN**  
 Date: **8/20/18**

SIEVE	2"	1.5"	1"	0.75"	0.5"	0.375"	#4	#10	#40	#200								
SIEVE SIZE (mm)	50	37.50	25	19.00	12.5	9.5	4.75	2.00	0.425	0.075	0.0271	0.0186	0.0151	0.0113	0.0082	0.0059	0.0030	0.0013
PERCENT PASSING	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.5	98.9	89.0	66.2	52.4	47.7	41.6	37.0	32.4	25.6	18.1

## Gradation Test Results

Percent Passing by Weight



GRAVEL		SAND			SILT	CLAY
Coarse	Fine	Coarse	Medium	Fine		

% Gravel 0.0

% Sand 11.0

% Silt 65.0

% Clay 24.0

**EPA Ocean Disposal  
Special Conditions**

**C**



### Standard Conditions for use of the Humboldt Open Ocean Disposal Site (HOODS):

1. All disposal operations at the HOODS shall be conducted in accordance with the most recent update of the Site Management and Monitoring Plan (SMMP, [available here](#)) as well as these specific conditions. (In the event of any contradictions, these conditions prevail.)
2. Dredged material shall not be leaked or spilled from disposal vessels during transit to the HOODS. Transportation of dredged material to the HOODS shall only occur when weather and sea state conditions will not interfere with safe transportation and will not create risk of spillage, leak or other loss of dredged material in transit to the HOODS. No disposal vessel trips shall be initiated when the National Weather Service has issued a gale warning for local waters during the time period necessary to complete dumping operations, or when wave heights are 16 feet or greater.
3. No more than one disposal vessel may be present within the HOODS at any time.
4. **Buffer cells:** Disposal may only occur in certain interior cells of the HOODS (refer to attached schematics of the HOODS, and to Condition 5, below). **No disposal shall occur in buffer cells A1, A2, A3, A4, A6, B6, C6, D6, E6, F6, or F1. Similarly, no disposal shall occur in the outer half of buffer cells B1, C1, D1, E1, F2, F3, F4, and F5.** (As described below in Condition 5, the inner half of cells B1, C1, D1, E1, F2, F3, F4, and F5 may be used for this project.)
5. **Allowable disposal cells:** To minimize further mounding throughout the HOODS, for this project disposal events shall occur only over the northeast and northwest slopes of the existing mound. Specifically, as shown on the attached schematics, **all disposal events must occur within the area comprised of the NW half of cells B2, C2, D2, and E2; the SE half of cells B1, C1, D1, and E1; the NE half of cells E2, E3, E4, and E5; and the SW half of cells F2, F3, F4, and F5.** Dredged material from sequential dumps should be disposed in alternating sides of this area (e.g., over the north slope of the mound, and then over the west slope of the mound) to the extent weather and sea conditions allow for safe operation and for the disposal vessel to be kept inside the allowed area for the duration of the disposal event. (Note, this does not mean that any single disposal event cannot discharge material over both the north and west slopes, as long as the discharge occurs fully within the overall allowable disposal area.)
6. **Disposal vessel tracking and instrumentation:** The disposal vessel must have a disposal tracking system, and the system must be operational before any individual disposal trip to HOODS is initiated. Throughout transit to the disposal site, during disposal, and for at least 10 minutes after disposal is complete, the disposal tracking system must automatically indicate and record the position, speed and draft of the disposal vessel, and the load level within the bin. These data must be generated at a maximum 1-minute interval while en route to the HOODS, and at a maximum 15-second interval while within 1/4 mile of and inside the HOODS boundary. The tracking system must also indicate and record the time and location of the beginning and end of each disposal event (e.g., opening and closing of scow hull or hopper doors).

7. **E-mail Alerts:** “E-mail alerts” regarding any degree of apparent dumping outside the allowable disposal cells at HOODS, and regarding any apparent substantial leakage/spillage or other loss of material en route to the HOODS, must be sent within 24 hours of the City or its dredging contractor becoming aware of the apparent issue, to Brian Ross (ross.brian@epa.gov) and Allan Ota (ota.allan@epa.gov) at EPA Region IX, to your San Francisco District USACE permit manager, and to Mark Delaplaine at the California Coastal Commission (mdelaplaine@coastal.ca.gov). Substantial leakage/spillage or other loss shall be defined as an apparent loss of draft of one foot or more between the time that the disposal vessel begins transport to the HOODS and the time of actual disposal.
8. **Monthly reports:** In addition to any alerts pursuant to Condition 7 above, data recorded from the disposal tracking system must be provided to EPA Region IX, and the San Francisco District USACE at minimum on a monthly basis during disposal operations. For each disposal trip the records must include disposal trip number and date, estimated bin volume of material disposed, and a visual display of the beginning and ending locations of the disposal event relative to the HOODS boundaries and allowable internal disposal cells. The monthly reports shall include a cover letter describing any problems complying with these Ocean Disposal Special Conditions, the cause(s) of the problems, any steps taken to rectify the problems, and whether the problems occurred on subsequent disposal trips.
9. **Post-Disposal Bathymetric Survey of HOODS:** A post-disposal bathymetric survey of the HOODS, extending at least 500 feet outside the site boundaries in all directions, shall be conducted within 45 days of completion of disposal operations, and provided to EPA Region IX within 20 days of completion. **(NOTE: EPA is waiving this condition for the 2017 City of Eureka dredging project.)**

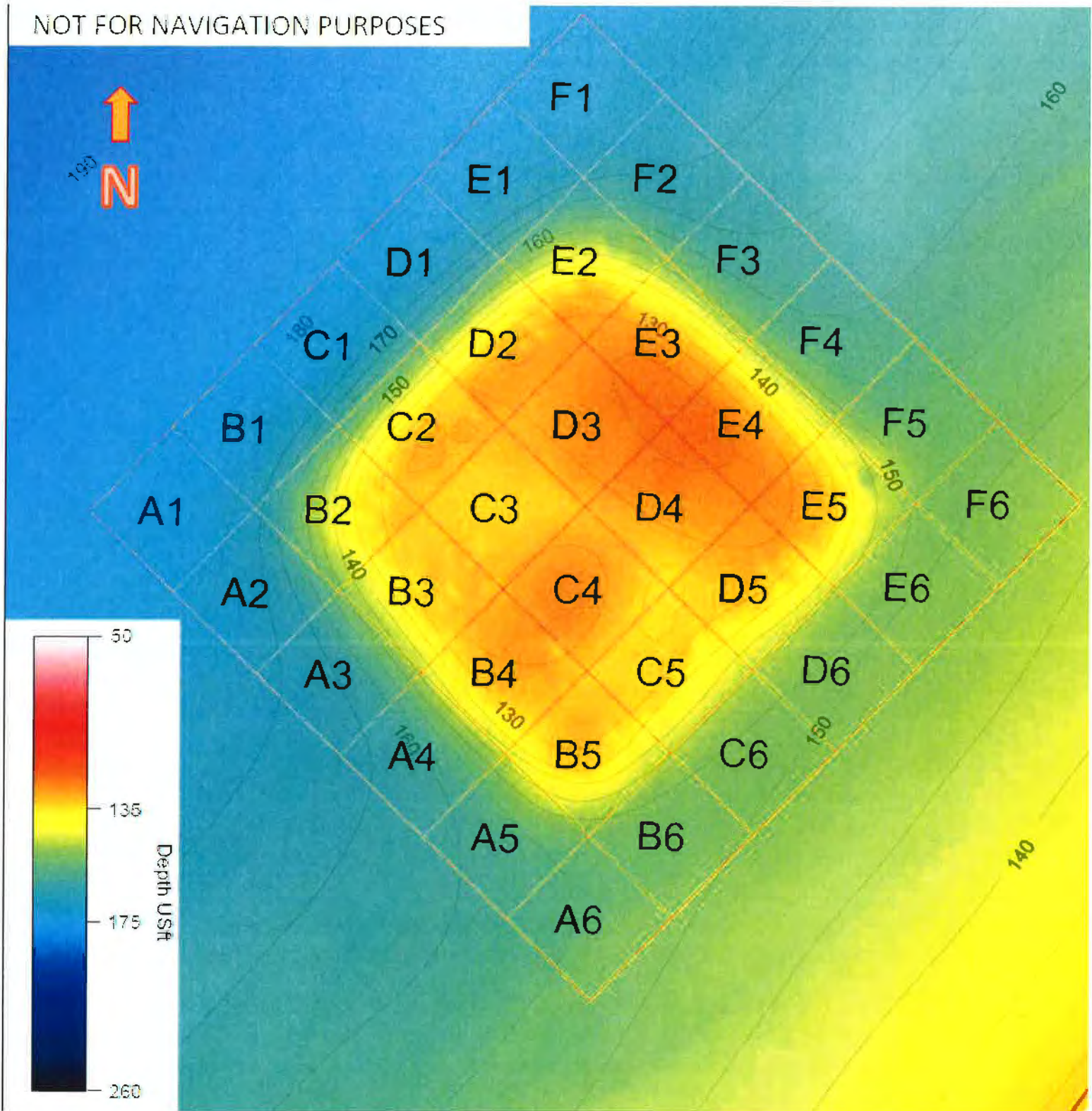
**Additional Project-Specific Condition for use of HOODS:**

EPA has determined that, for the 2017 City of Eureka maintenance dredging project, the following additional project-specific condition is necessary to prevent potential harm to the environment and to comply with the ocean disposal criteria at 40 CFR Part 227 (specifically applicable parts of sub-part B and all of sub-parts C, D, E, and G):

10. **Pre-construction conference:** This is the first ocean disposal operation at HOODS carried out by the City in many years, and these restrictions and limitations on disposal operations at HOODS have been updated substantially. EPA therefore requires that the City and its prime dredging contractor participate in a pre-construction conference with EPA and USACE. The purpose of the conference, which may be conducted by phone, is to ensure that all of EPA’s ocean disposal conditions are fully understood. Please contact Brian Ross or Allan Ota at EPA, and the USACE permit manager, to arrange this conference in advance of initiation of any dredging and ocean disposal operations.

**ALSO SEE ATTACHED FIGURES (2)**

-end-



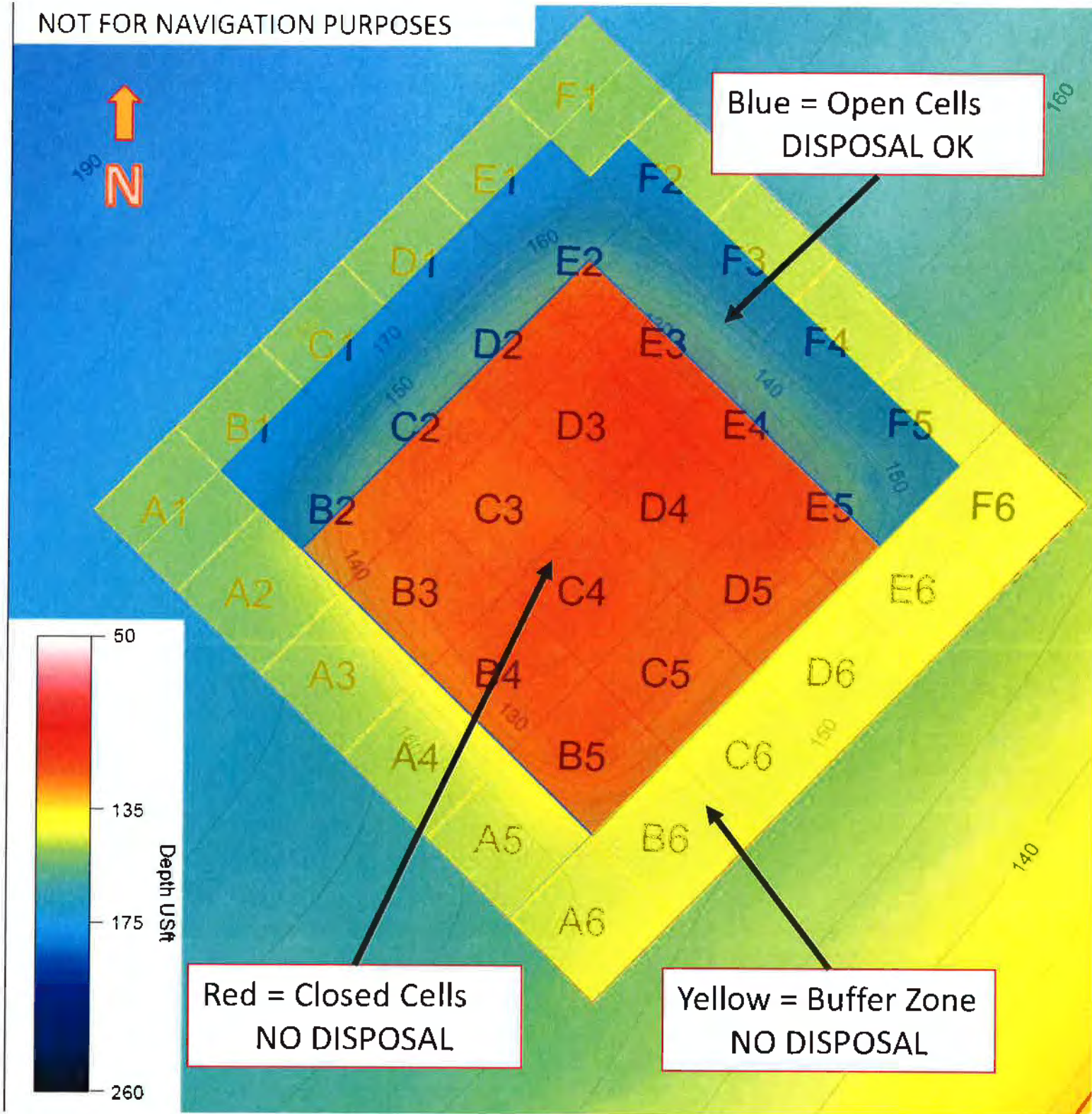
**Humboldt Open Ocean Disposal Site: Cell layout base map with 8/2014 bathymetry**

Allowable disposal cells for 2017 are all on the SLOPES of the mound, as shown on the next page.

They include:

- the NW half of cells B2, C2, D2, and E2;
- the SE half of cells B1, C1, D1, and E1;
- the NE half of cells E2, E3, E4, and E5; and
- the SW half of cells F2, F3, F4, and F5.





### Humboldt Open Ocean Disposal Site: Allowable Disposal Cells for 2017

Allowable disposal cells for 2017 are on the NW and NE SLOPES of the mound ONLY.

**BLUE** shading indicates allowable disposal area, including:

- the NW half of cells B2, C2, D2, and E2;
- the SE half of cells B1, C1, D1, and E1;
- the NE half of cells E2, E3, E4, and E5; and
- the SW half of cells F2, F3, F4, and F5.

**YELLOW** shading indicates Buffer Zone cells – NO DISPOSAL allowed

**RED** shading indicates cells closed due to mounding – NO DISPOSAL allowed

**District Provided  
Permits and CEQA  
Notice of Exemption**

**D**

## Description

District provided permits are complete for (1) the dredging part of the project; (2) dredged material disposal at the Humboldt Open Ocean Disposal Site (HOODS); and (3) Dredged material offloading at Redwood Terminal II using pumping methods and dewatering at Redwood Terminal II. A permit amendment is being pursued to allow for dredged material offloading at Redwood Terminal II using a clamshell bucket and to expand the allowed dewatering area. The following documents are included below:

- Exhibit A includes the approvals which allow for dredging at Woodley Island Marina and disposal at HOODS.
- Exhibit B includes permit amendments obtained that allow for offloading of dredged material at Redwood Terminal II using pumping methods and for subsequent dewatering.
- Exhibit C includes the permit amendment application material submitted to the California Coastal Commission which if approved would amend the existing Coastal Development Permit (in Exhibit B) to (1) allow for offloading of dredged material at Redwood Terminal II using a clamshell bucket; and (2) expand the allowable area for dewatering dredged material. Other existing permits do not require amendments to allow for offloading of dredged material using a clamshell bucket or for the larger dewatering area. It is expected that the Coastal Development Permit amendment will be considered by the California Coastal Commission at their July 8-10, 2020 or Aug 12-14, 2020 meeting. It is also expected that the amended permit will require 20-foot buffers between eelgrass and project equipment.

## **Exhibit A**

### **Approvals for Dredging and Dredged Material Disposal at the Humboldt Open Ocean Disposal Site**

1. US Army Corps of Engineers Permit
2. California Coastal Commission Exemption
3. North Coast Regional Water Quality Control Board Certification
4. California Environmental Quality Act Exemption



DEPARTMENT OF THE ARMY  
SAN FRANCISCO DISTRICT, CORPS OF ENGINEERS  
1455 MARKET STREET  
SAN FRANCISCO, CALIFORNIA 94103-1398

SEP 04 2018

REPLY TO

Regulatory Division

Subject: File Number: 1996-22216, Woodley Island Marina Maintenance Dredging; Individual Permit; Second Transmittal

Mr. Larry Oetker  
Executive Director  
Humboldt Bay Harbor Recreation and Conservation District  
601 Startare Drive  
Eureka, California 95501

Dear Mr. Oetker:

Enclosed is your signed copy of a Department of the Army permit (Enclosure 1) to dredge approximately 300,000 cubic yards of sediments from Woodley Island Marina and dispose the suitable material at the Humboldt Open Ocean Disposal Site (HOODS).

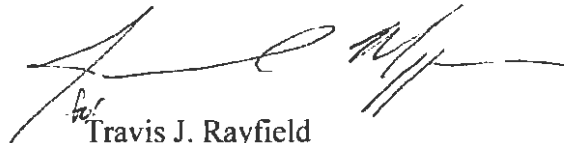
Please complete the appropriate parts of the "Project Status" form (Enclosure 2) for each episode, and return them to this office. You are responsible for ensuring that the contractor (or workers) executing the activity authorized herein is knowledgeable with the terms and conditions of this authorization.

**Be advised that your signed permit will NOT be an authorization to proceed. You must first fulfill the requirements of Standard DMMO Conditions 8b, 8c, and 8d on pages 3B and 3C. The conditions are for the submittal, to this office for approval, of a dredge operations plan, a before-dredge survey and a solid-debris management plan. Once these items have been submitted and approved, by this office, you will receive written authorization to commence your work. It is important that all the information requested in the above-mentioned Standard DMMO Conditions is submitted as specified or the submittal might be considered incomplete. An incomplete submittal can be returned for completion, causing delays to your project. You are also responsible for all other general and special conditions contained in your permit.**



You may refer any questions on this matter to Debra O'Leary by telephone at (415) 503-6807 or by e-mail at [Debra.A.O'Leary@usace.army.mil](mailto:Debra.A.O'Leary@usace.army.mil). All correspondence should be addressed to Debra O'Leary, Operations and Readiness Division, referencing the 1996-22216.

Sincerely,

A handwritten signature in black ink, appearing to read 'Travis J. Rayfield', with a long horizontal stroke extending to the right.

Travis J. Rayfield  
Lieutenant Colonel, U.S. Army  
District Engineer

Enclosures

Copy Furnished (w/encl 1 only):

US EPA, San Francisco, CA,  
CA CCC, Arcata, CA  
CA RWQCB, Eureka, CA  
CA SLC, Sacramento, CA  
US NMFS, Santa Rosa, CA  
US FWS, Arcata, CA

## PROJECT STATUS

Please use the forms below to report the dates when you start and finish the work authorized by the enclosed permit. Also if you suspend work for an extended period of time, use the forms below to report the dates you suspended and resumed work. If you find that you cannot complete the work within the time granted by the permit, please apply for a time extension at least one month before your permit expires. If you materially change the plan or scope of the work, it will be necessary for you to submit new drawings and a request for a modification of your permit.

(cut as needed) -----

Date: \_\_\_\_\_

**NOTICE OF COMPLETION OF WORK** under Department of the Army Permit No. 1996-22213, Episode 1

**TO:** District Engineer, US Army Corps of Engineers, Operations and Readiness Division, 1455 Market Street, 16th Floor, San Francisco, CA 94103-1398

In compliance with the conditions of Permit No. 1996-22213, this is to notify you that work was completed on \_\_\_\_\_.

Permittee: Humboldt Bay Harbor Recreation and Conservation District,

Address: 601 Startare Drive, Eureka, California 95501

(cut as needed) -----

Date: \_\_\_\_\_

**NOTICE OF RESUMPTION OF WORK** under Department of the Army Permit No. 1996-22213, Episode 1

**TO:** District Engineer, US Army Corps of Engineers, Operations and Readiness Division, 1455 Market Street, 16th Floor, San Francisco, CA 94103-1398

In compliance with the conditions of Permit No. 1996-22213, this is to notify you that work was resumed on \_\_\_\_\_.

Permittee: Humboldt Bay Harbor Recreation and Conservation District,

Address: 601 Startare Drive, Eureka, California 95501

(cut as needed) -----

Date: \_\_\_\_\_

**NOTICE OF SUSPENSION OF WORK** under Department of the Army Permit No. 1996-22213, Episode 1

**TO:** District Engineer, US Army Corps of Engineers, Operations and Readiness Division, 1455 Market Street, 16th Floor, San Francisco, CA 94103-1398

In compliance with the conditions of Permit No. 1996-22213, this is to notify you that work was suspended on \_\_\_\_\_.

Permittee: Humboldt Bay Harbor Recreation and Conservation District,

Address: 601 Startare Drive, Eureka, California 95501

(cut as needed) -----

Date: \_\_\_\_\_

**NOTICE OF COMMENCEMENT OF WORK** under Department of the Army Permit No. 1996-22213, Episode 1

**TO:** District Engineer, US Army Corps of Engineers, Operations and Readiness Division, 1455 Market Street, 16th Floor, San Francisco, CA 94103-1398

In compliance with the conditions of Permit No. Permit No. 1996-22213, this is to notify you that work commenced on \_\_\_\_\_.

Permittee: Humboldt Bay Harbor Recreation and Conservation District,

Address: 601 Startare Drive, Eureka, California 95501



**DEPARTMENT OF THE ARMY**  
**SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS**  
**1455 MARKET STREET**  
**SAN FRANCISCO, CALIFORNIA 94103-1398**

**DEPARTMENT OF THE ARMY PERMIT**

PERMITTEE: Humboldt Bay Harbor Recreation & Conservation District

PERMIT NUMBER: 1996-22216

ISSUING OFFICE: **San Francisco District, U.S. Army Corps of Engineers (USACE)**

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate District or Division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below:

**PROJECT DESCRIPTION**

The permittee is authorized to dredge a maximum of approximately 300,000 cubic yards (cys) of sediment over the 10-year life of the permit and no more than approximately 100,000 annually from the 19.3-acre (approximately) Woodley Island Marina in Eureka, Humboldt County, California. The design depth for the Woodley Island Marina is -14 feet mean lower low water (MLLW) plus an additional 1-foot overdredge allowance. The material will be removed mechanically and barged to the Humboldt Open Ocean Disposal Site (HOODS). Work shall be conducted in accordance with the attached drawings entitled, "USACE File: 1996-22216 Woodley Island Marina Maintenance Dredging" in 4 sheets, dated April 2018.

Prior to each dredging episode, this office and the U.S. Environmental Protection agency shall evaluate the suitability of any sediment proposed to be disposed at HOODS.

PROJECT LOCATION: The Woodley Island Marina is located in Eureka, Humboldt County, California (APNs 40503109 and 40503110)

**GENERAL CONDITIONS:**

1. The time limit for completing the work authorized ends on December 31, 2028. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as Special Conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions. (Reference document: *In the Matter of Water Quality Certification for the Woodley Island Maintenance Dredging Project, WDID No. 1B180035WNHU* dated July 23, 2018 (Attachment 2).)

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the Terms and Conditions of your permit.

7. You understand and agree that, if future operations by the United States require the removal, relocation or other alteration of the structure or work authorized herein, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, you will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration (Section 10 only).

#### **SPECIAL CONDITIONS:**

1. The National Marine Fisheries Service (NMFS) concurred with the Corps' determination that the project was not likely to adversely affect the following species and designated critical habitats for the following species:

- California coast Chinook salmon (*Oncorhynchus tshawytscha*),
- North coast steelhead trout (*Oncorhynchus mykiss*),
- Southern Oregon northern California coast coho salmon (*Oncorhynchus kisutch*),
- North American green sturgeon (*Acipenser medirostris*),

These concurrences are premised, in part, on project work restrictions outlined in the Minimization and Conservation Measures on pages 2 and 3 of the June 5, 2018 NMFS letter (Attachment 3). These work restrictions are incorporated as special conditions to this authorization for your project to ensure unauthorized incidental take of species and loss of critical habitat does not occur.

2. Dredging shall be limited to July 1 through October 15 each year for the following reasons in order to minimize impacts to endangered species. Any dredging outside this environmental work window would require additional consultation between this office and the NMFS pursuant to Section 7 of the Endangered Species Act.

3. The permittee shall monitor turbidity at the dredge site and background turbidity at least 1,000 feet away from the dredge site every 3 hours during dredge operation and keep a log of the results. If the turbidity at the dredge site exceeds background turbidity by 20% the permittee shall take steps to reduce turbidity at the dredge site by halting dredging until the project site turbidity returns to background level or until there is an ebb tide at the dredge site. The log shall be forwarded to this office on a weekly basis.

4. If you encounter any previously unknown historic or archeological artifacts or deposits, or human remains, while accomplishing the work authorized by this permit, you must immediately halt work at the discovery location plus a 50-foot minimum buffer, and notify the Corps, San Francisco District, Dredged Material Management Office (Ms. Debra O'Leary at (415) 503-6807) about what you have found. The permittee will be responsible for hiring a qualified professional archaeologist to assist with development of a treatment program in accordance with the *Protocol for Inadvertent Archaeological Discoveries for Ground Disturbing Project Permits, Leases and Franchises Issued by the Humboldt Bay Harbor, Recreation and Conservation District, Humboldt Bay, California* dated May 7, 2018 (or subsequent versions of the document)(Attachment 4). Work will cease until the Corps has completed consultation with the interested Tribes and,

if necessary, the State Historic Preservation Office.

5. Additional Standard DMMO Conditions found on pages 3A-E shall be adhered to at all times.

STANDARD DMMO CONDITIONS TO PERMIT NUMBER 1996-22216

1. Your use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.
2. You must have a copy of this permit available on the vessel used for the authorized transportation and disposal of dredged material.
3. You must advise this office as per Special Condition 12, on page 2D, **before** you start dredging activities under the authorization of this permit.
4. To provide notification of activities affecting navigation, the permittee shall provide the following information by fax, e-mail or standard mail to the contact listed below **at least two weeks before commencing work**:
  - a. Name and telephone number of the dredge and or project manager.
  - b. Size and placement of any floating construction equipment.
  - c. Radio telephone frequencies and call signs of any marine equipment.
  - d. Anticipated work start and completion dates.

Commander (dpw)  
11<sup>th</sup> Coast Guard District  
Coast Guard Island, Bldg 50-3  
Alameda, California 94501-5100

POC:  
Local Notice to Mariners  
Waterways Management Branch  
PH: 510-437-2980  
FAX: 510-437-5836  
E-MAIL: D111NM@uscg.mil

5. The Coast Guard Captain of the Port of San Francisco Bay may require modifications to marine construction equipment deployment or mooring systems to safeguard navigation while work is in progress.
6. All vessels operated for disposal of dredged material are required to participate in the Coast Guard's Vessel Traffic Control Service (VTS). Five minutes before each departure, the permittee shall notify the VTS by radio, via Channel 14, of the following: The name of vessel; time of departure from dredge site; and time of departure from disposal site.
7. When utilizing the Humboldt Open Ocean Disposal Site (HOODS), the permittee shall comply with the episode specific conditions specified in the U.S. Environmental Protection Agency's Ocean Disposal Special Conditions for the City of Eureka Use of the Humboldt Open Ocean Disposal. These conditions will be included in the Dredge Operation Plan Approval Letter (Special Condition 8b).
8. The permittee shall submit the following reports for review and comment to:

U.S. Army Corps of Engineers, San Francisco District  
Chief, Operations and Readiness Branch  
Attn: Debra O'Leary  
1455 Market Street, 16<sup>th</sup> Floor  
San Francisco, California 94103-1398

- a. Dredge Material Analysis: Submit, for approval, no earlier than 60 days prior to the proposed commencement of any authorized successive dredging episodes, dredge material analysis (Physical, Chemical, and Biological) sampling and testing information. **Please include the U.S. Army Corps of Engineers (Corps) permit number and dredge episode number with this submittal.** Also submit Regional Water Quality Control Board (RWQCB) water quality certification or waiver for disposal of the material. For each dredging episode, the permittee shall obtain the approval of the District Engineer for formulating specific sediment testing procedures for the Dredged Material Analysis. The testing protocol will be in accordance with the testing guidelines as published in the Corps and U.S. Environmental Protection Agency publication entitled, "Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. - Testing Manual" (The Inland Testing Manual or ITM, EPA-823-B-98-004), dated February 1998, and subsequent amendments thereto. The permittee shall provide a copy of the Dredged Material Analysis to the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Wildlife concurrent with the San Francisco Bay Conservation and Development Commission's RWQCB's, and the Corps' receipt of this information. Agency comments submitted to the Corps within 15 calendar days thereafter will be given full consideration in the decision on dredged material disposal.
- b. Dredge Operation Plan: Submit, for approval by this office, no earlier than 60 calendar days and no later than 20 calendar days before the proposed commencement of dredging, a plan which includes the following: **Corps permit number, dredge episode number**, a copy of the dredging contract or description of the work under which the contractor will do the permitted work; name and telephone numbers of the dredging contractor's representative on site; dredging start and completion dates; names of vessel; dump scow numbers or identification; bin or barge capacities; identification of work as either maintenance dredging or new dredging; discussion of proposed dredging procedures, as governed under Special Condition No. 11, with detailed drawings or specifications of the grid or centrifugal pump system; quantity of material to be removed; dredging design depth and typical cross section including overdepth; and date of last dredging episode and design depth. The Dredge Operational Plan shall also provide the following information:
- 1) The controls being established to insure that dredging operations occur within the limits defined by the channel dimensions and typical channel section. The horizontal and vertical positioning systems being utilized must be indicated as noted in 3, below.
  - 2) The controls being established to insure that disposal of the dredged material at the disposal site is at the assigned location and depth. The horizontal and vertical positioning systems being utilized must be indicated as noted in 3, below.
  - 3) Method of determining electronic positioning of dredge or dump scow during entire dredging operation at dredge site, disposal site and en route to and from disposal site.

**Please note that failure to provide all of the above information may result in delays to your project. When your Dredge Operation Plan has been approved, you will receive a written authorization to commence with your project.**

- c. Pre-Dredge Survey: Submit no earlier than 60 calendar days and no later than 20 calendar days before commencement of dredging, a survey with accuracy to one-tenth foot that delineates and labels the following: areas to be dredged with overdepth allowances; existing depths; estimated quantities to be dredged to the design depth; and estimated quantities to the overdepth limit. **All surveys shall be signed by the permittee to certify their accuracy. Please include the Corps permit number and dredge episode number.**

**Please note that failure to provide all the above information may result in delays to your project.**

- d. Solid Debris Management Plan: Submit no earlier than 60 calendar days and no later than 20 calendar days before commencement of work, a plan which describes measures to ensure that solid debris generated during

any authorized dredging, demolition or construction operation is retained and properly disposed in areas not under Corps jurisdiction. **At a minimum, the plan shall include the following: source and expected type of debris; debris retrieval method; Corps permit number and dredge episode number; disposal method and site; schedule of disposal operations; and debris containment method to be used, if floatable debris is involved.**

**Please note that failure to provide all the above information may result in delays to your project.**

- e. **Post-Dredge Survey:** Submit, **within 30 days of the last disposal activity** ("last" is defined as that activity after which no further activity occurs for 15 calendar days), a survey with accuracy to one-tenth foot that delineates and labels the areas dredged and the dredged depths. **Also, include the Corps permit number, dredge episode number, dates of dredging commencement and completion, actual quantities dredged to the design depth, and actual quantities to the overdepth limit.** The permittee shall substantiate the total quantity dredged by including calculations used to determine the volume difference (in cubic yards) between the Pre- and Post-Dredging Surveys and **explain any variation in quantities greater than 15% beyond estimated quantities or dredging deeper than is permitted (design plus overdepth allowance).** **All surveys shall be accomplished by a licensed surveyor and signed by the permittee to certify their accuracy.** A copy of the Post-Dredge Survey should be sent to the National Ocean Service for chart updating:

NOAA/National Ocean Service  
Nautical Data Branch  
N/CS26, SSMC3, Room 7230  
1315 East-West Highway  
Silver Spring, Maryland 20910-3282.

9. **Disposal Site Verification Log (DSVL):** Submit on a weekly basis by noon Monday, the log (downloadable from <http://www.spn.usace.army.mil/Portals/68/docs/Dredging/guidance/document2010-09-07-132110.pdf>) that enumerates work accomplished during the preceding week. Mail to:

U.S. Army Corps of Engineers, San Francisco District  
Attn: Shelah Sweatt, DMMO  
1455 Market Street, 16<sup>th</sup> Floor  
San Francisco, California 94103-1398;

FAXed to Ms. Shelah Sweatt at (415) 503-6693; or e-mail to [shelah.sweatt@usace.army.mil](mailto:shelah.sweatt@usace.army.mil). **Please include the Corps permit number and dredge episode number.** The log will be provided when the Corps approves the Dredge Operation Plan and authorizes the commencement of the dredging.

10. **Overflow requirements:**

- a. No overflow or decant water shall be discharged from the barge, with the exception of spillage incidental to mechanical dredge operations.
- b. During transportation from the dredging site to the disposal site, no material shall be permitted to overflow, leak or spill from barge, bins or dump scows.
- c. For hopper dredge only, during dredging operations, overflow shall be limited to a maximum of 15 minutes. Adjustments to the dredging operation may be required to insure that once overflow commences, it will not exceed the 15-minute limit.
- d. For approved sand dredging, overflow will not exceed 15 minutes or the economic load, whichever occurs first.



11. If the material is mechanically dredged, passed through a debris grid, with a maximum opening size of 12 inches by 12 inches that will cover the entire loading area of the dump scow. Everything that does not pass through the grid will be considered solid debris and shall be disposed in areas outside of Corps jurisdiction. All such material shall be promptly removed from the grid at the end of each 8 hour shift or sooner.
12. **The permittee or dredge contractor shall inform this office when: 1) a dredge episode actually commences, 2) when dredging is suspended (suspension is when the dredge contractor leaves the dredge site for more than 48 hours for reasons other than equipment maintenance), 3) when dredging is restarted, and 4) when dredging is complete. Each notification should include the Corps permit number and dredge episode number. The information can be sent to the attention of Debra O'Leary, in writing to the address below; FAXed to (415) 503-6693; e-mailed to [debra.a.o'leary@usace.army.mil](mailto:debra.a.o'leary@usace.army.mil) or via telephone message at (415) 503-6807.**

U.S. Army Corps of Engineers, San Francisco District  
Operations and Readiness Division  
Attn: Debra A. O'Leary  
1455 Market Street, 16<sup>th</sup> Floor  
San Francisco, California 94103-1398

13. The permittee, as directed by the District Engineer under authority pursuant to the policies and procedures of 33 CFR 325.7, may be required to modify disposal schedules and monthly disposal quantities for particular dredging episodes.
14. The permittee shall allow the dredging area and equipment to be inspected by the Corps staff upon request.
15. For each dredge episode, the permittee shall be responsible for obtaining a letter of water quality certification from the Regional Water Control Quality Board and authorization from the California Coastal Commission. Water quality certification and BCDC authorization will be a prerequisite to the District Engineer's decision to approve or disapprove specific dredge episodes pursuant to the policies and 33 CFR 325.2(b)(1)(ii) and 325.2(b)(2)(ii).
16. **If a land, ocean, or other aquatic disposal site becomes available for use during the life of the permit, the permittee shall evaluate these disposal alternatives, taking into consideration cost, existing technology, and logistics in light of the overall project purpose to facilitate compliance with the 404(b)(1) Guidelines (40 CFR 230). This evaluation shall be submitted to the Corps at least 60 calendar days before commencement of subsequent dredging episodes. The District Engineer, upon review of this information and after consultation with other resource agencies, may direct the permittee to use such sites in lieu of or in addition to the Alcatraz Disposal Site (SF-11), under authority of 33 CFR 325.7 and 40 CFR 230.10(a).**

FURTHER INFORMATION:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 403). Section 10 of the Rivers and Harbors Act generally regulates all structures and work occurring below the plane of mean high water in tidal waters of the United States; in former diked baylands currently below mean high water; outside the limits of mean high water but affecting the navigable capacity of tidal waters; or below the plane of ordinary high water in non-tidal waters designated as navigable waters of the United States. Navigable waters of the United States generally include all waters subject to the ebb and flow of the tide; and/or all waters presently used, or have been used in the past, or may be susceptible for future use to transport interstate or foreign commerce. The term "structure" includes, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island or reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, or any other obstacle or obstruction. The term "structure" does not include bridges and causeways constructed in or over navigable or tidal waters of the United States, since this regulatory responsibility has been delegated to the U.S. Coast Guard under the Department of Transportation Act of 1966 (Pub. L. No. 89-670). The term "work" includes, without limitation, any dredging or disposal of dredged material, filling, or other modification of a navigable water of the United States.

( ) Section 404 of the Clean Water Act (33 U.S.C. § 1344). Section 404 of the Clean Water Act generally regulates all discharges of dredged or fill material occurring below the plane of ordinary high water in non-tidal waters of the United States; or below the high tide line in tidal waters of the United States; and within the lateral extent of wetlands adjacent to these waters. Waters of the United States generally include the territorial seas; all traditional navigable waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters subject to the ebb and flow of the tide; wetlands adjacent to traditional navigable waters; non-navigable tributaries of traditional navigable waters that are relatively permanent, where the tributaries typically flow year-round or have continuous flow at least seasonally; and wetlands directly abutting such tributaries. Where a case-specific analysis determines the existence of a "significant nexus" effect with a traditional navigable water, waters of the United States may also include non-navigable tributaries that are not relatively permanent; wetlands adjacent to non-navigable tributaries that are not relatively permanent; and wetlands adjacent to but not directly abutting a relatively permanent non-navigable tributary. The term "dredged material" means material that is excavated or dredged from waters of the United States. The term "fill material" means material placed in waters of the United States where the material has the effect of replacing any portion of a water of the United States with dry land or of changing the bottom elevation of any portion of a water of the United States. Examples of such fill material include, but are not limited to, rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure in waters of the United States. The term "fill material" does not include trash or garbage.

(X) Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. § 1413). Section 103 of the Marine Protection, Research, and Sanctuaries Act generally regulates the transport of dredged material for the purpose of disposal in ocean waters. Ocean waters is defined as those waters of the open seas lying seaward of the base line from which the territorial seas is measured, as defined in the Convention of the Territorial Sea and the Contiguous Zone (15 UST 1606; TIAS 5639).

2. Limits of this authorization:

- a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.
- b. This permit does not grant any property rights or exclusive privileges.
- c. This permit does not authorize any injury to the property or rights of others.
- d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability: In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.
- e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.


5. Reevaluation of Permit Decision: This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate. (See Item 4 above.)
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 C.F.R. Section 325.7 or enforcement procedures such as those contained in 33 C.F.R. Sections 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the Terms and Conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 C.F.R. Section 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

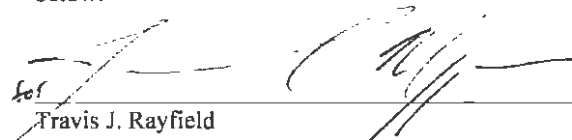
6. Extensions: General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

  
(PERMITTEE)

8-24-18  
(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

  
Travis J. Rayfield  
Lieutenant Colonel, U.S. Army  
District Engineer

04 SEP 2018  
(DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

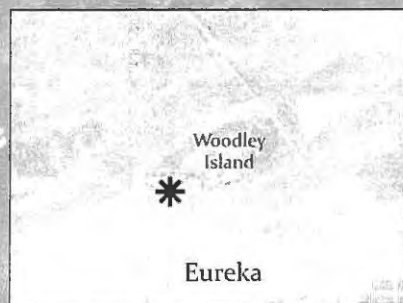
\_\_\_\_\_  
(TRANSFeree)

\_\_\_\_\_  
(DATE)

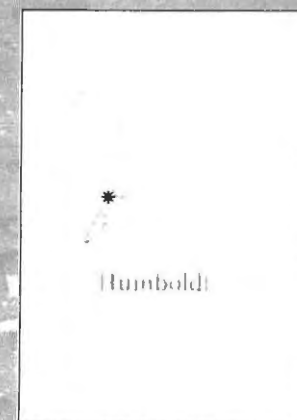
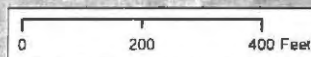
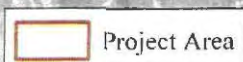
USACE File: 1996-22216

Woodley Island Marina  
Maintenance Dredging

Sheet 1 of 14  
April 2018



Woodley Island



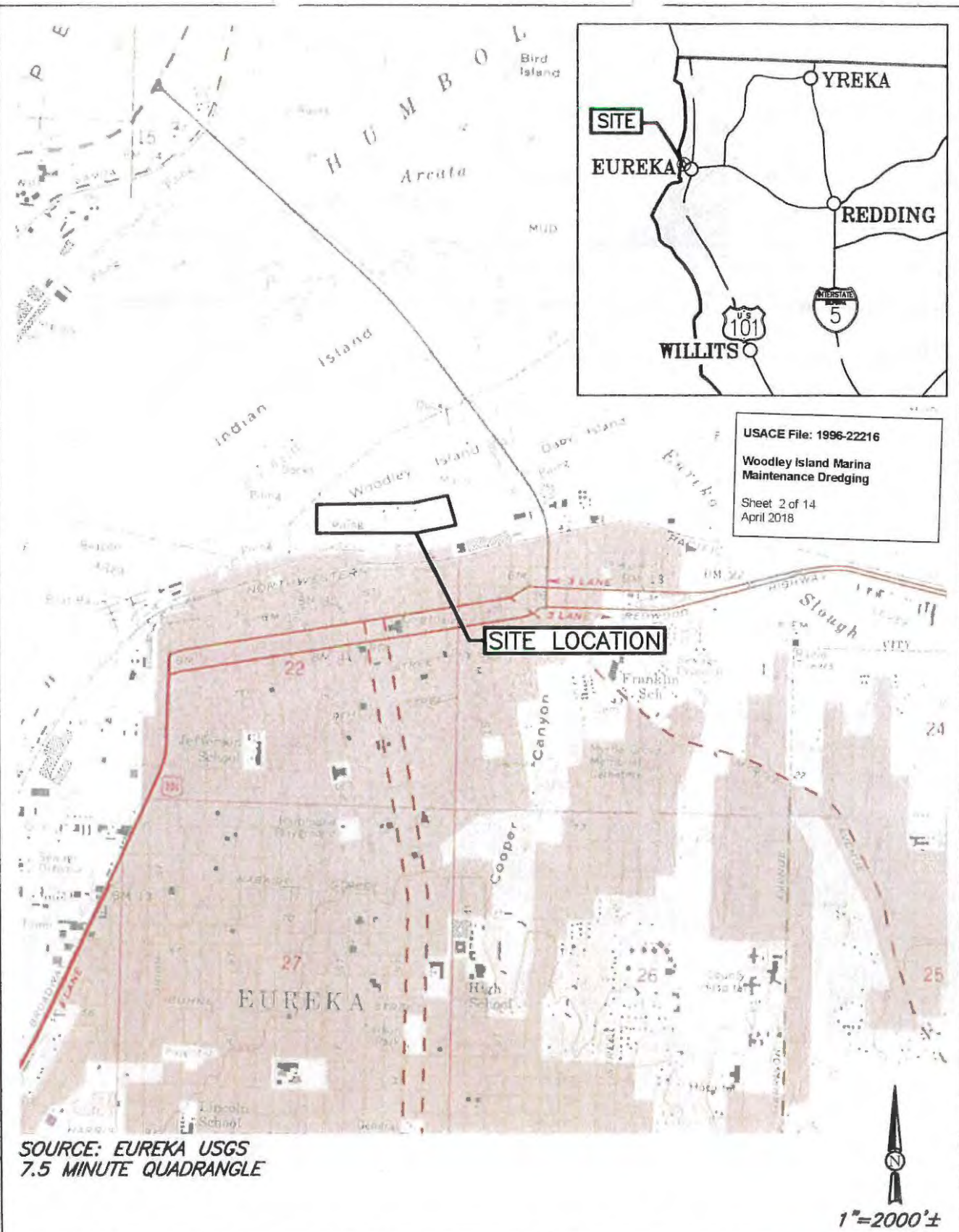
# Woodley Island Marina Dredge Site

Figure 1a - Vicinity Map

PLANWEST  
PARTNERS, INC.



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 <p>SHN Consulting Engineers &amp; Geologists, Inc.</p>	<p>Harbor District Woodley Island Maintenance Dredging Eureka, California</p>	<p>Site Location Map</p> <p>SHN 016240</p> <p>March 2018</p> <p>016240-020-SITE-LCTN</p> <p>Figure 1</p>
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USACE File: 1996-22216

Woodley Island Marina  
Maintenance Dredging

Sheet 3 of 14  
April 2018

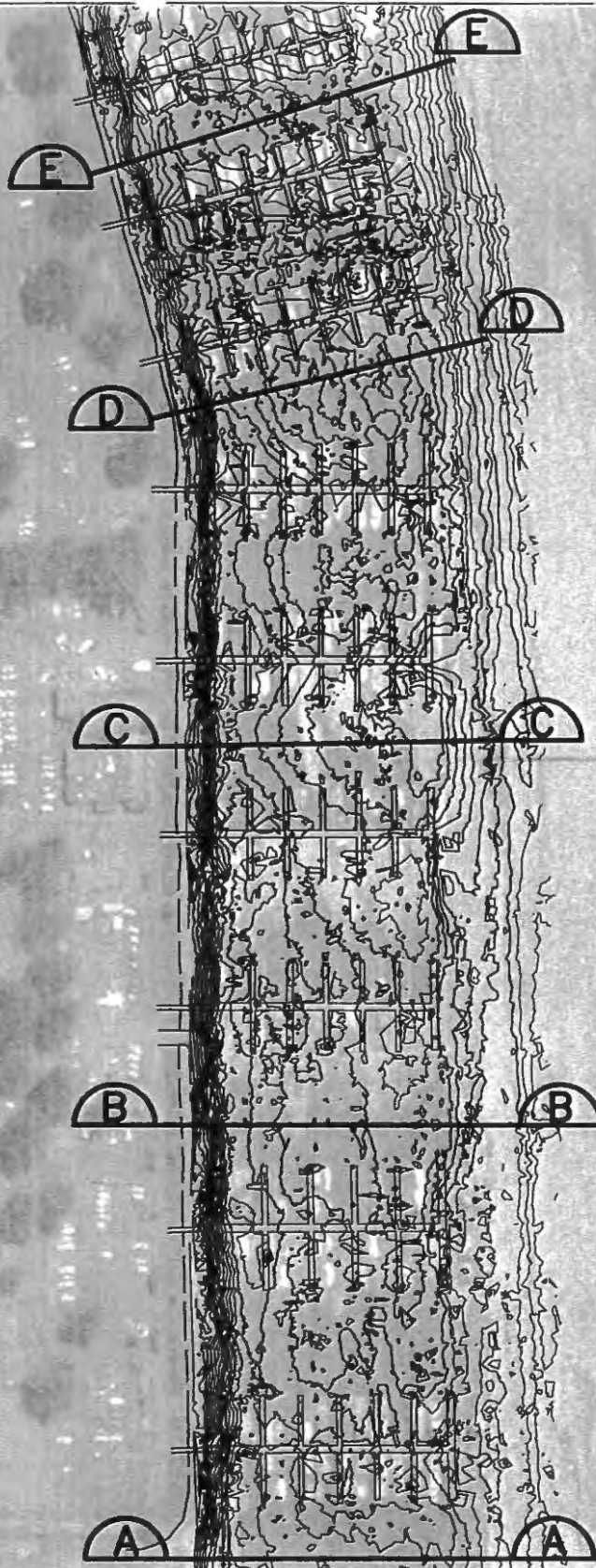


IMAGE SOURCE: ESRI

**SH**  
Consulting Engineers  
& Geologists, Inc.

Harbor District  
Woodley Island Maintenance Dredging  
Eureka, California

March 2018

016240-020-XSECT

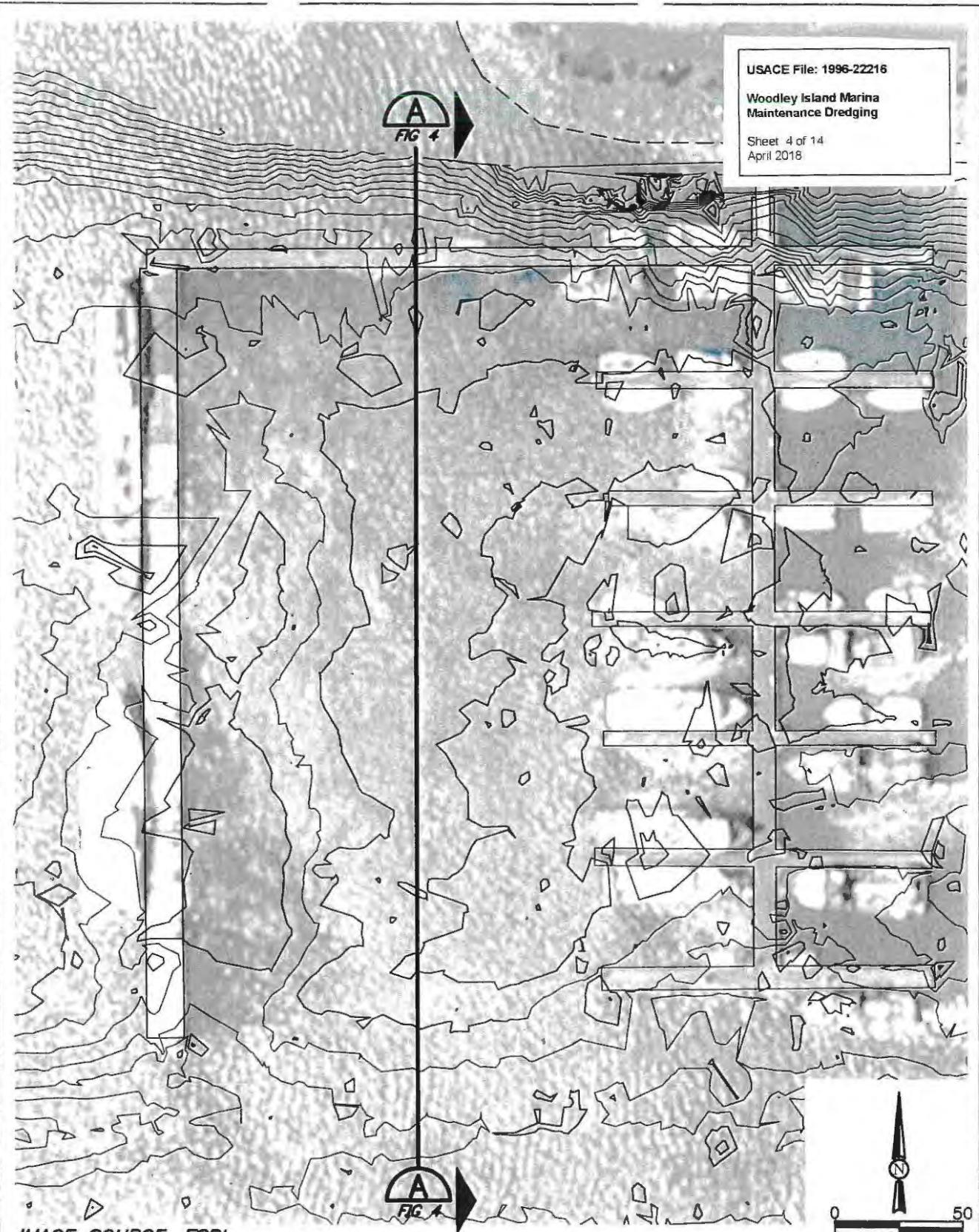
Aerial View showing  
Section Locations  
SHN 016240

Figure 2

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USACE File: 1996-22216  
Woodley Island Marina  
Maintenance Dredging  
Sheet 4 of 14  
April 2018

IMAGE SOURCE: ESRI



Harbor District  
Woodley Island Maintenance Dredging  
Eureka, California

Aerial View showing  
Section A Location  
SHN 016240

March 2018

016240-020-XSECT

Figure 3



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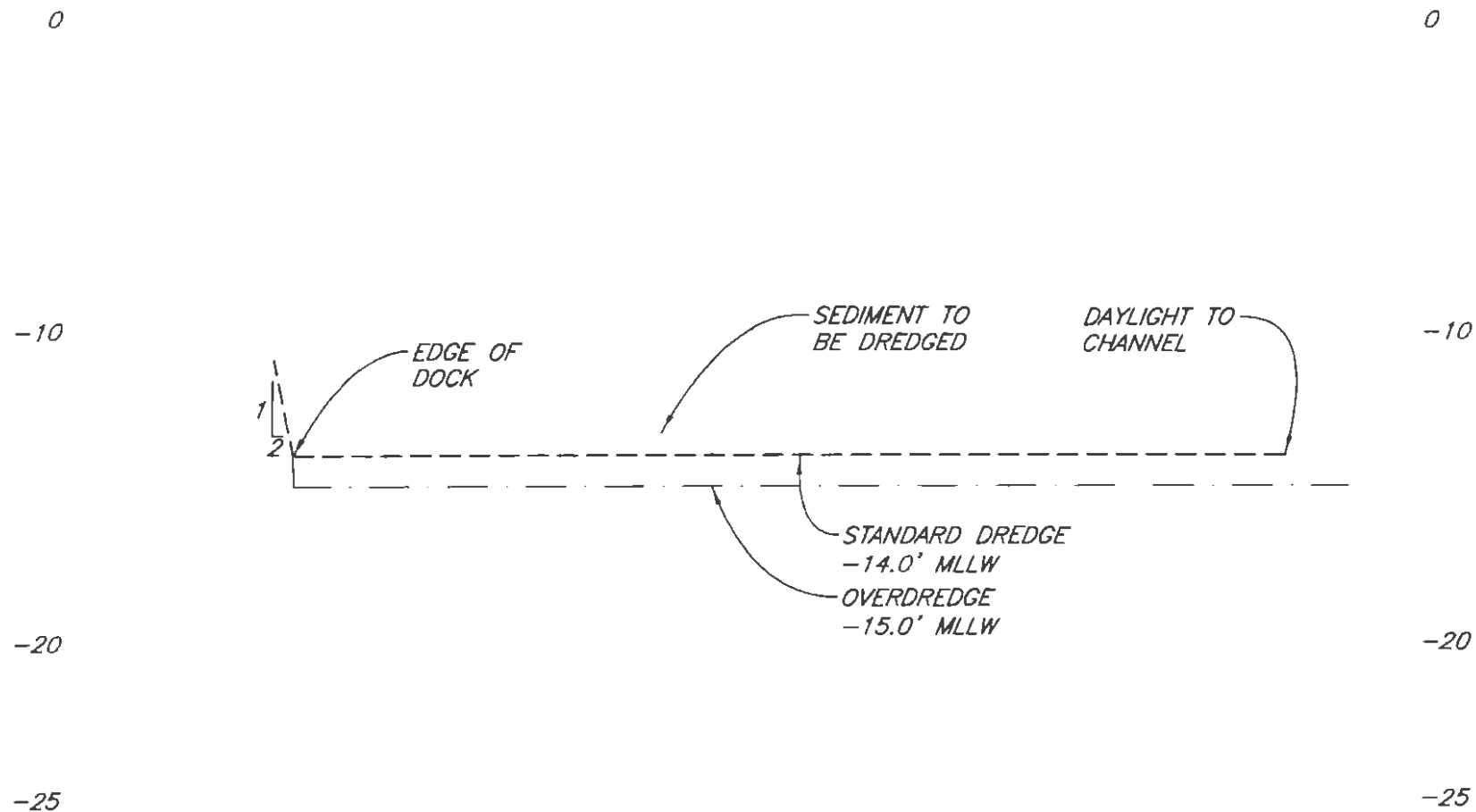
**SECTION A**SCALE: 1"=50' H  
1"=5' V

FIG 3

  
 Consulting Engineers  
& Geologists, Inc.
Harbor District  
Woodley Island Maintenance Dredging  
Eureka, California

Section A

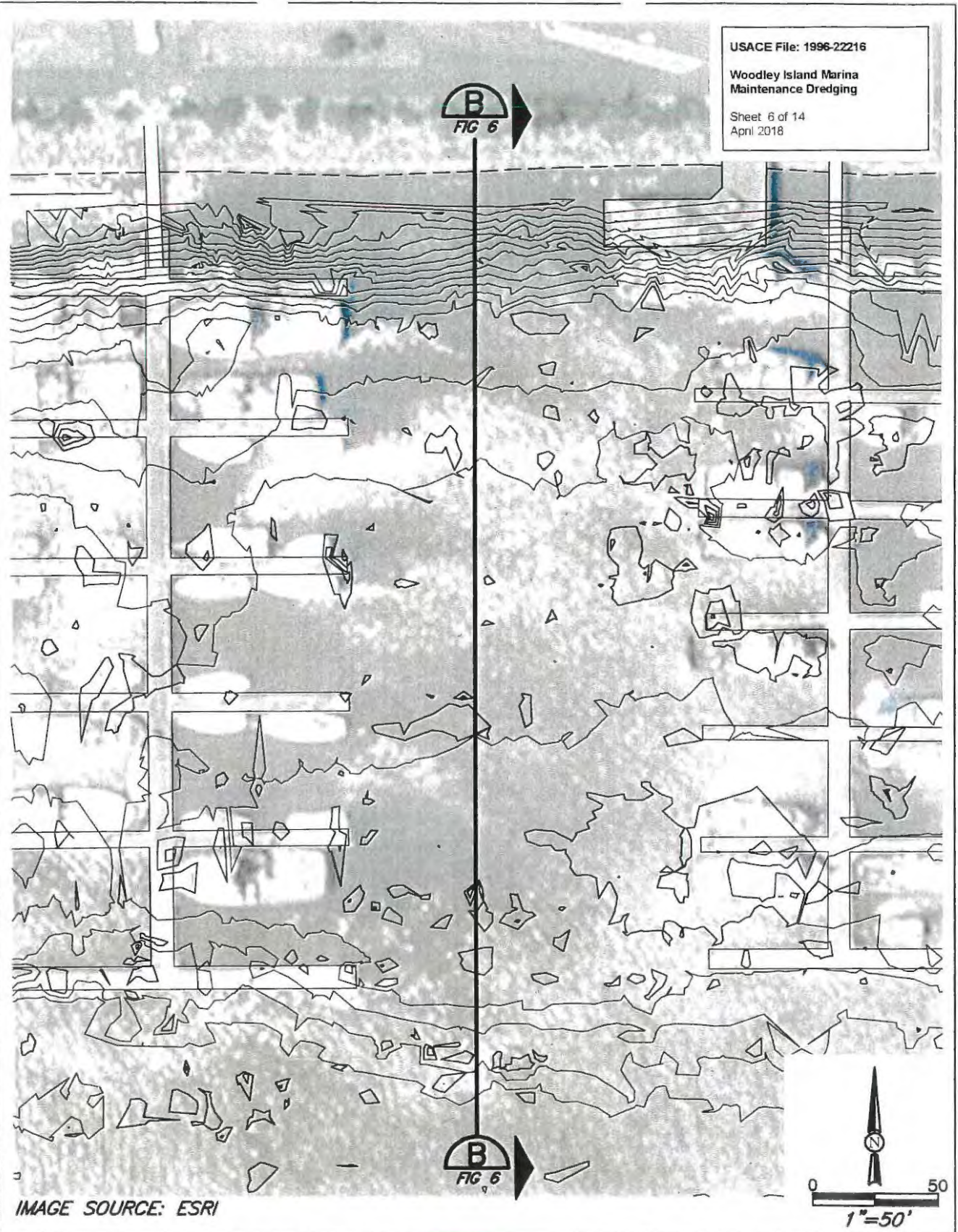
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March 2018


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Figure 4

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USACE File: 1996-22216  
Woodley Island Marina  
Maintenance Dredging  
Sheet 6 of 14  
April 2018

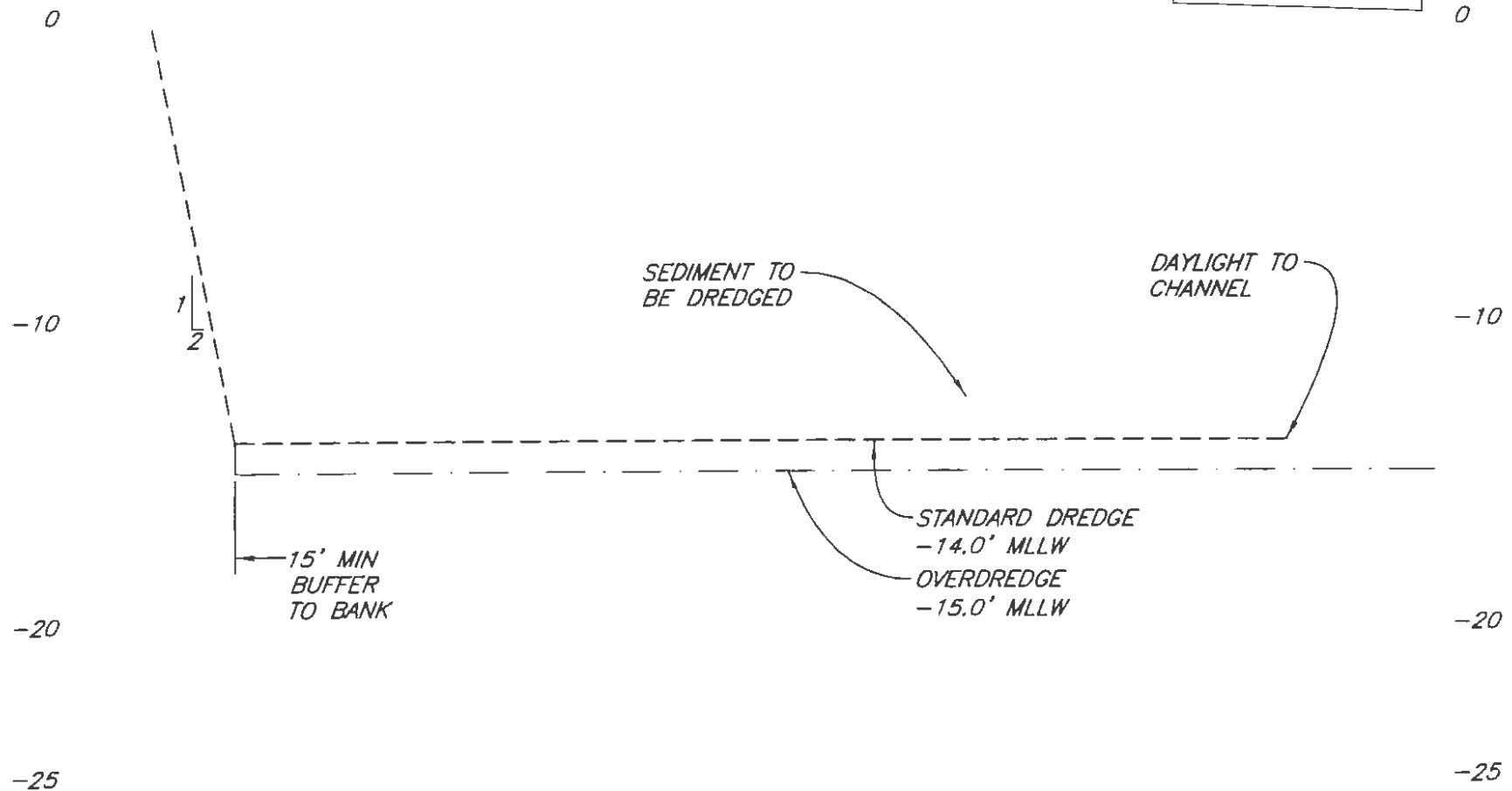
 Consulting Engineers & Geologists, Inc.	Harbor District Woodley Island Maintenance Dredging Eureka, California March 2018	Aerial View showing Section B Location SHN 016240 Figure 5
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USACE File: 1996-22216

Woodley Island Marina  
Maintenance Dredging

Sheet 7 of 14  
April 2018

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**SECTION B**

SCALE: 1"=50' H  
1"=5' V

FIG 5

**SH**  
Consulting Engineers  
& Geologists, Inc.

Harbor District  
Woodley Island Maintenance Dredging  
Eureka, California

March 2018

016240-020-ASPEC 1

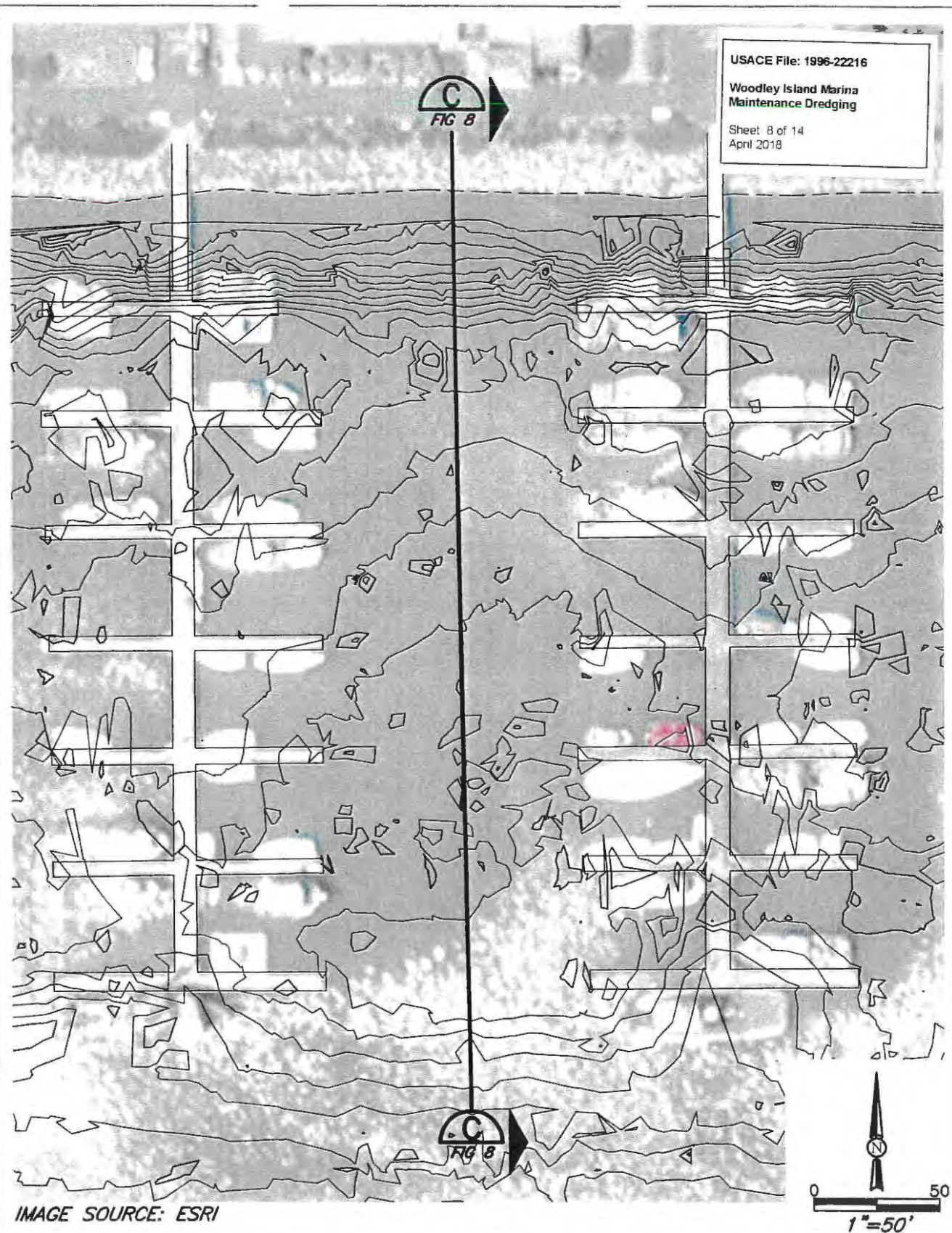
Section B

SHN 016240

Figure 6



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Consulting Engineers  
& Geologists, Inc.

Harbor District  
Woodley Island Maintenance Dredging  
Eureka, California

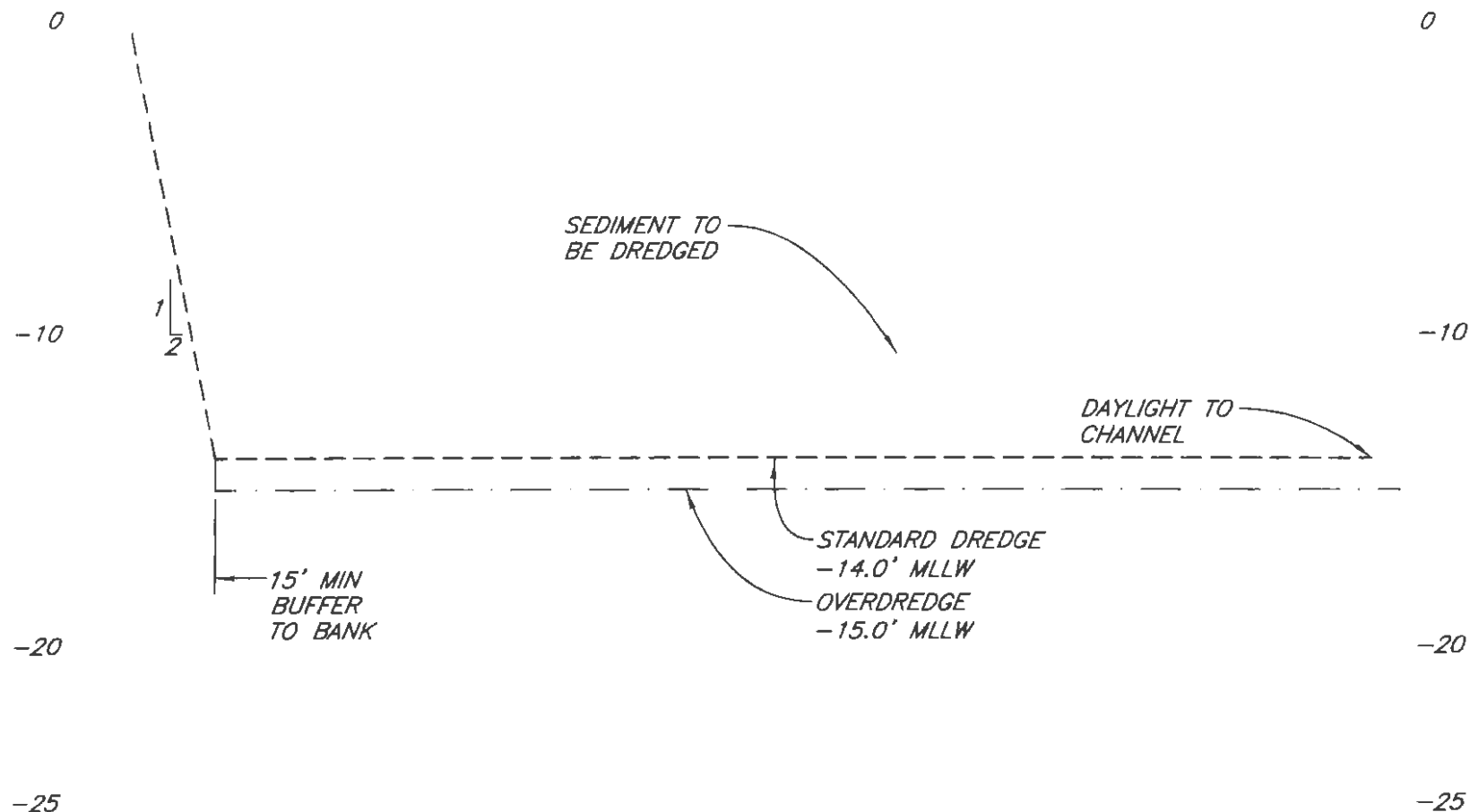
March 2018

016240-020-XSECT

Aerial View showing  
Section C Location  
SHN 016240

Figure 7

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**SECTION C**  
SCALE: 1"=50' H  
1"=5' V  
FIG 7



Consulting Engineers  
& Geologists, Inc.

Harbor District  
Woodley Island Maintenance Dredging  
Eureka, California

March 2018

016240-020-ASPECT

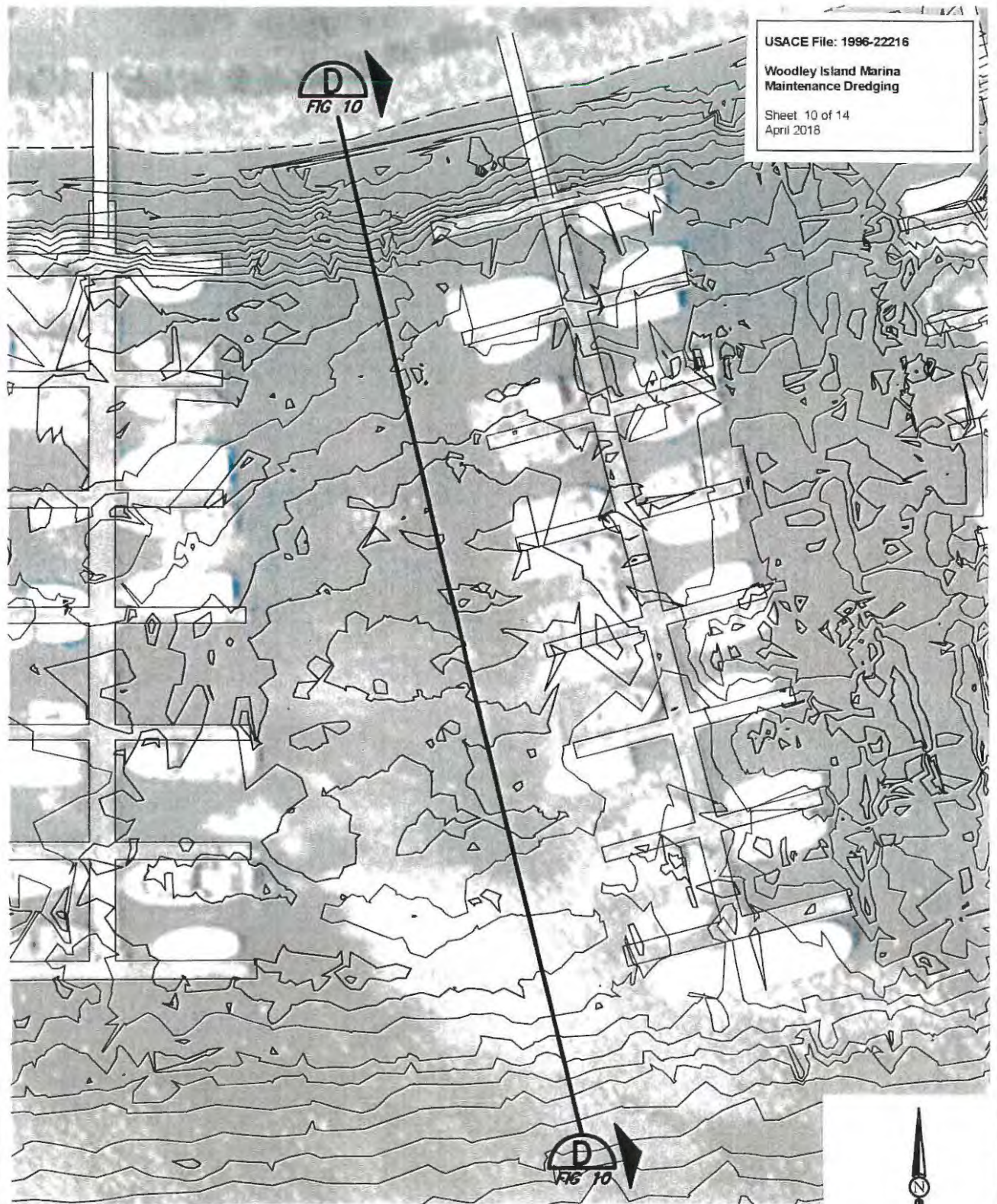
Section C

SHN 016240

Figure 8

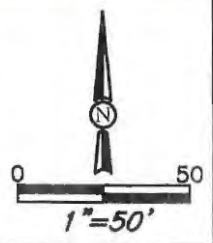



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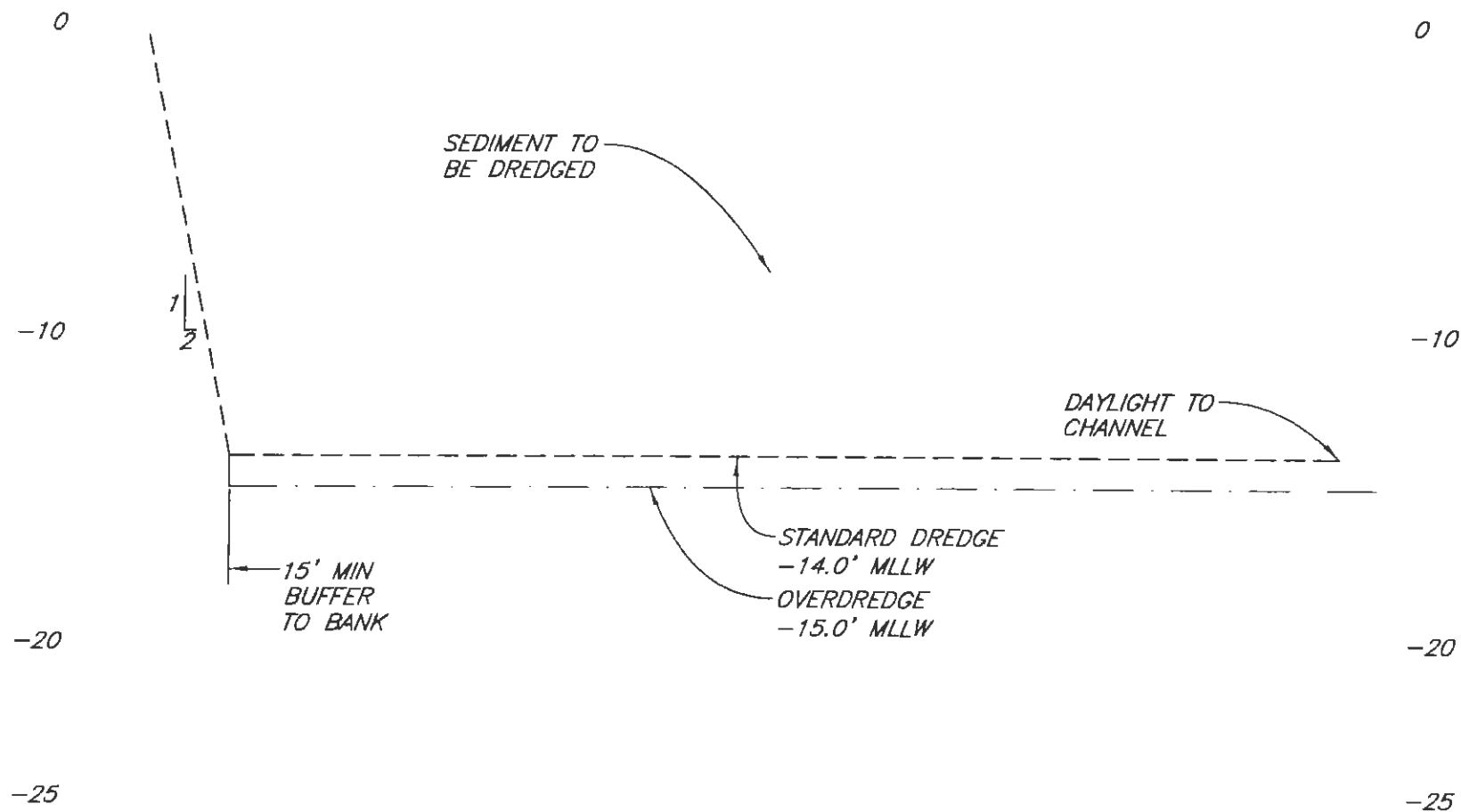
USACE File: 1996-22216  
Woodley Island Marina  
Maintenance Dredging  
Sheet 10 of 14  
April 2018

IMAGE SOURCE: ESRI



 Consulting Engineers & Geologists, Inc.	Harbor District Woodley Island Maintenance Dredging Eureka, California	Aerial View showing Section D Location SHN 016240
	March 2018	016240-020-XSECT
Figure 9		

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**SECTION D**  
SCALE: 1"=50' H  
1"=5' V  
FIG 9

**SH**  
Consulting Engineers  
& Geologists, Inc.

Harbor District  
Woodley Island Maintenance Dredging  
Eureka, California

Section D  
SHN 016240

March 2018

016240-020-XSECT

Figure 10



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USACE File: 1996-22216  
Woodley Island Marina  
Maintenance Dredging  
Sheet 12 of 14  
April 2018

IMAGE SOURCE: ESRI


 Consulting Engineers & Geologists, Inc.	Harbor District Woodley Island Maintenance Dredging Eureka, California		Aerial View showing Section E Location SHN 016240
	March 2018	016240-020-XSECT	

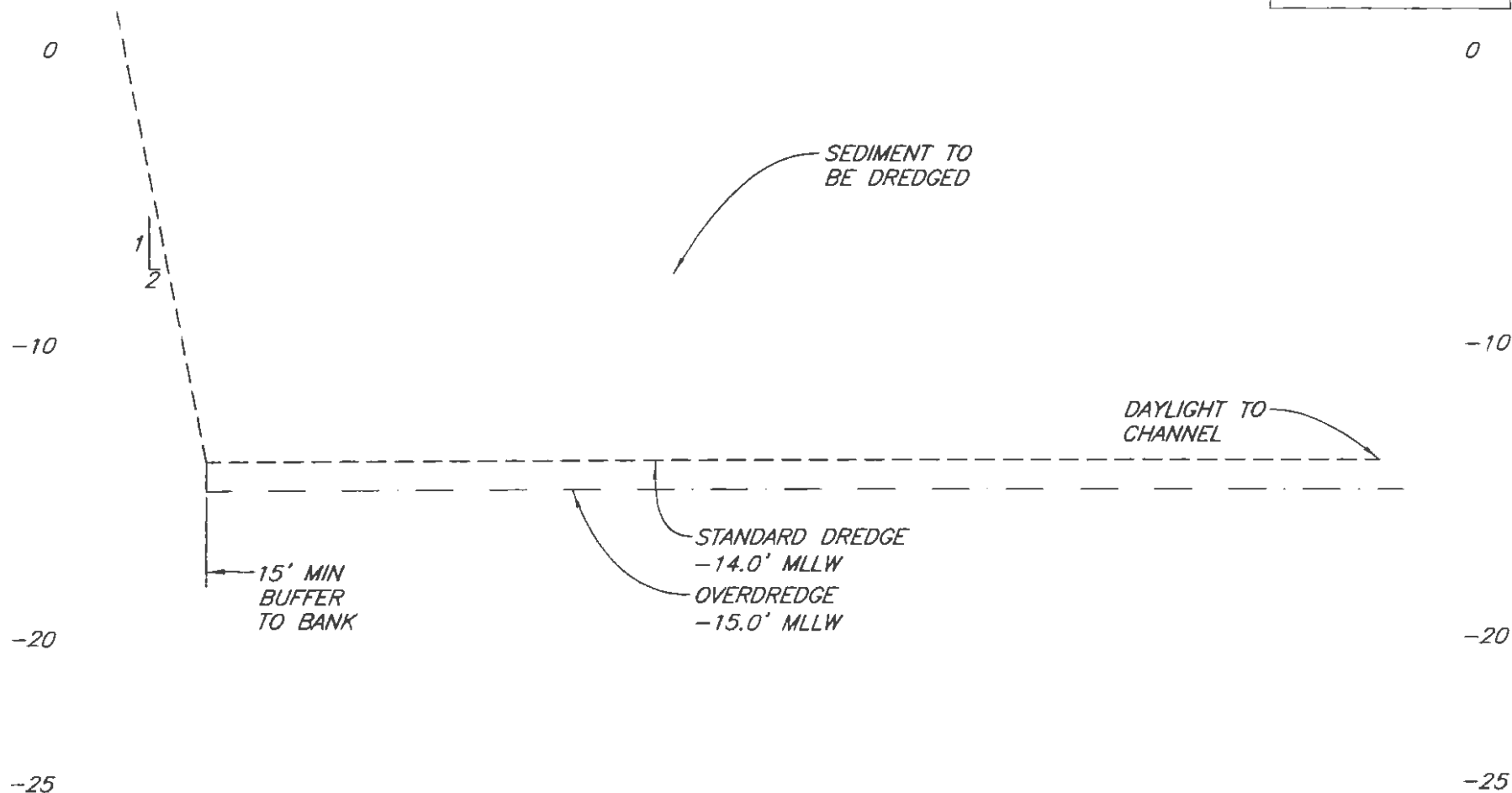
Figure 11



USACE File: 1996-22216

Woodley Island Marina  
Maintenance Dredging

Sheet 13 of 14  
April 2018



**SECTION E**  
SCALE: 1"=50' H 1"=5' V FIG 11

**SEIN**  
Consulting Engineers  
& Geologists, Inc

Harbor District  
Woodley Island Maintenance Dredging  
Eureka, California

Section E




SEIN 016240

March 2018

016240-020-ASEC1

Figure 12

## Region 9 Ocean Dumping Sites

-  HOODS Dump Site
-  3-mile Maritime Limit (Nautical Miles)
-  10-meter Bathymetric Contour Lines

### Data Sources:

Bathymetric Contours: California Department of Fish and Game, 10 meter bathymetric contour lines to 600 meters depth on the California coast, July 2000

3-mile Maritime Limit: NOAA's Office of Coast Survey (OCS), September 2005

Shaded Relief: USGS National Elevation Data (100K)

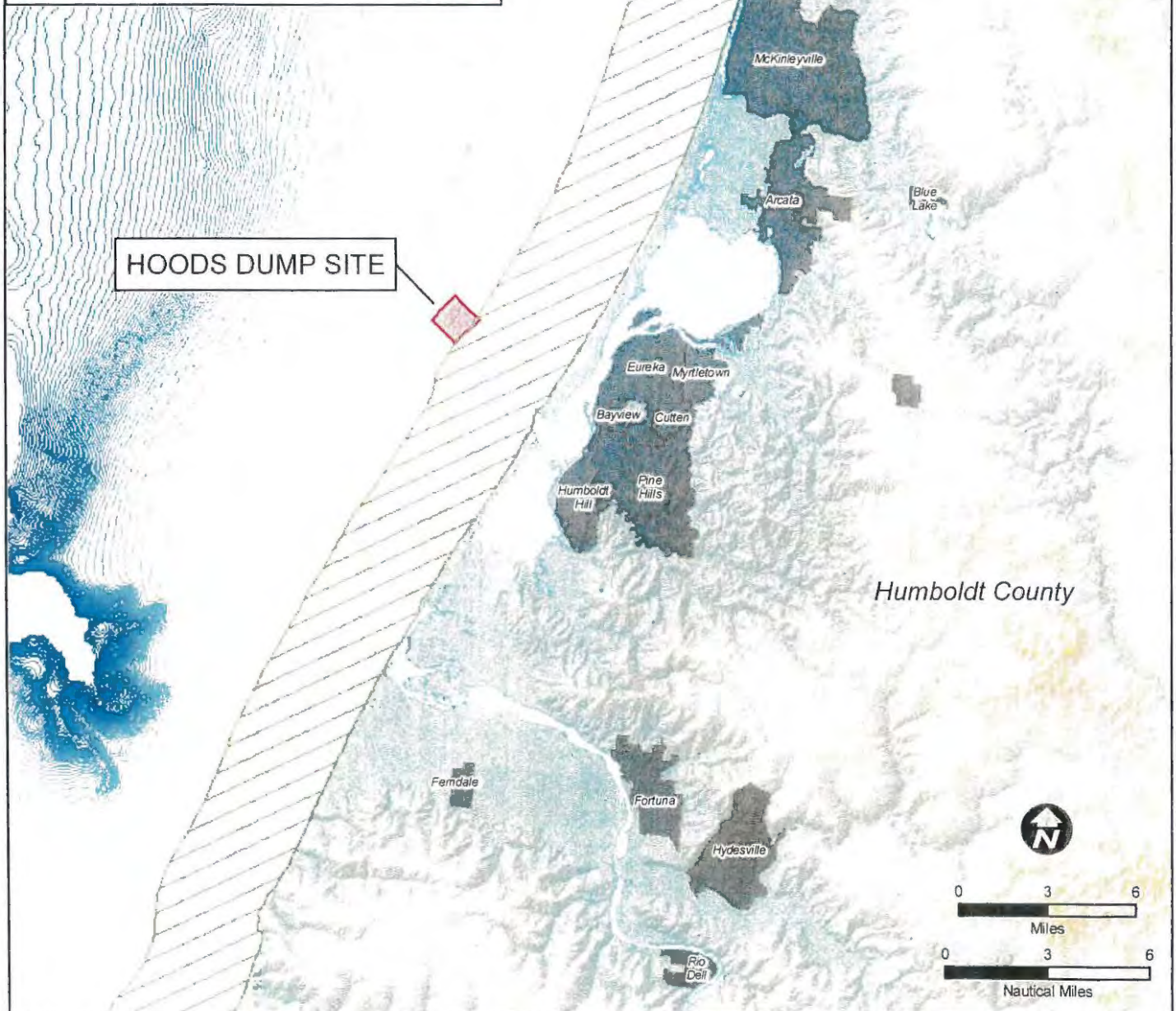
WTR0601347.1 May 2006



USACE File: 1996-22216

Woodley Island Marina  
Maintenance Dredging

Sheet 14 of 14  
April 2018





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
West Coast Region  
1655 Hendon Road  
Arcata, California 95521-4573

**JUN 05 2018**

Refer to NMFS No: WCR-2018-9936

Rick M. Bottoms, Ph.D.  
Chief, Regulatory Division  
U.S. Department of the Army  
San Francisco District, Corps of Engineers  
1455 Market Street  
San Francisco, California 94103-1398

Re: Endangered Species Act Section 7(a)(2) Concurrence Letter and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Humboldt Bay Harbor, Recreation, and Conservation District's Woodley Island Marina Maintenance Dredging Project in Eureka, Humboldt County, California (Corps File Number 1996-22216)

Dear Dr. Bottoms:

On May 29, 2018, NOAA's National Marine Fisheries Service (NMFS) received your request for a written concurrence that the United States Army Corps of Engineers' (Corps) proposed authorization of the Humboldt Bay Harbor, Recreation, and Conservation District's (District) Woodley Island Maintenance Dredging Project (Project) pursuant to Section 404 of the Clean Water Act of 1972, as amended (33 U.S.C. § 1344 *et seq.*) and Section 10 of the Rivers and Harbors Act of 1899, as amended (33 U.S.C. § 403 *et seq.*) is not likely to adversely affect (NLAA) species listed as threatened or endangered or critical habitats designated under the Endangered Species Act (ESA). This response to your request was prepared by NMFS pursuant to section 7(a)(2) of the ESA, implementing regulations at 50 CFR 402, and agency guidance for preparation of letters of concurrence.

NMFS also reviewed the proposed action for potential effects on essential fish habitat (EFH) designated under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), including conservation measures and any determination you made regarding the potential effects of the action. This review was pursuant to section 305(b) of the MSA, implementing regulations at 50 CFR 600.920, and agency guidance for use of the ESA consultation process to complete EFH consultation.

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). The concurrence letter will be available through NMFS' Public Consultation Tracking System <https://pets.nmfs.noaa.gov/pets-web/homepage/pets>. A complete record of this consultation is on file at NMFS' West Coast Region, Arcata, California office.



### **Proposed Action**

The Corps proposes to issue a 10-year Department of the Army Permit pursuant to Section 404 of the Clean Water Act of 1972, as amended (33 U.S.C. § 1344 *et seq.*) and Section 10 of the Rivers and Harbors Act of 1899, as amended (33 U.S.C. § 403 *et seq.*) to permit the Project. The District proposes to dredge the 19.3-acre Woodley Island Marina (WIM) using a mechanical clamshell dredge, removing as much as 300,000 cubic yards (cy) over the life of the permit, with no more than 100,000 cy removed in any 12-month period. Work would be completed during the July 1 to October 15 work window. The proposed dredging would remove accumulated sediment from the WIM area to restore adequate navigational and mooring depths. The dredged material would be placed in a sealed dump scow and transported to the Humboldt Open Ocean Disposal Site (HOODS), located three miles offshore of Humboldt Bay in the Pacific Ocean.

The District has not yet selected a dredging contractor and each contractor will have unique means and methods to complete the project based on their experience and equipment. As such, specific details, such as types of equipment, barge/scow size, number of trips to HOODS, schedule, etc., are still unknown. However, the general dredging methodology will consist of heavy equipment removing material from the bay floor with a clamshell bucket and placing it into a scow for transport to the disposal site at HOODS. Prior to dredging, pre-project hydrographic surveys will be completed. Updated dredge volumes will be generated and verified with post project hydrographic surveys.

The dredge barge will be moved into position and will anchor, typically by setting two spud piles attached to the barge. A tugboat will then move the dump scow into position nearby the work barge. A crane outfitted with a closed clamshell bucket will be used. Other than the negligible amount of sediment on the exterior of the bucket during loading, there will be no water or sediment released back into Humboldt Bay. Dredged material will be placed in the water tight dump scow positioned adjacent to the work barge. Once the scow is full, it will be towed out of Humboldt Bay to the HOODS ocean disposal site. The barge and scow will be repositioned frequently throughout the project in order to access all the areas to be dredged and will work 24-hours a day.

Dredging WIM will include removal of sediment from within vessel mooring berths, fairways in between docks, slips, and from beneath all floating and fixed structures and encompass 19.3-acres. Dock structures may be dismantled as necessary and any broken docks will be repaired or replaced. Side slopes will be cut at a 2:1 angle or the natural angle of repose. Overdredge depth is one foot below the design depth of (-)14 feet mean lower low water (MLLW). The current volume of sediment in need of removal from the WIM is estimated to be 130,000 cy, requiring two seasons of work to remove.

### **Minimization and Conservation Measures**

The Corps proposes to authorize the following measures as part of the proposed action.

- Dredging is limited to July 1 to October 15 to minimize effects to listed species
- Dredge volume will be limited to 100,000 cy in any 12 month period of time

- Spoils will be deposited at HOODS in accordance with the Corps and Environmental Protection Agency criteria
- Clamshell and excavator dredging is a slow and controlled process allowing marine life time to escape as the equipment approaches. There are no suction or jetting pressures involved. Operator has the ability to limit descent speeds to minimize sediment dispersion.
- Vegetable based or biodegradable hydraulic fluids shall be used, if possible, in equipment operating over water or without secondary containment
- Equipment will be routinely inspected before, during, and after use
- Spill and containment kits will be kept on site
- Dredging will not extend beyond the over-dredging limits identified
- Turbidity will be monitored upstream and downstream of the Project to ensure turbidity is limited to only 500-feet from work sites in Humboldt Bay

#### **Action Area**

The action area includes the WIM as well as a 500-foot buffer, representing the extent sediment and turbidity is likely to extend. The action area also includes the HOODS offshore disposal site and the area of Humboldt Bay and the Pacific Ocean in which vessels, tugs, barges, and scows will be travelling to deposit dredge spoils at the disposal site at HOODS and return to the work sites.

#### **Action Agency's Effects Determination**

Available information indicates the following listed species (Evolutionarily Significant Units (ESU) or Distinct Population Segments [DPS]) under the jurisdiction of NMFS may be affected by the proposed project:

##### **Southern Oregon/Northern California Coast (SONCC) coho salmon ESU**

(*Oncorhynchus kisutch*)

Threatened (70 FR 37160; June 28, 2005)

Critical habitat (64 FR 24049; May 5, 1999);

##### **California Coastal (CC) Chinook salmon ESU**

(*O. tshawytscha*)

Threatened (70 FR 37160; June 28, 2005)

Critical habitat (70 FR 52488; September 2, 2005);

##### **Northern California (NC) steelhead DPS**

(*O. mykiss*)

Threatened (71 FR 834; January 5, 2006)

Critical habitat (70 FR 52488; September 2, 2005);

##### **North American green sturgeon Southern DPS**

(*Acipenser medirostris*)

Threatened (71 FR 17757; April 7, 2006)

Critical habitat (74 FR 52300; October 9, 2009).



The Corps determined the Project may affect, but is not likely to adversely affect SONCC coho salmon, CC Chinook salmon, NC steelhead, and Southern DPS green sturgeon and their designated critical habitats. The Corps rationale for their determination includes the areas proposed for dredging and disposal have been previously used several times and considered to be highly disturbed; the work window minimizes exposure of listed species; availability of suitable habitat elsewhere; and the effects would be short term with rapid recolonization of infaunal species. The Corps has also determined that the Project may adversely affect EFH.

#### SONCC Coho Salmon, CC Chinook Salmon, and NC Steelhead Life History and Use of Humboldt Bay

*SONCC Coho Salmon Life History:* Coho salmon have a generally simple 3-year life history. The adults typically migrate from the ocean and into Humboldt Bay towards their freshwater spawning grounds in late summer and fall, and spawn by mid-winter. Adults die after spawning. The eggs are buried in nests, called redds, in the rivers and streams where the adults spawn. The eggs incubate in the gravel until fish hatch and emerge from the gravel the following spring as fry. These 0+ age fish typically rear in freshwater for about 15 months before migrating to the ocean. The juveniles go through a physiological change during the transition from fresh to salt water called smoltification. Coho salmon typically rear in the ocean for two growing seasons, returning to their natal streams as 3-year old fish to renew the cycle.

Recent studies have identified the importance of the greater transition zone, or ecotone, between fresh and brackish water to juvenile salmonids (Miller and Sadro 2003). Wallace et al. (2015) defined this stream-estuary ecotone to include the area of low gradient stream extending from stream entrance to the wide valley floor, through the upper limit of tidal influence downstream to the area where the channel becomes bordered by tidal mudflats (including fringing marsh habitats, side channels, and off channel ponds). Sampling by California Department of Fish and Wildlife (CDFW) suggest that 0+ age coho salmon from Freshwater Creek (a tributary to Humboldt Bay) primarily rear in the stream-estuary ecotone during the spring and summer and then migrate back into Freshwater Creek to over-winter before emigrating to the ocean the following year as age 1+ smolts (Wallace and Allen 2007). An estimated 40% of coho salmon smolts originated from the stream-estuary ecotone of Freshwater Creek in 2007 and 2008 (Ricker and Anderson 2011).

*CC Chinook Salmon Life History:* The CC Chinook salmon ESU are typically fall spawners, returning to Humboldt Bay before entering their natal streams in the early fall. The adults tend to spawn in the mainstem or larger tributaries of rivers. As with the other anadromous salmon, the eggs are deposited in redds for incubation. When the 0+ age fish emerge from the gravel in the spring, they typically migrate to saltwater shortly after emergence. Therefore, Chinook salmon typically enter the estuary as smaller fish compared to coho salmon. Chinook salmon are typically present in the stream-estuary ecotone from early May to early September, with peak abundance in June/July (Wallace and Allen 2007). Similar to coho salmon, prey resources during out-migration is critical to Chinook salmon survival as they grow and move out to the open ocean. A study by MacFarlane (2010) indicated that juvenile Chinook salmon require less prey

in the estuary, equivalent to one northern anchovy (*Engraulis mordax*) per day, compared to a range of one to four anchovies needed per day in the ocean.

*NC Steelhead Life History:* Steelhead exhibit the most complex suite of life history strategies of any salmonid species. They have both anadromous and resident freshwater life histories that can be expressed by individuals in the same watershed. The anadromous fish generally return to freshwater to spawn as 4 or 5 year old adults. Unlike other Pacific salmon, steelhead can survive spawning and return to the ocean only to return to spawn in a future year. It is rare for steelhead to survive more than two spawning cycles. Steelhead typically spawn between December and May. Like other Pacific salmon, the steelhead female deposits her eggs in a redd for incubation. The 0+ age fish emerge from the gravel to begin their freshwater life stage and can rear in their natal stream for 1 to 4 years before migrating to the ocean.

Steelhead have a similar life history as noted above for coho salmon, in the sense that they rear in freshwater for an extended period before migrating to saltwater. As such, they enter the estuary as larger fish (mean size of about 170 to 180 mm or 6.5 to 7.0 inches) and are, therefore, more oriented to deeper water channels in contrast to Chinook salmon that typically enter the estuary as 0+ fish. The CDFW data indicate that steelhead smolts generally migrate downstream toward the estuary between March 1 and July 1 each year, although they have been observed as late as September (Ricker et al. 2014). The peak of the outmigration timing varies from year to year within this range, and generally falls between early April and mid-May. CDFW estimated 80% to 90% of steelhead trout smolts originated from the stream-estuary ecotone of Freshwater Creek in 2007 and 2008 (Wallace et al. 2015).

*Salmonid Use of Humboldt Bay:* Salmonids use eelgrass habitats for cover and feeding while they migrate to the marine environment, or while they rear seasonally in Humboldt Bay before returning upstream to overwinter (Wallace et al. 2015). Salmonids occurring in estuaries are highly mobile and in Humboldt Bay, low numbers of fish are spread over a large area, which can complicate scientific observations or captures intended to understand their habitat preferences (Garwood et al. 2013 and Pinnix et al. 2005). Phillips (1984) suggested Chinook salmon were “transient” users of eelgrass for feeding or cover. Murphy et al. (2000) did not observe a significant association of juvenile salmon with eelgrass. Garwood et al. (2013) studied fish assemblages in an eelgrass bed in Humboldt Bay by conducting monthly saupling over a period of several years and only captured one listed salmonid (NC steelhead) during the multi-year study. Pinnix et al. (2005) sampled over a 2-year period using fyke nets, shrimp trawls, beach seines, purse seines, cast nets, and minnow traps. Pinnix et al. (2005) identified a diverse and abundant fish community using the mudflats, oyster culture, and eelgrass meadows in Humboldt Bay, including a total of 49 species from 22 families of fishes. However, over the two years of sampling, no salmonid species were captured in any of the six different types of sampling gear.

A recent study related to 1+ age coho salmon smolts in Humboldt Bay, California, by Pinnix et al. (2013) used acoustic transmitters surgically implanted into the out-migrating smolts. Coho salmon smolts spent more time in the stream- estuary ecotone compared to the intertidal habitat of Humboldt Bay. During their residency in Humboldt Bay, coho smolts primarily used deep channels and channel margins and were present in the estuary an average of 10 to 12 days. They were also detected near floating eelgrass mats adjacent to the channels, but not over eelgrass

beds. The results from this study emphasize the importance of edge habitat and the need for structural heterogeneity during salmonid residency and migration through Humboldt Bay.

#### Southern DPS Green Sturgeon Life History and Use of Humboldt Bay

Southern DPS green sturgeon inhabit estuaries along the west coast during the summer and fall months (Moser and Lindley 2007) and are known to use the North Humboldt Bay heavily (Goldsworthy et. al. 2016, Pinnix 2008). Juvenile Southern DPS green sturgeon rear in their natal streams in California's Central Valley, so only sub-adult and adult SDPS green sturgeon are present in Humboldt Bay and are the only life stages of SDPS green sturgeon that could be exposed to the effects of the Project. Sub-adults range from 65-150 cm total length from first ocean entry to size at sexual maturity. Sexually mature adults range from 150-250 cm total length.

The action area is largely an intertidal mudflat with a deeper subtidal channel nearby (Eureka Channel). Because the action area is largely intertidal, SDPS green sturgeon are only expected along the deepest margins of the action area where suitable depths exist to accommodate large animals like the SDPS green sturgeon. SDPS green sturgeon can only utilize the action area during high tides, and therefore exposure to the Project is very limited

#### **Consultation History**

On May 29, 2018, NMFS received an initiation package from the Corps with an attached Project Description prepared by Pacific Affiliates (Pacific Affiliates 2018). The Corps requested NMFS concurrence that the Project, as proposed, is not likely to adversely affect SONCC coho salmon, CC Chinook salmon, NC steelhead, SDPS green sturgeon or their designated critical habitats. The Corps also determined the Project might adversely affect species managed under the Pacific Coast Salmon Fishery Management Plan (FMP), Pacific Coast Groundfish FMP, and Coastal Pelagic Species FMP.

On May 31, 2018, NMFS contacted the Corps via email requesting confirmation that the Project Description prepared by the District (HBHRC 2018) could be considered as part of the consultation initiation package, as the Corps did not provide a description of the project as part of the initiation package.

On June 5, 2018, the Corps confirmed that the Project Description prepared by the District is part of the initiation package. On June 5, 2018, NMFS determined that there was sufficient information to initiate informal consultation as described above.

## **ENDANGERED SPECIES ACT**

#### **Effects of the Action**

Under the ESA, "effects of the action" means the direct and indirect effects of an action on the listed species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action (50 CFR 402.02). The applicable standard to find that a proposed action is not likely to adversely affect listed species or critical habitat is that all of the



effects of the action are expected to be discountable, insignificant, or completely beneficial. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or critical habitat. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Discountable effects are those extremely unlikely to occur.

#### Effects on Salmon, Steelhead and Green Sturgeon Critical Habitat

The critical habitat designations for SONCC coho salmon, CC Chinook salmon, NC steelhead, and Southern DPS green sturgeon use the term primary constituent element or essential feature. The new critical habitat regulations (81 FR 7414) replace this term with physical or biological features (PBFs). This shift in terminology does not change the approach used in conducting our analysis, whether the original designation identified primary constituent elements, physical or biological features, or essential features. In this consultation, we use the term PBF to mean primary constituent element or essential feature, as appropriate for the specific critical habitat.

#### *Effects on SONCC coho salmon, CC Chinook, and NC Steelhead Critical Habitat*

Within the range of the SONCC coho salmon, the life cycle of the species can be separated into five PBFs or essential habitat types: (1) juvenile summer and winter rearing areas, (2) juvenile migration corridors, (3) areas for growth and development to adulthood, (4) adult migration corridors, and (5) spawning areas. Areas 1 and 5 are often located in small headwater streams and side channels, while areas 2 and 4 include these tributaries as well as mainstem reaches and estuarine zones. Growth and development to adulthood (area 3) occurs primarily in near- and off-shore marine waters, although final maturation takes place in freshwater tributaries when the adults return to spawn. Within these areas, essential features of coho salmon critical habitat include adequate: (1) substrate, (2) water quality, (3) water quantity, (4) water temperature, (5) water velocity, (6) cover/shelter, (7) food, (8) riparian vegetation, (9) space, and (10) safe passage conditions (NMFS 1999). The PBFs of coho salmon critical habitat associated with this project relate to: areas for growth and development to adulthood. The essential features that may be affected by the proposed action include water quality, food, cover/shelter, and safe passage.

The PBFs of CC Chinook salmon critical habitat and the PBFs of NC steelhead critical habitat within the action area is limited to the estuarine area with: (1) water quality, water quantity, and salinity conditions supporting juvenile and adult physiological transitions between fresh- and saltwater; (2) natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, and side channels; and (3) juvenile and adult forage, including aquatic invertebrates and fishes, supporting growth and maturation (NMFS 2005). The essential features that may be affected by the proposed action include water quality, natural cover, and forage/food resources.

#### *Water Quality PBF*

The proposed action includes activities that could degrade the water quality PBF for salmonids. Degraded water quality is expected to result from increased turbidity from disturbance of sediment and the incidental fallback of sediment from the clamshell dredge during operation. Elevated suspended sediment concentrations (SSCs) in Humboldt Bay are a relatively frequent occurrence. SSC levels can naturally increase due to wave action on shallow mudflats, storm runoff being delivered from local tributaries, and turbid water from the Eel River entering on

incoming tides. It is common for SSCs in Humboldt Bay to range from 40 to 100 milligrams per liter or more during the year (Swanson et al. 2012). Significant increases in turbidity usually begin to occur in September or October with the onset of the wet season, and peak between December and February (Swanson et al. 2012). Implementation of the minimization measures, which are included in the proposed action, will ensure any effects of turbidity are minimized.

The clamshell dredge bucket will minimize the extent and duration of turbid conditions, which are expected to extend no more than 500-feet from work areas. Because work will only occur in one discrete location at any time, the majority of the action area will remain undisturbed during project activities. NMFS expects that the temporary reduction in water quality in Humboldt Bay will not affect the conservation value of critical habitat. Dredge spoils deposited at the offshore HOODS disposal site will also generate short term increases in turbidity in the Pacific Ocean. Disposal events at HOODS will be more episodic than the actual dredging work in Humboldt Bay and is expected to dissipate quickly in the open ocean environment. Therefore, the effects of the Project on the water quality PBF are expected to be insignificant.

#### *Prey/Forage Resources PBF*

The proposed action will result in the temporary loss of some benthic food resources within the area of the dredge footprint of the Project. Given the proposed work window, the majority of the disturbance to prey resources in the action area will occur during times when salmonid use of the action area is very low. As salmonid use of the action area increases in the spring months the following year, the dredged areas would have had several months to recover and be recolonized by benthic organisms. The preferred prey resources for juvenile salmonids (Dungeness crab larvae, Pacific herring larvae, harpacticoid copepods, etc) would not be affected by the Project. Because prey resources are not expected to be significantly affected, NMFS does not expect any adverse effects to the Prey Resource PBF.

#### *Migratory Corridor PBF*

The proposed action will result in increased turbidity within 500 feet of work sites while the clamshell dredge removes accumulated sediments from the dredge footprint. The proposed work will occur when salmonids are not expected to be migrating, and NMFS expects that salmonid use (rearing) in the action area will be minimal. The short term turbidity is not expected to have a lasting effect on the quality or quantity of the migratory corridor. NMFS expects no adverse effects to the Migratory Corridor PBF.

*Conclusion: Effects to SONCC Coho Salmon, CC Chinook, and NC Steelhead Critical Habitat*  
Based on our analysis above, implementation of the minimization measures will be sufficient to protect all of the PBFs of SONCC coho salmon, CC Chinook salmon, and NC steelhead critical habitat. For these reasons, the potential effects on the aforementioned species' critical habitat are expected to be insignificant.

#### Effects to SDPS Green Sturgeon Critical Habitat

The PBFs of green sturgeon critical habitat within the action area is limited to the estuarine area with: (1) abundant food items and substrates for juvenile, subadult and adult life stages; (2) water flow necessary for orientation and attraction flows to spawning areas in the Sacramento River; (3) water quality necessary for normal behavior, growth, and viability of all life stages; (4) a

migratory pathway necessary for the safe and timely passage within estuarine habitats and between estuarine and riverine or marine habitats; (5) a diversity of depths necessary for shelter, foraging and migration of juvenile, subadult, and adult life stages; and (6) sediment quality necessary for normal behavior, growth, and viability of all life stages (NMFS 2006).

#### *Prey Resources PBF*

The proposed action will result in the temporary reduction of benthic food resources within the area of the dredge footprint of the Project. After the first dredging cycle (likely to occur in 2018), the benthic community is expected to recover and recolonize the dredge footprint. Given the large volumes of sediment to be removed at WIM (130,000 cy), the second dredging episode will likely begin 13 months after the first episode. As SDPS green sturgeon enter Humboldt Bay in April, the dredge footprint will have had nearly six months of recovery time after the first year of dredging. Subsequent dredging efforts will be much smaller in scope and dependent on the volume of sediment accumulated. Green sturgeon use of the dredge footprint is relatively low given its low value location and high levels of disturbance. The temporary reduction in benthic prey resources during the recovery and recolonization of the dredge footprint after dredging episodes is not expected to adversely affect the Prey Resources PBF for SDPS green sturgeon.

#### *Water Flow PBF*

The Water Flow PBF is specific to bays and estuaries that are adjacent to the Sacramento River and is intended to provide for sufficient flows so that adult life stages can orient themselves to the incoming flow to accommodate upstream spawning migrations into the Sacramento River. Because Humboldt Bay is not adjacent to the Sacramento River, this PBF does not apply and will not be further considered in this consultation.

#### *Water Quality PBF*

The Water Quality PBF establishes criteria for suitable water temperatures, salinity, dissolved oxygen, and contaminants for all life stages of SDPS green sturgeon. The Project is not expected to affect these water quality parameters as the activities will not significantly affect temperature, salinity, or dissolved oxygen. Minimization measures are proposed in the *Proposed Action* section are likely to avoid introducing significant amounts of contaminants (fuel, etc) into the action area. Such toxics would be further diluted by tides and currents. Thus, there are no adverse effects expected to the Water Quality PBF.

#### *Migratory Corridor PBF*

The Migratory Corridor for SDPS green sturgeon may be temporarily affected by increases in turbidity. Turbid conditions are expected to extend as far as 500 feet from work sites, leaving ample space and adequate depths for any SDPS sturgeon migratory behaviors to occur. Furthermore, it is not expected that turbidity will affect SDPS green sturgeon migratory behaviors as the species has reduced eyesight and relies on other senses to navigate. Therefore, the effects to the Migratory Corridor PBF are expected to be insignificant.

#### *Water Depth PBF*

The Water Depth PBF suggests that a diversity of depths is necessary for shelter, foraging, and migration of all life stages of SDPS green sturgeon. Sub-adult and adult green sturgeon green sturgeon occupy a diversity of depths while in bays or estuaries for feeding and migration. The

Project will increase the depths of areas that are currently shallow, resulting in depths that remain suitable (or possibly enhanced) for SPDS green sturgeon. NMFS does not expect adverse effects to the Water Depth PBF, as a diversity of depths will remain available to all SDPS green sturgeon in the action area.

#### *Sediment Quality PBF*

The Sediment Quality PBF identifies the importance of the chemical characteristics of sediments, and suggests that sediments be free of elevated levels of contaminants such as selenium, pesticides, or poly aromatic hydrocarbons. These chemicals are known to cause adverse effects on all life stages of green sturgeon. Due to minimization measures described above, the Project is not expected to contribute chemical contamination to the water in the action area in more than the small amounts that are re-suspended from the bottom during dredging activities. Therefore, NMFS does not expect adverse effects to the Sediment Quality PBF.

#### *Conclusion: Effects to SDPS Green Sturgeon Critical Habitat*

Implementation of the minimization measures will be sufficient to protect all PBFs of SDPS green sturgeon critical habitat in the action area. Thus, the potential effects to green sturgeon critical habitat in the action area are expected to be insignificant.

#### Effects to Salmon and Steelhead Individuals

The Project has the potential to affect all life stages of the listed salmonids occurring in the action area due to entrainment in the clamshell bucket; reduced fitness resulting from temporary increases in turbidity; reduced fitness resulting from temporary reduction in benthic prey; and disturbance from vessel traffic. The effects caused by these project components have been reduced or minimized by incorporating the minimization measures described in the *Proposed Action* section.

#### *Entrainment in Clamshell Bucket*

There is a very remote possibility that a juvenile salmonid could be captured in the clamshell bucket and removed along with the dredge spoils. However, the work will occur when listed salmonid use of the action area is very low, thus minimizing exposure of juveniles. Any juveniles present in the action area during the work window would be expected to be present in the deeper North Bay Channel. Pinnix et al. 2013 found that SONCC coho salmon juveniles predominantly occurred in deep channels and NMFS expects that listed salmonids will prefer the deeper Eureka Channel and are expected to avoid the work areas, thus the possible effects of entrainment are discountable.

#### *Turbidity*

As previously described in the *Effects to Critical Habitat* section, operation of the clamshell dredge is expected to reduce water quality through the suspension of sediments and the resulting temporary increases in turbidity. Turbid waters are expected to extend no more than 500 feet from work sites, and work is expected to be limited to only one portion of the action area at a time. The work will occur when listed salmonid use of the action area is low, thus minimizing exposure of both juveniles and adults. If any life stages were present, it is expected they would be present in the deeper subtidal channel. Pinnix et al. 2013 found that SONCC coho salmon residency in the Bay was very low and predominantly occurred in deep channels. Listed

salmonids will be able to avoid the work areas as ample suitable habitat is available within the action area. Therefore, NMFS expects no adverse effect to listed salmonids resulting from turbidity.

#### *Benthic Prey Reduction*

The proposed action will result in the temporary loss of some benthic food resources within the area of the dredge footprint of the Project. Given the proposed work window, the majority of the disturbance to prey resources in the action area will occur during times when salmonid use of the action area is very low. As salmonid use of the action area increases in the spring months the following year, the dredged areas would have had several months to recover and be recolonized by benthic organisms. Furthermore, the preferred prey resources for juvenile salmonids (Dungeness crab larvae, Pacific herring larvae, harpacticoid copepods, etc) would not be affected by the Project. Because prey resources are not expected to be significantly affected, NMFS does not expect any fitness related consequences to individuals. Therefore, NMFS expects the effects of a temporary reduction in benthic prey to be insignificant.

#### *Disturbance from Vessel Traffic*

As described in the *Proposed Action* section, an increase in sound and disturbance related to the dredging work itself, in addition to the barges, scows, or tugs needed to transport dredge spoils is expected. The Fisheries Hydroacoustic Working Group (FHWG) has developed injury threshold criteria for listed fish species (FHWG 2008). The FHWG identified sound pressure levels of 206 dB-peak (peak decibels) at 10 m as being injurious to fish. Accumulated sound exposure levels (SEL) at 10 m of 187 dB for fishes that are greater than 2 grams are considered to cause temporary shifts in hearing, resulting in temporarily decreased fitness (i.e., reduced foraging success, reduced ability to detect and avoid predators) (FHWG 2008). The low level acoustics produced by vessels or from operation of the clamshell dredge are not likely to result in any negative physiological response or injury to any of the life stages of all the listed salmonid species. Vessel traffic may startle individual fish on the rare occasion when vessel traffic comes into close proximity of individuals. This brief startle response is not expected to result in any fitness consequence or increase rates of predation. Therefore, vessel traffic and associated disturbance is not expected to adversely affect listed salmonids.

#### *Conclusion: Individual Salmon and Steelhead*

There is little potential for combined effects given the size and location of where most of the activities are proposed to occur. For example, if a listed juvenile salmonid is startled by vessel traffic, it would leave and flee into other suitable habitat nearby before experiencing any sediment-related effects. NMFS concludes that all of the effects caused by the Project, when evaluated as a whole for the potential for combined or synergistic effects, would have an insignificant effect on individual Chinook salmon, coho salmon, and steelhead.

#### Effects to Green Sturgeon Individuals

The Project has the potential to affect SDPS green sturgeon due to entrainment in the clamshell bucket; reduced fitness resulting from temporary increases in turbidity; reduced fitness resulting from habitat reduction or loss; and disturbance from vessel traffic. The effects caused by these project components have been reduced or minimized by incorporating the minimization measures previously described.

#### *Entrainment in Clamshell Bucket*

The only life stages of SDS green sturgeon expected to be present are the larger sub-adult and adult life stages. Both sub-adult and adult life stages are too large to be captured inside of a clamshell bucket. Furthermore, based on Pinnix (2008) and Goldsworthy et al. (2016), SDPS green sturgeon spend most of their time in the northern reaches of the North Bay near Sand Island. NMFS expects exposure of SDPS green sturgeon to be very limited, based on their high use of the North Bay. NMFS expects possible effects of entrainment to be discountable.

#### *Turbidity*

As previously described, turbidity is expected to result from dredging activities and extend as far as 500 feet from work sites. Most sturgeon are generally benthic foragers and not visual predators (Moyle 2002). The green sturgeon retina is dominated by rods as the primary photoreceptors, indicating that they are adapted to environments characterized by low light levels (Sillman et al. 2005). This indicates that green sturgeon vision is likely not to be particularly sensitive or acute (Sillman et al. 2005), and therefore resilient to the minor increases in turbidity expected to be caused by the Project. As a benthic foraging species they are adapted to living in estuaries with fine sediment bottoms and inhabit streams with high levels of turbidity (Allen and Cech 2007). The temporary increases in turbidity are not expected to reduce feeding opportunities nor the fitness of SDPS green sturgeon individuals, a species which is known to rely on other senses over eyesight. Furthermore, NMFS expects that few SDPS green sturgeon would be exposed to increased turbidity in the action area, given their high use of the North Bay (Pinnix 2008 and Goldsworthy et al. 2016). Therefore, the effects of turbidity from the proposed action are expected to be insignificant to SDPS green sturgeon.

#### *Benthic Prey Reduction*

The proposed action will result in the temporary loss of some benthic food resources within the area of the dredge footprint of the Project. However, the Project represents the third dredging episode since 1988 (dredging occurred at WIM in 1988, 1998, and 2007) in support of existing infrastructure in areas of high recreational and commercial use (marinas and boat ramps). As previously discussed, the majority of SDPS green sturgeon are found in the North Bay and Entrance Bay, and most will not be exposed to any effects of the Project inside of the action area. Because prey resources will only be temporarily affected, and there is ample suitable habitat elsewhere, NMFS does not expect any fitness related consequences to individuals. Therefore, NMFS expects the effects of a temporary reduction in benthic prey to be insignificant.

#### *Disturbance from Vessel Traffic*

As described in the *Proposed Action* section, an increase in sound and disturbance related to the dredging work itself, in addition to the barges, scows, or tugs needed to transport dredge spoils is expected. The FHWG has developed injury threshold criteria for listed fish species (FHWG 2008). The FHWG identified sound pressure levels of 206 dB-peak (peak decibels) at 10 m as being injurious to fish. Accumulated sound exposure levels (SEL) at 10 m of 187 dB for fishes that are greater than 2 grams are considered to cause temporary shifts in hearing, resulting in temporarily decreased fitness (i.e., reduced foraging success, reduced ability to detect and avoid predators) (FHWG 2008). The low level acoustics produced by vessels or from operation of the clamshell dredge are not likely to result in any negative physiological response or injury to SDPS

green sturgeon. Vessel traffic may startle individual fish on the rare occasion when vessel traffic comes into close proximity of individuals. This brief startle response is not expected to result in any fitness consequence or increase rates of predation. Furthermore, NMFS expects that few SDPS green sturgeon would be exposed to sound and disturbance in the action area, given their high use of the North Bay (Pinnix 2008 and Goldsworthy et al. 2016). Therefore, vessel traffic and expected sound levels produced is expected to be insignificant to SDPS green sturgeon individuals.

*Conclusion: Individual SDPS Green Sturgeon*

There is little potential for combined effects to occur. For example, if a SDPS green sturgeon is startled by vessel traffic, it would leave and flee into other suitable habitat nearby before experiencing any sediment-related effects. NMFS concludes that all of the effects caused by the Project, when evaluated as a whole for the potential for combined or synergistic effects, would have an insignificant effect on individual SDPS green sturgeon.

**Conclusion**

Based on this analysis, NMFS concurs with the Corps that the proposed action may affect, but is not likely to adversely affect SONCC coho salmon, CC Chinook salmon, NC steelhead, and Southern DPS green sturgeon or their designated critical habitats.

**Reinitiation of Consultation**

Reinitiation of consultation is required and shall be requested by the Corps or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and (1) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (2) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this concurrence letter; or if (3) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16). This concludes the ESA portion of this consultation.

**MAGNUSON-STEVENSON FISHERY CONSERVATION AND MANAGEMENT ACT**

Under the MSA, this consultation is intended to promote the protection, conservation and enhancement of EFH as necessary to support sustainable fisheries and the managed species' contribution to a healthy ecosystem. For the purposes of the MSA, EFH means "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity", and includes the associated physical, chemical, and biological properties that are used by fish (50 CFR 600.10), and "adverse effect" means any impact which reduces either the quality or quantity of EFH (50 CFR 600.910(a))<sup>1</sup>. Adverse effects may include direct, indirect, site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

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<sup>1</sup> Note, the EFH regulations do not identify "may affect, not likely to adversely affect" as a possible determination for EFH. Instead, the EFH regulations specify that any reduction in the quantity or quality of EFH is an adverse effect.

This analysis is based, in part, on the EFH assessment provided by the Corps (District 2018) and descriptions of EFH for Pacific coast groundfish (PFMC 2005), coastal pelagic species (PFMC 1998), and Pacific coast salmon (PFMC 1999) contained in the FMPs developed by the Pacific Fishery Management Council and approved by the Secretary of Commerce.

### **Essential Fish Habitat Affected by the Project**

The Pacific Fisheries Management Council (PFMC) has delineated EFH for Pacific Coast Salmon (PFMC 2014), Pacific Groundfish (PFMC 2006), and Coastal Pelagics (PFMC 1998) FMPs. EFH is defined in the MSA as those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. NMFS regulations further define waters to include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; substrate to include sediment, hard bottom, structures underlying the waters, and associated biological communities; necessary to mean the habitat required to support a sustainable fishery and the managed species contribution to a healthy ecosystem; and spawning, breeding, feeding, or growth to maturity to cover a species' full life cycle (50 CFR § 600.10).

In estuarine and marine areas, Pacific Coast Salmon EFH extends from the nearshore and tidal submerged environments within state territorial waters out to the full extent (200 miles) of the U.S. Exclusive Economic Zone (EEZ) offshore of Washington, Oregon, and California north of Point Conception to the Canadian border (PFMC 2014). The Pacific Groundfish EFH includes all waters from the mean high water line, and the upriver extent of saltwater intrusion in river mouths, along the coasts of Washington, Oregon, and California seaward to the boundary of the EEZ (PFMC 2006). The east-west geographic boundary of Coastal Pelagic EFH is defined to be all marine and estuarine waters from the shoreline along the coasts of California, Oregon, and Washington offshore to the limits of the EEZ and above the thermocline where sea surface temperatures range between 10°C and 26°C. The southern extent of EFH for Coastal Pelagics is the United States-Mexico maritime boundary. The northern boundary of the range of Coastal Pelagics is the position of the 10°C isotherm, which varies both seasonally and annually (PFMC 1998). Thus, the proposed project occurs within EFH for various Federally-managed species in the Pacific Coast Salmon, Pacific Groundfish, and Coastal Pelagics FMPs.

### **Adverse Effects on Essential Fish Habitat**

NMFS determined the proposed action would adversely affect EFH for Pacific Coast Salmon, Pacific Coast Groundfish, and Coastal Pelagic Species Fishery Management Plans as follows:

- Temporarily degraded water quality within the action area due to the generation of suspended sediment caused by dredging activities
- Temporary reduction in benthic prey after the dredging is complete and before recovery and recolonization occur
- Potential for loss of eelgrass

Furthermore, the project is located in a Habitat Area of Particular Concern (HAPC) for various federally managed fish species within the Pacific Coast Groundfish FMP and Pacific Coast Salmon FMP. HAPC are described in the regulations as subsets of EFH that are rare, particularly susceptible to human-induced degradation, especially ecologically important, or located in an



environmentally stressed area. Designated HAPC are not afforded any additional regulatory protection under MSA; however, federal projects with potential adverse impacts to HAPC are more carefully scrutinized during the consultation process. As defined in the Pacific Groundfish and Pacific Salmon FMP, Humboldt Bay, including the project area, is identified as estuary and seagrass (*i.e.*, eelgrass) HAPC.

#### *Adverse Effects to Water Quality*

Elevated SSCs in Humboldt Bay and the Pacific Ocean are a relatively frequent occurrence. SSC levels can naturally increase due to wave action on shallow mudflats, storm runoff being delivered from local tributaries, algae blooms, and turbid water from the Eel River entering on incoming tides. It is common for SSCs in Humboldt Bay to range from 40 to 100 milligrams/liter or more during the year (Swanson et al. 2012). Significant increases in turbidity usually begin to occur in September or October with the onset of the wet season, and peak between December and February (Swanson et al. 2012). There is an expected temporary increase in turbidity during the initial episode of dredging, and less significant increases in subsequent dredging episodes as the dredge volumes will be smaller after the initial episode. Brief episodes of turbidity will also occur at HOODS resulting from the disposal of dredge spoils. The high current and wind environment at HOODS is expected to quickly ameliorate suspended sediments and turbidity. In addition, the duration of exposure will be temporary, which would reduce the duration of any adverse effects.

#### *Effects of Reduction in Benthic Habitat/Prey*

The proposed action will result in the temporary loss of some benthic food resources within the area of the dredge footprint of the Project. After dredging, the benthic environment will likely be largely devoid of life and will recover and be recolonized over time by benthic fauna and infauna. Most benthic species will have recovered or recolonized the area by the following season. Although recovery and recolonization may occur in several months, repeated annual dredging may cause adverse effects as the dredge area may not recover in between dredging efforts.

#### *Effects to Eelgrass*

The WIM was constructed in 1978 and the District purchased a 22-acre mitigation site located at the end of Park Street in Eureka. The 22-acre Park Street mitigation site continues to serve as mitigation for ongoing impacts from marina infrastructure and maintenance dredging at WIM. NMFS expects eelgrass may exist in very low abundance in some portions of the WIM which may be exposed to dredging or to the effects caused by dredging operations (turbidity). The District (2018) suggests that eelgrass is present episodically along the slope of the WIM. Therefore, there is a high likelihood that eelgrass present in WIM during dredging may be effected, or in some cases lost. However, the 22-acre mitigation site at Park Street continues to compensate for any effects to eelgrass in the WIM.

#### **EFH Conservation Recommendation**

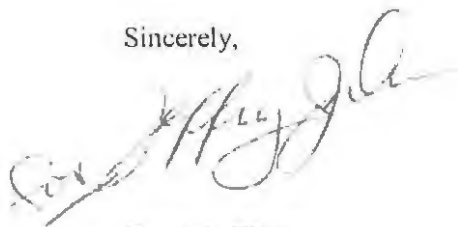
NMFS determined that the following conservation recommendation is necessary to avoid the adverse effects of the proposed action on EFH:

1. The District estimates there to be 130,000 cy of sediment currently in need of removal from the WIM. The District has proposed to limit the volume of dredged material to 100,000 cy every 12-months. Therefore, two consecutive work seasons would be required in order to remove the 130,000 cy of material (work would have to be planned and timed to comply with the 12-month limitation on volume). After the initial 130,000 cy of material is removed, the District should implement a two year (24 month) resting period or longer in between dredging cycles. For example, after 130,000 cy is removed during the initial years of the permit and another dredging cycle begins on August 15, 2025, the next dredging cycle should not begin until August 16, 2027, to allow for full recolonization and recovery to provide for benefits to federally managed species. NMFS suggests the 24-month resting period would begin in 2020, presumably after the District is able to remove the current 130,000 cy of sediment accumulation in the WIM over 2018 and 2019.

Within 30 days after receiving EFH recommendations, the Corps must provide NMFS with a detailed written response (50 CFR 600.920(k)(1)). The number of conservation recommendations accepted should be clearly identified in that response. If your response is inconsistent with the EFH conservation recommendations, you must explain why the recommendations will not be followed, including the scientific justification for any disagreements over the anticipated effects of the action and the measures needed to avoid, minimize, mitigate, or offset such effects. The Corps must reinitiate EFH consultation with NMFS if the proposed action is substantially revised in a way that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH conservation recommendations (50 CFR 600. 920(1)). This concludes the MSA portion of this consultation.

Please direct questions regarding this letter to Mr. Matt Goldsworthy, Northern California Office, at (707) 825-1621 or via e-mail at [Matt.Goldsworthy@noaa.gov](mailto:Matt.Goldsworthy@noaa.gov).

Sincerely,



Barry A. Thom  
Regional Administrator

cc: Copy to ARN # 151422WCR2018AR00115

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**CALIFORNIA COASTAL COMMISSION**

NORTH COAST DISTRICT OFFICE  
1385 EIGHTH STREET, SUITE 130  
ARCATA, CALIFORNIA 95521-5947  
PH (707) 826-8950 FAX (707) 826-8960  
[WWW.COASTAL.CA.GOV](http://WWW.COASTAL.CA.GOV)

**RECEIVED**

JUN 01 2018

**H.B.H.R. & C.D.****PERMIT EXEMPTION / NO PERMIT REQUIRED**

May 31, 2018

Commission Reference Number: 1-18-0196-X

Applicant Name: Humboldt Bay Harbor, Recreation, and Conservation District

Project Location: At the Woodley Island Marina within Humboldt Bay (Humboldt County) (APNs: 40503109 and 40503110)

**Project Description:** The Harbor District proposes to dredge the Woodley Island Marina, including removal of all sediment from within the berths, fairways, slips and from beneath all floating and fixed structures within a total area of approximately 16.15 acres. Dredging shall also be conducted beneath gangway landing areas to maintain utility line clearance at low tide. Dredging will be performed using an excavator and/or crane with a clamshell bucket positioned on a floating work barge. Material will be scooped from the bay floor and deposited in a sealed dump scow situated adjacent to the work barge. Once full, the scow will be transported to the Humboldt Open Ocean Disposal Site (HOODS) located three nautical miles northwest of the Humboldt Bay entrance where the dredged material will be deposited.

Permit coverage is being requested for a total dredged volume of up to 300,000 cubic yards over a ten year period, with dredged volumes not exceeding 100,000 cubic yards in any 12 month period. Dredge depth will be -14.0 feet mean lower low water (MLLW) with a one foot overdredge depth. Dock structures will not be dismantled to complete dredging. The marina will continue to operate during the dredging work to ensure commercial and recreational access to coastal waters. Dredging activities will only be performed between July 1 and October 15 of each calendar year to avoid impacts to salmonids migrating through Humboldt Bay.

This is to certify that this location and/or proposed project has been reviewed by the staff of the Coastal Commission. A Coastal Development Permit is NOT necessary for the reasons checked below:

- ☐ The site is not located within the Coastal Zone as established by the California Coastal Act of 1976, as amended.
- ☐ The proposed development is included in categorical Exclusion Number \_\_\_\_ adopted by the California Coastal Commission.
- ☒ The proposed development is judged to be repair or maintenance activity not resulting in an addition to or enlargement or expansion of the object of such activities and not involving any risk of substantial adverse environmental impact (Coastal Act Section 30610(d)).

**PERMIT EXEMPTION / NO PERMIT REQUIRED**

- ☐ The proposed development is an improvement to an existing single family residence (Coastal Act Section 30610(a)) and not located in the area between the sea and the first public road or within 300 feet of the inland extent of any beach (whichever is greater) (Section 13250(b)(4) of 14 Cal. Admin. Code).
- ☐ The proposed development is an improvement to an existing single family residence and is located in the area between the sea and the first public road or within 300 feet of the inland extent of any beach (whichever is greater), but is not (a) an increase of 10% or more of internal floor area; (b) an increase in height over 10%; or (c) a significant non-attached structure (Coastal Act Section 30610(a) and Section 13250(h)(4) of the Administrative Regulations).
- ☐ The proposed development is an interior modification to an existing use with no change in the density or intensity of use (Coastal Act Section 30106).
- ☐ The proposed development involves the installation, testing, and placement in service of a necessary utility connection between an existing service facility and development approved in accordance with coastal development permit requirements, pursuant to Coastal Act Section 30610(f).
- ☐ The proposed development is the rebuilding of a structure, other than a public works facility, destroyed by natural disaster. The replacement conforms to all of the requirements of Coastal Act Section 30610(g).
- ☐ Other: \_\_\_\_\_

Please be advised that only the project described above is exempt from the permit requirements of the Coastal Act. Any change in the project may cause it to lose its exempt status. This certification is based on information provided by the recipient of this letter. If, at a later date, this information is found to be incorrect or incomplete, this letter will become invalid, and any development occurring at that time must cease until a Coastal Development Permit is obtained.

Sincerely,

John Ainsworth  
Executive Director

*Cristin Kenyon*  
Cristin Kenyon  
Coastal Program Analyst



North Coast Regional Water Quality Control Board

July 23, 2018

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**In the Matter of**  
**Water Quality Certification**  
**for the**  
**Woodley Island Maintenance Dredging Project**  
**WDID No. 1B180035WNHU**

APPLICANT:	Humboldt Bay Harbor, Recreation and Conservation District
RECEIVING WATER:	Humboldt Bay
HYDROLOGIC UNIT:	Eureka Plain Hydrologic Unit No. 110.00
COUNTY:	Humboldt
Files:	Woodley Island Maintenance Dredging Project ECM PIN CW- 846146

---

**FINDINGS BY THE EXECUTIVE OFFICER:**

1. On April 2, 2018, the Humboldt Bay Harbor, Recreation and Conservation District (Applicant) filed an application for water quality certification (Certification) under section 401 of the Clean Water Act (33 U.S.C. § 1341) with the California Regional Water Quality Control Board, North Coast Region (Regional Water Board) for activities associated with the Woodley Island Maintenance Dredging Project (Project). The application was deemed complete on June 20, 2018. The Regional Water Board previously issued a Certification for maintenance dredging activities at the Woodley Island Marina on August 26, 2005, and dredging was last conducted in 2007. The Project is located at the Marina on Woodley Island at 601 Startare Drive, Eureka, Humboldt County, at latitude 40.8079° N, and longitude 124.162° W.
2. **Public Notice:** The Regional Water Board provided 21-day public notice of the application pursuant to Title 23, California Code of Regulations, Section 3858 on June



26, 2018, and posted information describing the Project on the Regional Water Board's website. No comments were received.

3. **Receiving Waters:** The Project will cause disturbances to waters of the state associated with Humboldt Bay within the Eureka Plain Hydrologic Unit No. 110.00.
4. **Project Description:** The primary purpose of the Project is to conduct maintenance dredging in the marina to the designed channel depth of -14ft. Mean Lower Low Water for boat access. The Project includes dredging approximately 19.3 acres of the Humboldt Bay floor, removing up to 300,000 cubic yards (cy) of sediment over ten years (not to exceed 100,000 cy in any 12-month period). The Applicant shall conduct the maintenance dredging with a closed clamshell bucket to minimize turbidity and will monitor turbidity within 500 feet of dredging to ensure water quality objectives are maintained during dredging. The Applicant conducted a Sampling and Analysis Plan in 2015. The final Analytical Report, dated March 2, 2017, identify that the sediment contains a predominance of silt and clay (~>90% fine sediment) and similar or lower chemical constituent levels previously approved for maintenance dredging and disposal. The Applicant proposes to use a sealed dump scow to transfer and transport the dredged sediment to the Humboldt Open Ocean Disposal Site (HOODS) for permanent disposal and has received U.S. Environmental Protection Agency (EPA) approval for disposal.
5. **Construction Timing:** The Project is planned to take place between July and October, from 2018 through 2028 as necessary.
6. **Authorized Project Impacts:** No permanent impacts to waters of the state are proposed. Temporary impacts to waters of the state include dredging approximately 19.3 acres of Humboldt Bay floor removing up to 300,000 cubic yards (cy) of sediment over ten years, not to exceed 100,000 cy in any 12-month period.
7. **Avoidance, Minimization and Mitigation for Project Impacts:** The Project includes a plan to monitor turbidity within 500 feet of dredging to ensure water quality objectives are maintained during dredging and if necessary take proposed adaptive measures or Best Management Practices (BMPS) to avoid and minimize exceedances greater than 20% above background turbidity levels. The Project proposes to employ BMPs to prevent or reduce any discharges during transfer and transport to HOODS. Compensatory mitigation for the impacts to eel grass (*Zostera marina*) due to the construction of the marina in 1978 included the purchase of 22 acres in Eureka where mitigation included restoring tidal action to the property and fresh water wetland enhancement. No additional compensatory mitigation is required for maintenance dredging within the marina footprint.
8. **Other Agency Actions:** The Applicant has applied for authorization from the United States Army Corps of Engineers for a Clean Water Act, section 404 permit and or



Rivers and Harbors Act section 10. The U.S. EPA has reviewed and approved the placement of sediment at the HOODS site and has determined that it does not exceed regulatory thresholds. The Applicant has obtained a Coastal Development Permit Exemption from the California Coastal Commission.

9. **CEQA Compliance:** The North Coast Regional Water Quality Control Board, as lead California Environmental Quality Act (CEQA) agency, has determined that the project qualifies for a Categorical Exemption, 15304 (g) Minor Alterations to Land – Maintenance Dredging, and will file a Notice of Exemption with the State Clearinghouse concurrent with issuance of the 401 Water Quality Certification, pursuant to CEQA guidelines.
10. **Total Maximum Daily Load (TMDL):** Humboldt Bay within the Eureka Plain Hydrologic Unit 110.00 is identified as impaired for Dioxin Toxic Equivalents (TEQs) and Polychlorinated biphenyls (PCBs) under Clean Water Act Section 303(d). A TMDL has not yet been developed to address these impairments.
11. **Antidegradation Policy:** The federal antidegradation policy requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's *Water Quality Control Plan for the North Coast Region* (Basin Plan) implements, and incorporates by reference, both the state and federal antidegradation policies. This Certification is consistent with applicable federal and state antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater, and does not otherwise authorize degradation of the waters affected by this Project.
12. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this water quality certification. The Order may be accessed at this web address:  
[https://www.waterboards.ca.gov/water\\_issues/programs/cwa401/docs/generalorders/go\\_wdr401regulated\\_projects.pdf](https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/generalorders/go_wdr401regulated_projects.pdf)

Receiving Water:	Humboldt Bay, Eureka Plain Hydrologic Unit No. 110.00	
Filled and/or Excavated Areas:	Permanent impacts to waters of the state:	None
	Temporary impacts to waters of the state:	19.3 acres of bay substrate
Dredge Volume	300,000 cy over 10 years (100,000 cy max annually)	
Latitude/Longitude:	40.8079° N, 124.162° W	
Certification Expiration:	July 23, 2028	

Accordingly, based on its independent review of the record, the Regional Water Board certifies that the Woodley Island Maintenance Dredging Project (WDID No. 1B180035WNHU) as described in the application will comply with sections 301, 302, 303, 306 and 307 of the Clean Water Act, and with applicable provisions of state law, provided that the Applicant complies with the following terms and conditions:

**All conditions of this Certification apply to the Applicant (and their employees) and all contractors (and their employees), sub-contractors (and their employees), and any other entity or agency that performs activities or work on the Project as related to this Water Quality Certification.**

**Terms and Conditions:**

**Project-Specific Conditions**

1. No dredged material shall be permitted to overflow, leak, or spill from barges, bins, or dump scows during transportation from the dredging site to HOODS. No overflow or decant water shall be discharged from any barge at any time. Dredge material shall be removed only by closed clamshell bucket. Dredged material volume shall not exceed 100,000 cubic yards in any 12-month period.
2. The Applicant shall monitor turbidity within 500 feet of dredging to ensure water quality objectives are maintained during dredging and, if necessary, take proposed adaptive measures or Best Management Practices (BMPS) to avoid and minimize exceedances greater than 20% above background turbidity levels.

**Project-Specific Conditions Requiring Reports**

3. **Annual Dredge Report:** The Applicant shall provide an electronic copy of the *Annual Dredge Report* to Water Board staff within 60 days of completion of dredging operations or by November 1, annually, if no dredging will occur that year. The report may be submitted via email to [northcoast@waterboards.ca.gov](mailto:northcoast@waterboards.ca.gov). The report shall contain the dates of dredging, maps of the dredging footprint, turbidity results, and the calculated final dredging volume.

### Standard Conditions

4. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330 and title 23, California Code of Regulations, section 3867.
5. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to title 23, California Code of Regulations, section 3855, subdivision (b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
6. The validity of this Certification is conditioned upon total payment of any fee required under title 23, California Code of Regulations, section 3833, and owed by the Applicant.

An application fee of \$1,500 was received for the Project on April 2, 2018. This Certification will be subject to annual billing while the project certification is active and dredge volume discharge fees will be billed annually following submittal of the *Annual Dredge Report* per the current fee schedule:

[https://www.waterboards.ca.gov/resources/fees/water\\_quality/docs/dredgefillcalculator.xlsx](https://www.waterboards.ca.gov/resources/fees/water_quality/docs/dredgefillcalculator.xlsx)

The annual dredge discharge fee is based on the volume dredged during the previous fiscal years (July 1- June 30), calculated using *Annual Dredge Report* survey results provided to the Regional Water Board per condition 3. Annual fees will be automatically invoiced to the Applicant.

Applicant must notify the Regional Water Board to request to terminate annual billing if project is terminated prior to the expiration date. Regional Water Board staff may request site visit at the end of the Project to confirm status of Project and compliance with this Certification.

7. The Regional Water Board shall be notified at least five working days (working days are Monday – Friday) prior to the commencement of construction.
8. Only wildlife-friendly, 100-percent biodegradable erosion and sediment control products that will not entrap or harm wildlife shall be used. Erosion and sediment control products shall not contain synthetic (e.g., plastic or nylon) netting. Photodegradable synthetic products are not considered biodegradable. The Applicant shall request approval from the Regional Water Board if an exception from this requirement is needed for a specific location.
9. BMPs shall be implemented as proposed in the application materials. BMPs for erosion, sediment and turbidity control shall be implemented and in place at

commencement of, during and after any ground clearing activities or any other Project activities that could result in erosion or sediment discharges to surface water. Severe and unseasonal rain events are becoming more frequent due to the effects of climate change. Therefore, BMPs shall be immediately available for deployment at all times to prevent discharges to waters of the state.

10. The Applicant is prohibited from discharging waste to waters of the state, unless explicitly authorized by this Certification. For example, no debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, other than that authorized by this Certification, shall be allowed to enter into or be placed where it may be washed by rainfall into waters of the state. When operations are completed, any excess material or debris shall be removed from the work area.
11. The Applicant shall provide Regional Water Board staff access to the Project site to document compliance with this Certification.
12. If, at any time, an unauthorized discharge to surface water (including wetlands, lakes, rivers or streams) occurs, or any water quality problem arises, the associated Project activities shall cease immediately until adequate BMPs are implemented including stopping work. The Regional Water Board shall be notified promptly and in no case more than 24 hours after the unauthorized discharge or water quality problem arises.
13. Prior to implementing any change to the Project that may be a material change as defined in California Water Code section 13260(c) as a proposed change in character, location, or volume of the discharge, the Applicant shall obtain prior written approval of the Regional Water Board Executive Officer. If the Regional Water Board is not notified of the material change to the discharge, it will be considered a violation of this Certification, and the Applicant may be subject to Regional Water Board enforcement action(s).
14. All Project activities shall be implemented as described in the submitted Certification application package and the findings and conditions of this Certification. Subsequent Project changes that could significantly impact water quality shall first be submitted to Regional Water Board staff for prior review, consideration, and written concurrence. If the Regional Water Board is not notified of a significant alteration to the Project, it will be considered a violation of this Certification, and the Applicant may be subject to Regional Water Board enforcement actions.
15. The Applicant shall provide a copy of this Certification and State Water Resources Control Board (SWRCB) Order No. 2003-0017-DWQ to any contractor(s), subcontractor(s), and utility company(ies) conducting work on the Project, and shall require that copies remain in their possession at the work site. The Applicant shall be

responsible for ensuring that all work conducted by its contractor(s), subcontractor(s), and utility companies is performed in accordance with the information provided by the Applicant to the Regional Water Board.

16. Fueling, lubrication, maintenance, storage, and staging of vehicles and equipment shall not result in a discharge or threatened discharge to any waters of the state including dry portions of the shoreline. At no time shall the Applicant or its contractors allow use of any vehicle or equipment, which leaks any substance that may impact water quality.
17. The Applicant shall not use leaking vehicles or equipment within State waters or riparian areas. Vehicles and equipment used within State waters shall be checked for leaks at the beginning of each work day.
18. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under applicable state or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification. In response to a suspected violation of any condition of this Certification, the State Water Board may require the holder of any federal permit or license subject to this Certification to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In response to any violation of the conditions of this Certification, the Regional Water Board may add to or modify the conditions of this Certification as appropriate to ensure compliance.
19. The Regional Water Board may add to or modify the conditions of this Certification, as appropriate, to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.
20. In the event of any change in control of ownership of land presently owned or controlled by the Applicant, the Applicant shall notify the successor-in-interest of the existence of this Certification by letter and shall email a copy of the letter to the following email address: [NorthCoast@waterboards.ca.gov](mailto:NorthCoast@waterboards.ca.gov).

The successor-in-interest shall email the Regional Water Board Executive Officer at: [NorthCoast@waterboards.ca.gov](mailto:NorthCoast@waterboards.ca.gov) to request authorization to discharge dredged or fill material under this Certification. The request must contain the following:

- i) Effective date of ownership change;



- ii) Requesting entity's full legal name;
  - iii) The state of incorporation, if a corporation;
  - iv) The address and phone number of contact person; and
  - v) A description of any changes to the Project or confirmation that the successor-in-interest intends to implement the project as described in this Certification.
21. Except as may be modified by any preceding conditions, all Certification actions are contingent on:
- i) The discharge being limited to and all proposed mitigation being completed in strict compliance with the Applicant's Project description and CEQA documentation, as approved herein; and
  - ii) Compliance with all applicable water quality requirements and water quality control plans including the requirements of the Water Quality Control Plan for the North Coast Region (Basin Plan), and amendments thereto.
22. The authorization of this Certification for any dredge and fill activities expires on July 23, 2028. Conditions and monitoring requirements outlined in this Certification are not subject to the expiration date outlined above, and remain in full effect and are enforceable.

**Conditions 3, 7 and 8 have requirement for information and reports.** Any requirement for a report made as a condition to this Certification is a formal requirement pursuant to California Water Code section 13267, and failure or refusal to provide, or falsification of such required report is subject to civil liability as described in California Water Code, section 13268.

If you have any questions or comments, please call Gil Falcone at (707) 576-2830 or Stephen Bargsten at (707) 576-2653.

  
On Behalf of

Digitally signed by Jonathan  
Warmerdam

Date: 2018.07.23 15:25:58  
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Matthias St. John  
Executive Officer

180723\_GBF\_dp\_WoodleyDredging\_401

Original to: Mr. Larry Oetker, Executive Director, Humboldt Bay Harbor, Recreation and Conservation District, 601 Startare Drive, Eureka, CA 95501  
[loetker@humboldtbay.org](mailto:loetker@humboldtbay.org)



cc: State Water Resources Control Board, [Stateboard401@waterboards.ca.gov](mailto:Stateboard401@waterboards.ca.gov)  
Ms. Jennifer Siu, EPA Region 9, [Siu.Jennifer@epa.gov](mailto:Siu.Jennifer@epa.gov)  
Ms. Debra O'Leary, U.S. Army Corps of Engineers,  
[debra.a.o'leary@usace.army.mil](mailto:debra.a.o'leary@usace.army.mil)  
Ms. Rebecca Garwood, CDFW, [Rebecca.garwood@Wildlife.ca.gov](mailto:Rebecca.garwood@Wildlife.ca.gov)  
Ms. Vanessa Blodgett, Plan West Partners, [vanessab@planwestpartners.com](mailto:vanessab@planwestpartners.com)  
Mr. George Williamson, [districtplanner@humboldt看.org](mailto:districtplanner@humboldt看.org)



**PROTOCOLS FOR INADVERTENT ARCHAEOLOGICAL DISCOVERIES  
FOR GROUND DISTURBING PROJECT PERMITS, LEASES AND FRANCHISES  
ISSUED BY THE HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION  
DISTRICT, HUMBOLDT BAY, CALIFORNIA**

**April 22, 2015 (adopted 4/23/15 by Harbor District Commission)  
(Contact Information Updated May 7, 2018)**

**Background**

Humboldt Bay is the ancestral heartland of the Wiyot Indians, whose native language is affiliated with the Algonquian language family and who had occupied the bay area for at least 2000 years by the time the first recorded European maritime explorers entered the Bay in 1806 and the first American towns were established in 1850. There are hundreds of known and undiscovered archaeological sites around Humboldt Bay that evidence Wiyot history and prehistory. Today, citizens of Wiyot ancestry are affiliated with three federally-recognized tribes located in the ancestral homeland: Blue Lake Rancheria; Bear River Band of the Rohnerville Rancheria; and the Wiyot Table at Table Bluff Reservation.

**Applicable Laws**

A number of State and Federal historic preservation laws, regulations and policies address the need to manage potentially significant and/or sensitive (e.g., human remains) archaeological and Native American resources identified during advance project or permit review or discovered inadvertently.

- California Environmental Quality Act (CEQA) – Requires analysis by the Lead Agency under CEQA, to determine if a proposed project will cause a significant impact to “historical resources” including archaeological and Native American sites. Project approval may be conditional, for example, avoidance or mitigation (data recovery) of known archaeological resources, monitoring of ground disturbing activities in identified sensitive areas by local Tribal Representatives and/or professional archaeologists, and implementation of protocols for inadvertent archaeological discoveries.
- Section 106 of the National Historic Preservation Act (NHPA) – Requires analysis by the Lead Federal Agency and consultation with the California State Historic Preservation Officer (SHPO), Advisory Council on Historic Preservation (ACHP), culturally affiliated Native American Tribes, and others, as appropriate, to “resolve adverse effects” on “historic properties” including archaeological and Native American sites. Section 106 is the key Federal historic preservation law, and final approval of the undertaking may be conditional as specified in a legally binding Agreement among the parties.

Several laws and their implementing regulations spell out evaluation criteria to determine what constitutes a significant ‘site’ or a significant ‘discovery’:

- California Register of Historical Resources criteria (California Code of Regulations, Title 14, Chapter 3, Section 15064.5), for archaeological and Native American resources qualifying for consideration under CEQA;
- National Register of Historic Places criteria (36 CFR 63), qualifying for consideration under Section 106 review and NEPA;

State laws call for specific procedures and timelines to be followed in cases when human remains are discovered on private or non-Federal public land in California. It includes penalties (felony) for violating the rules for reporting discoveries, or for possessing or receiving Native American remains or grave goods:

- Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code (PRC) outline requirements for handling inadvertent discoveries of human remains, including those determined to be Native American with or without associated grave goods, found on private or non-Federal public lands. PRC 5097.99 (as amended by SB 447) specifies penalties for illegally possessing or obtaining Native American remains or associated grave goods.

Another California law imposes strong civil penalties for maliciously digging, destroying or defacing a California Indian cultural or sacred site:

- California Native American Historic Resource Protection Act of 2002 (SB 1816, adding Chapter 1.76 to Division 5 of the PRC), imposes civil penalties including imprisonment and fines up to \$50,000 per violation, for persons who unlawfully and maliciously excavate upon, remove, destroy, injure, or deface a Native American historic, cultural, or sacred site that is listed or may be listed in the California Register of Historic Resources.

### **Standard Mitigation Language for CEQA Initial Studies**

The following language may be employed by the Humboldt Bay Harbor, Recreation and Conservation District (Harbor District) when cultural resources screening (e.g., comment by Wiyot area Tribal Historic Preservation Officers (THPOs), formal record searches, current cultural resources studies) indicates a particular permit, leasehold or franchise area under its jurisdiction does not have known archaeological sites, however, unknown buried artifacts and archaeological deposits may exist and be impacted by the proposed action.

- CR-1 Should an archaeological resource be inadvertently discovered during ground-disturbing activities, the Tribal Historic Preservation Officers (THPO) appointed by the Blue Lake Rancheria, Bear River Band of Rohnerville Rancheria and Wiyot Tribe shall be immediately notified and a qualified archaeologist with local experience retained to consult with the Harbor District, the three THPOs, the Permittee and other applicable regulatory agencies to employ best practices for assessing the significance of the find, developing and implementing a mitigation plan if avoidance is not feasible, and reporting in accordance with the Harbor District's Standard Operating Procedures (SOP, below).

CR-2 Should human remains be inadvertently discovered during ground-disturbing activities, work at the discovery locale shall be halted immediately, the Harbor District and County Coroner contacted, and the Harbor District's SOP shall be followed, consistent with state law.

### **Standard Operating Procedures**

The following standard operating procedures for addressing inadvertent archaeological discoveries shall apply to all phases and aspects of work carried out under the authority of the Harbor District for those parties that obtain a permit, lease or franchise for projects that involve ground-disturbing activities within its jurisdiction. It shall apply as well to the Harbor District's activities involving ground disturbances. In all cases, these SOPs shall apply to their respective employees, officers and agents, including contractors whose activities may potentially expose and impact significant or sensitive resources.

The intent is to avoid or minimize direct or indirect impacts to significant archaeological or Native American discoveries that may qualify for inclusion in the California Register of Historical Resources and/or the National Register of Historic Places.

These Protocols are intended to serve as standard guidelines to the Harbor District for compliance with CEQA and NHPA Section 106 requirements for considering inadvertent archaeological discoveries.

### **Responsibility for Retaining Services of As-Needed Professional Archaeologist**

If an inadvertent discovery of archeological resources, human remains and/or grave goods occurs, the Harbor District or those parties that obtain a permit, lease or franchise shall be responsible for retaining as-needed services of a qualified Archaeologist, meaning the individual meets the Secretary of the Interior's Professional Standards for an Archaeological Principal Investigator and/or is listed as Registered Professional Archaeologist (see website at [www.rpanet.org](http://www.rpanet.org)). The professional will provide as-needed services to conduct rapid assessments of potentially significant archaeological finds discovered during the Project implementation.

### **Designated Points of Contact (POC) for Notification of Discoveries**

The Harbor District, those entities that obtain a permit, lease or franchise from the Harbor District, their construction contractor(s), and other applicable local, state or federal agencies shall each designate a representative who shall act as its official Point of Contact (POC) and who shall be notified immediately upon the inadvertent discovery of an archaeological find or the inadvertent discovery of human remains and /or grave goods during Project implementation.

The federally-recognized Blue Lake Rancheria, Bear River Band of the Rohnerville Rancheria and Wiyot Tribe each has citizens that recognize Wiyot ancestry. Each Tribe's appointed Tribal Historic Preservation Officer (THPO) is designated as the POC (below) and shall be immediately notified by the Harbor District's POC should an archaeological site (with or without human remains) be inadvertently discovered. The Harbor District POC is also listed below.

**Designated Tribal and Harbor District Points-of-Contact (\*updated 5/7/18)**

<b>Tribes</b>	<b>Address</b>	<b>Office Telephone</b>	<b>Cultural Staff*</b>
Blue Lake Rancheria	428 Chartin Road P.O. Box 428 Blue Lake, CA 95525	(707) 668-5101 x1037 Fax (707) 688-4272 Cell (530) 623-0663	Janet Eidsness, THPO
Bear River Band of the Rohnerville Rancheria	266 Keisner Road Loleta, CA 95551	(707) 733-1900 x233 Fax (707) 733-1972 Cell (707) 502-5233	Erika Cooper, THPO
Wiyot Tribe	1000 Wiyot Drive Loleta, CA 95551	(707) 733-5055 Fax (707) 733-5601 Cell (707) 499-3943	Ted Hernandez, THPO
Harbor District	601 Startare Drive, Eureka, CA 95501	(707) 443-0801 Fax (707) 443-0800 Cell (707) 834-1108	Larry Oetker, Executive Director

Interested Tribal Representatives shall be invited to inspect a discovery site and meet with the Harbor District's and other applicable delegated POCs and Consulting Professional Archaeologist, as appropriate, to make a rapid assessment of the potential significance of a find and participate in the development and implementation of a Treatment Plan, as appropriate.

Note: In the event that Native American skeletal remains are discovered, State law specifies that the "Most Likely Descendent (MLD)" appointed by the NAHC has the authority to make recommendations for the final treatment and disposition of said remains and associated grave goods – see below.

**A. SOP for Inadvertent Archaeological Discovery (General)**

1. Ground-disturbing activities shall be immediately stopped if potentially significant historic or archaeological materials are discovered. Examples include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, groundstone mortars and pestles), culturally altered ash-stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials, and historic structure remains such as stone-lined building foundations, wells or privy pits. Ground-disturbing project activities may continue in other areas that are outside the discovery locale.
2. An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the Contractor Foreman or authorized representative, or party who made the discovery and initiated these SOP.
3. The discovery locale shall be secured (e.g., 24-hour surveillance) as directed by the Harbor District if considered prudent to avoid further disturbances.

4. The Contractor Foreman or authorized representative, or party who made the discovery and initiated these SOP, shall be responsible for immediately contacting by telephone the parties listed below to report the find:
  - (a) the Harbor District's authorized POC and
  - (b) the Applicant's (District's permittee, lease or franchise holder) authorized POC, and it's General Contractor's POC if applicable.
5. Upon learning about a discovery, the Harbor District's POC shall be responsible for immediately contacting by telephone the POCs listed below to initiate the consultation process for its treatment and disposition:
  - (a) THPOs with Blue Lake Rancheria, Bear River Band and Wiyot Tribe; and Other applicable agencies involved in Project permitting (e.g., US Army Corps of Engineers, US Fish & Wildlife Service, California Department of Fish & Wildlife, etc.).
6. Ground-disturbing project work at the find locality shall be suspended temporarily while Harbor District, the three THPOs, consulting archaeologist and other applicable parties consult about appropriate treatment and disposition of the find. Ideally, a Treatment Plan will be developed within three working days of discovery notification. Where the project can be modified to avoid disturbing the find (e.g., through project redesign), this may be the preferred option. Should Native American remains be encountered, the provisions of State laws shall apply (see below). The Treatment Plan shall reference appropriate laws and include provisions for analyses, reporting, and final disposition of data recovery documentation and any collected artifacts or other archaeological constituents. Ideally, the field phase of the Treatment Plan may be accomplished within five (5) days after its approval, however, circumstances may require longer periods for data recovery.
7. The Harbor District's officers, employees and agents, including contractors, permittees, holders of leases or franchises, and applicable property owners shall be obligated to protect significant cultural resource discoveries and may be subject to prosecution if applicable State or Federal laws are violated. In no event shall unauthorized persons collect artifacts.
8. Any and all inadvertent discoveries shall be considered strictly confidential, with information about their location and nature being disclosed only to those with a need to know. The Harbor District's authorized representative shall be responsible for coordinating with any requests by or contacts to the media about a discovery.
9. These SOPs shall be communicated to the field work force (including contractors, employees, officers and agents) of those entities that obtain a permit, lease or franchise from the Harbor District, and such communications may be made and documented at weekly tailgate safety briefings.
10. Ground-disturbing work at a discovery locale may not be resumed until authorized in writing by the Harbor District.



11. In cases where a known or suspected Native American burial or human remains are uncovered:
  - (a) The following contacts shall be notified immediately: Humboldt County Coroner (707-445-7242) and the property owner of the discovery site, and
  - (b) The SOP for Inadvertent Discovery of Native American Remains and Grave Goods (B below) shall be followed.

## **B. SOP for Inadvertent Discovery of Native American Remains and Grave Goods**

In the event that known or suspected Native American remains are encountered, the above procedures of SOP paragraph A for Inadvertent Archaeological Discovery (General) shall be followed, as well as:

1. If human remains are encountered, they shall be treated with dignity and respect. Discovery of Native American remains is a very sensitive issue and serious concern of affiliated Native Americans. Information about such a discovery shall be held in confidence by all project personnel on a need-to-know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.
2. Violators of Section 7050.5 of the California Health and Safety Code may be subject to prosecution to the full extent of applicable law (felony offense).

In addition, the provisions of California law (Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the California Public Resources Code) will be followed:

1. The Coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American, the Coroner has 24 hours to notify the Native American Heritage Commission (NAHC) in Sacramento at (916) 653-4082.
2. The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD) of the deceased Native American. (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)
3. Within 48 hours of their notification by the NAHC, the MLD will be granted permission by the property owner of the discovery locale to inspect the discovery site if they so choose.
4. Within 48 hours of their notification by the NAHC, the MLD may recommend to the owner of the property (discovery site) the means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses (if any) recommended by the MLD may be considered and carried out.

5. Whenever the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the property owner rejects the recommendation of the MLD and mediation between the parties by NAHC fails to provide measures acceptable to the property owner, he/she shall cause the re-burial of the human remains and associated grave offerings with appropriate dignity on the property in a location not subject to further subsurface disturbance.

### **C. SOP for Documenting Inadvertent Archaeological Discoveries**

1. The Contractor Foreman or authorized representative, or party who made the discovery and initiated these SOP, shall make written notes available to the Harbor District describing: the circumstances, date, time, location and nature of the discovery; date and time each POC was informed about the discovery; and when and how security measures were implemented.
2. The Harbor District POC shall prepare or authorize the preparation of a summary report which shall include: the time and nature of the discovery; who and when parties were notified; outcome of consultations with appropriate agencies and Native American representatives; how, when and by whom the approved Treatment Plan was carried out; and final disposition of any collected archaeological specimens.
3. The Contractor Foreman or authorized representative shall record how the discovery downtime affected the immediate and near-term contracted work schedule, for purposes of negotiating contract changes where applicable.
4. If applicable, Monitoring Archaeologists and Tribal Representatives shall maintain daily fieldnotes, and upon completion, submit a written report to the Harbor District and the three Wiyot area THPOs.
5. Treatment Plans and corresponding Data Recovery Reports shall be authored by professionals who meet the Federal criteria for Principal Investigator Archaeologist and reference the *Secretary of the Interior's Standards and Guidelines for Archaeological Documentation* (48 FR 44734-44737).
6. Final disposition of all collected archaeological materials shall be documented in the final Data Recovery Report and its disposition decided in consultation with Tribal representatives.
7. Final Data Recovery Reports along with updated confidential, standard California site record forms (DPR 523 series) shall be filed at the Northwest Information Center of the California Historical Resources Information System and the Harbor District, with report copies provided to the three Wiyot area THPOs.
8. Confidential information concerning the discovery location, treatment and final disposition of Native American remains shall be prepared by the THPOs and forwarded to the Sacred Sites Inventory maintained by the NAHC.

COMMISSIONERS

1<sup>st</sup> Division

Larry Doss

2<sup>nd</sup> Division

Greg Dale

3<sup>rd</sup> Division

Stephen Kullmann

4<sup>th</sup> Division

Richard Marks

5<sup>th</sup> Division

Patrick Higgins

**Humboldt Bay**  
**Harbor, Recreation and Conservation District**  
(707) 443-0801  
P.O. Box 1030  
Eureka, California 95502-1030



**CALIFORNIA ENVIRONMENTAL QUALITY ACT - NOTICE OF EXEMPTION**

**To:** County of Humboldt  
County Clerk  
825 5<sup>th</sup> Street  
Eureka, CA 95501

**From:** Humboldt Bay Harbor, Recreation, and  
Conservation District  
601 Startare Drive  
Eureka, CA 95501  
districtplanner@humbolddbay.org

**Project Title:** Fields Landing Boat Yard & Woodley Island Marina Maintenance Dredging and Dredged Material Dewatering

**Project Applicant:** Humboldt Bay Harbor, Recreation, and Conservation District

**Project Location:** Fields Landing Boat Yard is located at 1 Yard Road, Fields Landing, CA (APN 307-101-002). Woodley Island Marina is on the north side of the Eureka Inner Channel, along the southwest portion of Woodley Island, within the City of Eureka. Redwood Marine Terminal II (RMT II) is located at 364 Vance Ave., Samoa, CA (APNs 401-112-011, -012, -021 and -024).

**Background:** In 2018 the Humboldt Bay Harbor, Recreation and Conservation District (District) received regulatory approvals for maintenance dredging at the Field's Landing Boat Yard and Woodley Island Marina. Approved dredging activities involve using an excavator and/or crane with a closed clamshell bucket and ocean disposal of dredged materials at the Humboldt Open Ocean Disposal Site (HOODS). As an alternative to ocean disposal, the District is now proposing dewatering of dredged materials for potential beneficial use. Dewatering of dredged material from Fields Landing would take place at Fields Landing or Redwood Terminal II (RMT II). Dewatering of dredged material from Woodley Island Marina would occur at Redwood Terminal II.

**Project Summary:**

**Fields Landing Dewatering** - A temporary dewatering basin would be constructed at the Field's Landing site on top of existing asphalt or concrete surfaces. The dewatering basin would be constructed with k-rails or other structures supporting an impermeable liner. The edges of the liner would be held in place with soft weights, such as sandbags. Dredged material would be transferred over land or pumped to the temporary dewatering basin. After settling to achieve enough clarity to be within 20% of the background turbidity of the bay, water would be gently let off the top through a controlled opening. A pipe would route the water to an existing storm drain inlet adjacent to the dredging area.

**RMT II Dewatering** - A barge containing the dredged material would be towed to the RMT II dock. An existing sea chest and pumps at the terminal would draw-in bay water and pump it directly into the hopper to reslurry the dredge material. Alternatively, a portable screened pump may be used. All bay water pumping will follow required screening standards. Dredge slurry would be pumped from the hopper to existing water clarifiers. After settling to achieve enough clarity to be within 20% of the background turbidity of the bay, water would be gently let off the top through a

controlled opening. A pipe would route the water to an existing storm drain inlet adjacent to the RMT II dock.

Before discharging to the bay at either location, the water would be filtered through baffles, pipe filter socks, and/or drop inlet filters. During discharge to Humboldt Bay, bay water and decant water turbidity would be monitored using a handheld turbidity meter. If discharge water turbidity exceeds bay water turbidity by 20% or more then discharging would cease. Discharge would not restart until solids within the dewatering structures have adequately settled and/or filtering methods have been adjusted in order to meet the turbidity standard.

**Pertinent California Environmental Quality Act (CEQA) Exemption:** The District has determined that the project is exempt from CEQA pursuant to a Class 4 categorical exemption which exempts minor public or private alterations in the condition of land, water, and/or vegetation which do not remove healthy, mature, scenic trees (Section 15304. Minor Alterations to Land). This includes minor temporary use of land having negligible or no permanent effects on the environment and maintenance dredging (15034(e)&(g)).

**Rationale for Exemption:** The project involves maintenance dredging and dewatering of dredged materials for potential beneficial use. The proposed activities would use either a temporary dewatering basin and/or existing facilities and would have no permanent effects on the environment. The project would take place within existing developed areas and would not remove trees or other vegetation. Prior to dredging, material within the dredging areas would be sampled using the Incremental Sampling Methodology (ISM). The bay water intake will be screened based on National Marine Fisheries Service (NMFS) criteria. Dredging and dewatering activities would be conducted in accordance with discharge requirements established by the Regional Water Quality Control Board and U.S. Army Corps of Engineers. The decant water would be discharged back to its source of Humboldt Bay.

The District has further determined that the use of the categorical exemption is not barred by any of the exceptions set forth in CEQA Guidelines Section 15300.2. The material supporting the above finding is on file with the District and available for review upon request at the address listed below.

**Contact:** Larry Oetker, Executive Director  
Humboldt Bay Harbor, Recreation and Conservation District  
601 Startare Drive, Eureka, CA 95501

Signature: \_\_\_\_\_

Date:\_\_\_\_\_

## **Exhibit B**

### **Approved Permit Amendments for Dredged Material Disposal at Redwood Terminal II using Pumps to Offload Dredged Material and for Dewatering**

1. US Army Corps of Engineers
2. California Coastal Commission
3. North Coast Regional Water Quality Control Board



DEPARTMENT OF THE ARMY  
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
450 GOLDEN GATE AVENUE  
SAN FRANCISCO, CALIFORNIA 94102-3404

RECEIVED

OCT 18 2019

H.B.H.R. & C.D.

October 11, 2019

Regulatory Division

Subject: File Number: 1996-22216, Woodley Island Marina Maintenance Dredging; Permit Modification 1

**LETTER OF MODIFICATION**

Mr. Larry Oetker  
Executive Director  
Humboldt Bay Harbor Recreation and Conservation District  
601 Startare Drive  
Eureka, California 95501

Dear Mr. Oetker:

This letter is in response to your request to modify Department of the Army permit number 1996-22216 to authorize disposal of sediment dredged from the Woodley Island Marina at the Redwood Marine Terminal Berth II water clarifiers or a temporary dewatering basin. Additionally, Humboldt Bay Harbor, Recreation & Conservation District (HBHRCD) seeks authorization to return decanted water from the water clarifiers or the temporary dewatering basin to Humboldt Bay (as described in the *Woodley Island Marina Description Amendment*, dated May 14, 2019). Your project was authorized under Permit 1996-22216 Woodley Island Marina Maintenance Dredging pursuant to Section 10 of the Rivers and Harbors Act of 1899, as amended (33 U.S.C. § 403 *et seq.*) and Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. § 1413).

Permit Number 1996-22216 is hereby modified under the provisions of 33 CFR § 325.7(b) as described in the attached "*Woodley Island Marina – Maintenance Dredging Project Description Amendment*" pursuant to Section 10 of the Rivers and Harbors Act of 1899, as amended (33 U.S.C. § 403 *et seq.*) and Section 404 of the Clean Water Act (33 U.S.C. § 1344). Except for the above modification, all terms and conditions of the original permit authorization remain in effect.

**Neither permit 1996-22216 nor this permit modification authorizes placement of fill in wetlands.** Therefore, any temporary dewatering basin must be constructed on an upland portion of the Redwood Marine Terminal Berth II site. If you have any questions regarding the extent of wetlands on the Redwood Marine Terminal Berth II site or have any other questions regarding this modification, please contact Ms. Debra O'Leary at (415) 503-6807 or by email: [debra.a.o'leary@usace.army.mil](mailto:debra.a.o'leary@usace.army.mil). Please address all correspondence to the Regulatory Division and refer to the File Number 1996-22216.



The San Francisco District is committed to improving service to our customers. We seek to achieve the goals of the Regulatory Program in an efficient and cooperative manner, while preserving and protecting our nation's aquatic resources. If you would like to provide comments on our Regulatory Program, please complete the Customer Service Survey Form available on our website: <http://www.spn.usace.army.mil/Missions/Regulatory.aspx>

Sincerely,

VARGAS.JESSI

CA.MARIE.128

8359675

For:

James C. Mazza

Acting Chief, Regulatory Division

Digitally signed by  
VARGAS.JESSICA.MARIE.

1288359675

Date: 2019.10.11

12:53:44 -07'00'

Enclosure

Copy Furnished (w/out enclosure):

US EPA, San Francisco, CA,  
CA CCC, Arcata, CA  
CA RWQCB, Eureka, CA  
CA SLC, Sacramento, CA  
US NMFS, Santa Rosa, CA  
US FWS, Arcata, CA



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
West Coast Region  
1655 Heindon Road  
Arcata, California 95521-4573

July 17, 2019

Refer to NMFS No: WCRO-2019-01797 and  
WCRO-2019-01850

Andrea Meier  
Acting Chief, Regulatory Division  
U.S. Department of the Army  
San Francisco District, Corps of Engineers  
450 Golden Gate Avenue, 4th Floor, Suite 0134  
San Francisco, California 94102-3406

Re: Endangered Species Act Section 7(a)(2) Concurrence Letter and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Humboldt Bay Harbor District Maintenance Dredging 2019 Reinitiation- Woodley Island Marina Project (Corps File Number 1996-22216) and the Humboldt Bay Harbor District Maintenance Dredging 2019 Reinitiation- Fields Landing Boat Lift Project (Corps File Number 1996-22476), located in Eureka and Fields Landing, Humboldt County, California

Dear Ms. Meier:

On June 26, 2019, and on July 16, 2019, NOAA's National Marine Fisheries Service (NMFS) received your requests for written concurrence that the United States Army Corps of Engineers' (Corps) proposed authorizations of the Woodley Island Marina Maintenance Dredging Project and the Fields Landing Boat Lift Maintenance Dredging Project (Projects) pursuant to Section 10 of the Rivers and Harbors Act of 1899, as amended (33 U.S.C. § 403 et seq.) and Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended (33 U.S.C. § 1413 et seq.) is not likely to adversely affect (NLAA) species listed as threatened or endangered or critical habitats designated under the Endangered Species Act (ESA). This response to your request was prepared by NMFS pursuant to section 7(a)(2) of the ESA, implementing regulations at 50 CFR 402, and agency guidance for preparation of letters of concurrence.

NMFS also reviewed the proposed action for potential effects on essential fish habitat (EFH) designated under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), including conservation measures and any determination you made regarding the potential effects of the action. This review was pursuant to section 305(b) of the MSA, implementing regulations at 50 CFR 600.920, and agency guidance for use of the ESA consultation process to complete EFH consultation.

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). A complete record of this consultation is on file at the Northern California Office in Arcata, California.



## **Proposed Action and Action Area**

The Corps proposes to modify and reinitiate consultation on two existing 10-year Department of the Army Permits pursuant to Section 10 of the Rivers and Harbors Act of 1899, as amended (33 U.S.C. § 403 et seq.) and Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended (33 U.S.C. § 1413 et seq.) to permit the Projects. The Projects were permitted in 2018 and no actions have yet to be taken, thus there are 9 years remaining on the permits and the Corps may extend those permits an additional year. The District proposes to dredge both the Woodley Island Marina (WIM) and the Fields Landing Boat Lift haul-out area (FLBL) using a mechanical clamshell dredge. Work would be completed during the July 1 to October 15 work window. The proposed dredging would remove accumulated sediment from the District's haul-out and marina facilities to restore adequate navigational depths. The dredged material may either be placed onshore and dewatered at Redwood Marine Terminal Berth II and repurposed for other beneficial uses or it would be placed in a sealed dump scow and transported to the Humboldt Open Ocean Disposal Site (HOODS), located three miles offshore of Humboldt Bay in the Pacific Ocean.

The current volume of sediment in need of removal from the WIM is estimated to be 130,000 cubic yards (cy) and will require two work seasons to remove. The anticipated volume to be removed throughout the duration of the permit at the WIM site is 300,000 cy, with no more than 100,000 cy removed in any 12 month period. Dredging WIM will include removal of sediment from within vessel mooring berths, fairways in between docks, slips, and from beneath all floating and fixed structures and encompass 19.3 acres. Dock structures may be dismantled as necessary and any broken docks will be repaired or replaced. Side slopes will be cut at a 2:1 angler or the natural angle of repose. The current volume of sediment in need of removal from the FLBL is estimated to be 12,120 cy and will be removed in less than two weeks during the initial episode. The anticipated volume to be removed throughout the duration of the permit at the FLBL site is 25,120 cy. Overdredge depth is one foot below the design depth of (-) 14 feet mean lower low water (MLLW) for the WIM site and (-) 15 feet MLLW for the FLBL site.

The District has not yet selected a dredging contractor and each contractor will have unique means and methods to complete the project based on their experience and equipment. However, the general dredging methodology will consist of heavy equipment removing material from the bay floor with a clamshell bucket and placing it into a scow for transport to either the dewatering area at Redwood Marine Terminal Berth II or the disposal site at HOODS. Prior to dredging, pre-project hydrographic surveys may be completed. A crane outfitted with a closed clamshell bucket will be used. There will be no water or sediment released back into Humboldt Bay, other than the negligible amount of sediment on the exterior of the bucket during loading.

Dredged material will be placed in the water tight dump scow. Once the scow is full, and once conditions are safe, it may be towed out of Humboldt Bay to the HOODS ocean disposal site or to Redwood Marine Terminal Berth II. If taken to Redwood Marine Terminal Berth II, water will be drafted from Humboldt Bay as part of the dewatering operation. Existing pumps within a sea chest at the terminal would draw-in bay water and pump it directly into the hopper to re-suspend the dredge material. Dredge slurry would be pumped from the hopper to existing water clarifiers and/or temporary dewatering basins. Temporary dewatering basins would be constructed with an impermeable liner. The perimeter of the liner would be secured with soft weights, such as sandbags. A controllable opening or weir would be constructed on one side of the basin. Decanted water would

be pumped from the dewatering basins and/or water clarifiers through pipes to a controlled discharge area. At the discharge area, the water would be returned to the bay utilizing a liner and sandbags to direct flow and waddles for filtering out sediments. Water discharged to the bay would be monitored and operations would be adjusted as necessary to ensure allowed turbidity levels are maintained. Upon drying, the dredged spoils will be repurposed and used for other projects where appropriate.

The Corps proposes to authorize the following measures as part of the proposed action:

- Round or square openings in intake screens on water intakes shall not exceed 2.38 millimeters (mm), as measured diagonally across the opening. Slotted openings in the screen shall not exceed 1.75 mm. Approach velocity shall not exceed 0.2 ft per second. Overall screen porosity shall be a minimum of 27%.
- Dredging is limited to July 1 to October 15 to minimize effects to listed species.
- Spoils which may be deposited at HOODS will adhere with the Corps and Environmental Protection Agency criteria.
- Clamshell and excavator dredging is a slow and controlled process allowing marine life time to escape as the equipment approaches. There are no suction or jetting pressures involved.
- Vegetable based or biodegradable hydraulic fluids shall be used, if possible, in equipment operating over water or without secondary containment.
- Equipment will be routinely inspected before, during, and after use.
- Spill and containment kits will be kept on site.
- Dredging will not extend beyond the over-dredging limits identified.
- Dredge volume will be limited to 100,000 cy in any 12 month period of time at WIM.

The action area includes the dredge footprints at WIM and FLBL as well as a 500-foot buffer around the work sites, representing the extent sediment and turbidity is likely to extend. The action area also includes the HOODS offshore disposal site and the area of Humboldt Bay and the Pacific Ocean in which vessels, tugs, barges, and scows will be travelling to deposit dredge spoils at the Redwood Marine Terminal Berth II or at the disposal site at HOODS and return to the work sites.

### **Action Agency's Effects Determination**

Available information indicates the following listed species (Evolutionarily Significant Units (ESU) or Distinct Population Segments [DPS]) under the jurisdiction of NMFS may be affected by the proposed project:

#### **Southern Oregon/Northern California Coast (SONCC) coho salmon ESU**

*(Oncorhynchus kisutch)*

Threatened (70 FR 37160; June 28, 2005)

Critical habitat (64 FR 24049; May 5, 1999);

#### **California Coastal (CC) Chinook salmon ESU**

*(O. tshawytscha)*

Threatened (70 FR 37160; June 28, 2005)

Critical habitat (70 FR 52488; September 2, 2005);

#### **Northern California (NC) steelhead DPS**

*(O. mykiss)*

Threatened (71 FR 834; January 5, 2006)

Critical habitat (70 FR 52488; September 2, 2005);  
**North American green sturgeon Southern DPS**  
*(Acipenser medirostris)*  
 Threatened (71 FR 17757; April 7, 2006)  
 Critical habitat (74 FR 52300; October 9, 2009).

The Corps determined the Project may affect, but is not likely to adversely affect SONCC coho salmon, CC Chinook salmon, NC steelhead, and Southern DPS green sturgeon and their designated critical habitats. The Corps rationale for their determination includes the areas proposed for dredging and disposal have been previously dredged as recently as 2012 and considered to be highly disturbed; the work window minimizes exposure of listed species; availability of suitable habitat elsewhere; and the effects would be short term with rapid recolonization of infaunal species. The Corps also determined the Project may adversely affect EFH for species managed under the Pacific Coast Groundfish, Coastal Pelagics, and Pacific Coast Salmon Fishery Management Plans.

#### SONCC Coho Salmon, CC Chinook, and NC Steelhead Life History and Use of Humboldt Bay

##### *SONCC Coho Salmon Life History*

Coho salmon have a generally simple 3-year life history. The adults typically migrate from the ocean and into Humboldt Bay towards their freshwater spawning grounds in late summer and fall, and spawn by mid-winter. Adults die after spawning. The eggs are buried in nests, called redds, in the rivers and streams where the adults spawn. The eggs incubate in the gravel until fish hatch and emerge from the gravel the following spring as fry. These 0+ age fish typically rear in freshwater for about 15 months before migrating to the ocean. The juveniles go through a physiological change during the transition from fresh to salt water called smoltification. Coho salmon typically rear in the ocean for two growing seasons, returning to their natal streams as 3-year old fish to renew the cycle.

Recent studies have identified the importance of the greater transition zone, or ecotone, between fresh and brackish water to juvenile salmonids (Miller and Sadro 2003). Wallace et al. (2015) defined this stream-estuary ecotone to include the area of low gradient stream extending from stream entrance to the wide valley floor, through the upper limit of tidal influence downstream to the area where the channel becomes bordered by tidal mudflats (including fringing marsh habitats, side channels, and off channel ponds). Sampling by California Department of Fish and Wildlife (CDFW) suggest that 0+ age coho salmon from Freshwater Creek (a tributary to Humboldt Bay) primarily rear in the stream-estuary ecotone during the spring and summer and then migrate back into Freshwater Creek to over-winter before emigrating to the ocean the following year as age 1+ smolts (Wallace and Allen 2007). An estimated 40% of coho salmon smolts originated from the stream-estuary ecotone of Freshwater Creek in 2007 and 2008 (Ricker and Anderson 2011).

##### *CC Chinook Salmon Life History*

CC Chinook salmon are typically fall spawners, returning to Humboldt Bay before entering their natal streams in the early fall. The adults tend to spawn in the mainstem or larger tributaries of rivers. As with the other anadromous salmon, the eggs are deposited in redds for incubation. When the 0+ age fish emerge from the gravel in the spring, they typically migrate to saltwater shortly after emergence. Therefore, Chinook salmon typically enter the estuary as smaller fish compared to coho

salmon. Chinook salmon are typically present in the stream-estuary ecotone from early May to early September, with peak abundance in June/July (Wallace and Allen 2007). Similar to coho salmon, prey resources during out-migration is critical to Chinook salmon survival as they grow and move out to the open ocean. A study by MacFarlane (2010) indicated that juvenile Chinook salmon require less prey in the estuary, equivalent to one northern anchovy (*Engraulis mordax*) per day, compared to a range of one to four anchovies needed per day in the ocean.

### *NC Steelhead Life History*

Steelhead exhibit the most complex suite of life history strategies of any salmonid species. They have both anadromous and resident freshwater life histories that can be expressed by individuals in the same watershed. The anadromous fish generally return to freshwater to spawn as 4 or 5 year old adults. Unlike other Pacific salmon, steelhead can survive spawning and return to the ocean only to return to spawn in a future year. It is rare for steelhead to survive more than two spawning cycles. Steelhead typically spawn between December and May. Like other Pacific salmon, the steelhead female deposits her eggs in a redd for incubation. The 0+ age fish emerge from the gravel to begin their freshwater life stage and can rear in their natal stream for 1 to 4 years before migrating to the ocean.

Steelhead have a similar life history as noted above for coho salmon, in the sense that they rear in freshwater for an extended period before migrating to saltwater. As such, they enter the estuary as larger fish (mean size of about 170 to 180 mm or 6.5 to 7.0 inches) and are, therefore, more oriented to deeper water channels in contrast to Chinook salmon that typically enter the estuary as 0+ fish. The CDFW data indicate that steelhead smolts generally migrate downstream toward the estuary between March 1 and July 1 each year, although they have been observed as late as September (Ricker et al. 2014). The peak of the outmigration timing varies from year to year within this range, and generally falls between early April and mid-May. CDFW estimated 80% to 90% of steelhead trout smolts originated from the stream-estuary ecotone of Freshwater Creek in 2007 and 2008 (Wallace et al. 2015).

### *Salmonid Use of Humboldt Bay*

Salmonids use eelgrass habitats for cover and feeding while they migrate to the marine environment, or while they rear seasonally in Humboldt Bay before returning upstream to overwinter (Wallace et al. 2015). Salmonids occurring in estuaries are highly mobile and in Humboldt Bay, low numbers of fish are spread over a large area, which can complicate scientific observations or captures intended to understand their habitat preferences (Garwood et al. 2013 and Pinnix et al. 2005). Phillips (1984) suggested Chinook salmon were “transient” users of eelgrass for feeding or cover. Murphy et al. (2000) did not observe a significant association of juvenile salmon with eelgrass. Garwood et al. (2013) studied fish assemblages in an eelgrass bed in Humboldt Bay by conducting monthly sampling over a period of several years and only captured one listed salmonid (NC steelhead) during the multi-year study. Pinnix et al. (2005) sampled over a 2-year period using fyke nets, shrimp trawls, beach seines, purse seines, cast nets, and minnow traps. Pinnix et al. (2005) identified a diverse and abundant fish community using the mudflats, oyster culture, and eelgrass meadows in Humboldt Bay, including a total of 49 species from 22 families of fishes. However, over the two



years of sampling, no salmonid species were captured in any of the six different types of sampling gear.

A recent study related to 1+ age coho salmon smolts in Humboldt Bay, California, by Pinnix et al. (2013) used acoustic transmitters surgically implanted into the out-migrating smolts. Coho salmon smolts spent more time in the stream- estuary ecotone compared to the intertidal habitat of Humboldt Bay. During their residency in Humboldt Bay, coho smolts primarily used deep channels and channel margins and were present in the estuary an average of 10 to 12 days. They were also detected near floating eelgrass mats adjacent to the channels, but not over eelgrass beds. The results from this study emphasize the importance of edge habitat and the need for structural heterogeneity during salmonid residency and migration through Humboldt Bay.

#### Southern DPS Green Sturgeon Life History and Use of Humboldt Bay

Southern DPS green sturgeon inhabit estuaries along the west coast during the summer and fall months (Moser and Lindley 2007) and are known to use the North Humboldt Bay heavily (Goldsworthy et. al. 2016, Pinnix 2008). Juvenile Southern DPS green sturgeon rear in their natal streams in California's Central Valley, so only sub-adult and adult SDPS green sturgeon are present in Humboldt Bay and are the only life stages of SDPS green sturgeon that could be exposed to the effects of the Project. Sub-adults range from 65-150 cm total length from first ocean entry to size at sexual maturity. Sexually mature adults range from 150-250 cm total length.

The action area is located along the transition from an intertidal mudflat to a deeper subtidal channel, where larger vessels dock up along the WIM or FLBL. SDPS green sturgeon are only expected along the deepest margins of the action area where suitable depths exist to accommodate large animals like the SDPS green sturgeon. Most SDPS green sturgeon are expected to reside mostly in the high use area of North Bay, as described by Goldsworthy et al. 2016 and Pinnix et al. 2008).

#### **Consultation History**

On June 26, 2019, NMFS received an initiation package from the Corps to reinitiate the consultation for the Corps permitting of the District's Woodley Island Marina Maintenance Dredging Project and requested NMFS concurrence that the Project, as proposed, is not likely to adversely affect SONCC coho salmon, CC Chinook salmon, NC steelhead, SDPS green sturgeon or their designated critical habitats. The Corps also determined the Project would not have a substantial adverse affect on species managed under the Pacific Coast Salmon Fishery Management Plan (FMP), Pacific Coast Groundfish FMP, and Coastal Pelagic Species FMP. On June 26, 2019, NMFS requested clarification from the Corps via email, for agreement on batching the Woodley Island Marina and Fields Landing Boat Launch maintenance dredging projects into one consultation. The Corps responded via email on the same day in agreement of batching consultations for both projects.

On July 16, 2019, NMFS received an initiation package from the Corps to reinitiate the consultation for the Corps permitting of the District's Fields Landing Boat Lift Project Fields Landing Boat Lift Maintenance Dredging Project, as proposed, is not likely to adversely affect SONCC coho salmon, CC Chinook salmon, NC steelhead, SDPS green sturgeon or their designated critical habitats. The Corps also determined the Project would not have a substantial adverse affect on species managed

under the Pacific Coast Salmon Fishery Management Plan (FMP), Pacific Coast Groundfish FMP, and Coastal Pelagic Species FMP.

## **ENDANGERED SPECIES ACT**

### **Effects of the Action**

Under the ESA, “effects of the action” means the direct and indirect effects of an action on the listed species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action (50 CFR 402.02). The applicable standard to find that a proposed action is not likely to adversely affect listed species or critical habitat is that all of the effects of the action are expected to be discountable, insignificant, or completely beneficial. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or critical habitat. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Discountable effects are those extremely unlikely to occur.

#### Effects on Salmon, Steelhead, and Green Sturgeon Critical Habitat

The critical habitat designations for SONCC coho salmon, CC Chinook salmon, NC steelhead, and Southern DPS green sturgeon use the term primary constituent element or essential feature. The new critical habitat regulations (81 FR 7414) replace this term with physical or biological features (PBFs). This shift in terminology does not change the approach used in conducting our analysis, whether the original designation identified primary constituent elements, physical or biological features, or essential features. In this consultation, we use the term PBF to mean primary constituent element or essential feature, as appropriate for the specific critical habitat.

#### *Effects on SONCC coho salmon, CC Chinook, and NC Steelhead Critical Habitat*

Within the range of the SONCC coho salmon, the life cycle of the species can be separated into five PBFs or essential habitat types: (1) juvenile summer and winter rearing areas, (2) juvenile migration corridors, (3) areas for growth and development to adulthood, (4) adult migration corridors, and (5) spawning areas. Areas 1 and 5 are often located in small headwater streams and side channels, while areas 2 and 4 include these tributaries as well as mainstem reaches and estuarine zones. Growth and development to adulthood (area 3) occurs primarily in near- and off-shore marine waters, although final maturation takes place in freshwater tributaries when the adults return to spawn. Within these areas, essential features of coho salmon critical habitat include adequate: (1) substrate, (2) water quality, (3) water quantity, (4) water temperature, (5) water velocity, (6) cover/shelter, (7) food, (8) riparian vegetation, (9) space, and (10) safe passage conditions (NMFS 1999). The PBFs of coho salmon critical habitat associated with this project relate to: areas for growth and development to adulthood. The essential features that may be affected by the proposed action include water quality, food, cover/shelter, and safe passage.

The PBFs of CC Chinook salmon critical habitat and the PBFs of NC steelhead critical habitat within the action area is limited to the estuarine area with: (1) water quality, water quantity, and salinity conditions supporting juvenile and adult physiological transitions between fresh- and saltwater; (2) natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, and side channels; and (3) juvenile and adult forage, including aquatic invertebrates and fishes, supporting growth and maturation (NMFS 2005). The essential features that

may be affected by the proposed action include water quality, natural cover, and forage/food resources.

#### Water Quality PBF

The proposed action includes activities that could degrade the water quality PBF for salmonids. Degraded water quality is expected to result from increased turbidity from disturbance of sediment and the incidental fallback of sediment from the clamshell dredge during operation. Elevated suspended sediment concentrations (SSCs) in Humboldt Bay are a relatively frequent occurrence. SSC levels can naturally increase due to wave action on shallow mudflats, storm runoff being delivered from local tributaries, and turbid water from the Eel River entering the bay on incoming tides. It is common for SSCs in Humboldt Bay to range from 40 to 100 milligrams per liter or more during the year (Swanson et al. 2012). Significant increases in turbidity usually begin to occur in September or October with the onset of the wet season, and peak between December and February (Swanson et al. 2012). Implementation of the minimization measures, which are included in the proposed action, will ensure any effects of turbidity are minimized.

The clamshell dredge bucket will minimize the extent and duration of turbid conditions, which are expected to extend no more than 500-feet from work areas. When spoils are taken to the Redwood Marine Terminal Berth II for dewatering, waters are drained from the dredge slurry and returned to Humboldt Bay. Return water from the dewatering operations may be more turbid than ambient conditions in Humboldt Bay, and create a minor and temporary increase in localized turbidity that would likely not extend beyond 200 feet during the short amount of time required for dewatering. NMFS expects that the temporary reduction in water quality in Humboldt Bay will not affect the conservation value of critical habitat. Therefore, the effects of the Project on the water quality PBF are expected to be insignificant.

#### Prey/Forage Resources PBF

The proposed action will result in the temporary loss of some benthic food resources within the area of the dredge footprint of the Project. Given the proposed work window, the majority of the disturbance to prey resources in the action area will occur during times when salmonid use of the action area is very low. As salmonid use of the action area increases in the spring months the following year, the dredged areas would have had several months to recover and be recolonized by benthic organisms. The preferred prey resources for juvenile salmonids (Dungeness crab larvae, Pacific herring larvae, harpacticoid copepods, etc) would not be affected by the Project. Because prey resources are not expected to be significantly affected, NMFS does not expect any adverse effects to the Prey Resource PBF.

#### Migratory Corridor PBF

The proposed action will result in increased turbidity within 500 feet of work sites while the clamshell dredge removes accumulated sediments from the dredge footprints. The proposed work will occur when salmonids are not expected to be migrating, and NMFS expects that salmonid use (rearing) in the action area will be minimal. The short term turbidity is not expected to have a lasting effect on the quality or quantity of the migratory corridor. NMFS expects no adverse effects to the Migratory Corridor PBF.

Conclusion: Salmon and Steelhead Critical Habitat

Based on our analysis above, implementation of the minimization measures will be sufficient to protect all of the PBFs of SONCC coho salmon, CC Chinook salmon, and NC steelhead critical habitat. For these reasons, the potential effects on the aforementioned species' critical habitat are expected to be insignificant.

#### *Effects to SDPS Green Sturgeon Critical Habitat*

The PBFs of green sturgeon critical habitat occur both in the estuarine and coastal marine areas of the action area. The PBFs of green sturgeon within the estuarine area include: (1) abundant food items and substrates for juvenile, subadult and adult life stages; (2) water flow necessary for orientation and attraction flows to spawning areas in the Sacramento River; (3) water quality necessary for normal behavior, growth, and viability of all life stages; (4) a migratory pathway necessary for the safe and timely passage within estuarine habitats and between estuarine and riverine or marine habitats; (5) a diversity of depths necessary for shelter, foraging and migration of juvenile, subadult, and adult life stages; and (6) sediment quality necessary for normal behavior, growth, and viability of all life stages (NMFS 2006). The PBFs of green sturgeon within the portion of the action area occurring in coastal marine areas (outside of Humboldt Bay in the Pacific Ocean in waters less than 60-fathoms of depth) also include migratory corridors; appropriate water quality; and ample food resources.

#### *Prey Resources PBF*

The proposed action will result in the temporary reduction of benthic food resources within the area of the dredge footprint of the Project. After the first dredging cycles (likely to occur in 2019), the benthic community is expected to recover and recolonize the dredge footprints. As SDPS green sturgeon enter Humboldt Bay in April, the dredge footprint will have had nearly six months of recovery time after the first year of dredging. Subsequent dredging efforts will be much smaller in scope and dependent on the volume of sediment accumulated. Green sturgeon use of the dredge footprint is relatively low given its low value location and high levels of disturbance. Effects to the PBFs of SDPS green sturgeon critical habitat at HOODS may be improved by adding complexity to the seafloor and additional prey items that are collected coincident to dredging. The temporary reduction in benthic prey resources during the recovery and recolonization of the dredge footprint after dredging episodes is not expected to adversely affect the Prey Resources PBF for SDPS green sturgeon.

#### *Water Quality PBF*

The Water Quality PBF establishes criteria for suitable water temperatures, salinity, dissolved oxygen, and contaminants for all life stages of SDPS green sturgeon. The Project is not expected to affect these water quality parameters as the activities will not significantly affect temperature, salinity, or dissolved oxygen. Minimization measures are proposed in the Proposed Action section are likely to avoid introducing significant amounts of contaminants (fuel, etc) into the action area. Such toxics would be further diluted by tides and currents. Thus, there are no adverse effects expected to the Water Quality PBF.

#### *Migratory Corridor PBF*

The Migratory Corridor for SDPS green sturgeon may be temporarily affected by increases in turbidity. Turbid conditions are expected to extend as far as 500 feet from work sites, leaving ample space and adequate depths for any SDPS sturgeon migratory behaviors to occur. Furthermore, it is not expected that turbidity will affect SDPS green sturgeon migratory behaviors as the species has

reduced eyesight and relies on other senses to navigate. Therefore, the effects to the Migratory Corridor PBF are expected to be insignificant.

#### Water Depth PBF

The Water Depth PBF suggests that a diversity of depths is necessary for shelter, foraging, and migration of all life stages of SDPS green sturgeon. Sub-adult and adult green sturgeon occupy a diversity of depths while in bays or estuaries for feeding and migration. The Project will increase the depths of areas that are currently shallow, resulting in depths that remain suitable (or possibly enhanced) for SDPS green sturgeon. NMFS does not expect adverse effects to the Water Depth PBF, as a diversity of depths will remain available to all SDPS green sturgeon in the action area.

#### Sediment Quality PBF

The Sediment Quality PBF identifies the importance of the chemical characteristics of sediments, and suggests that sediments be free of elevated levels of contaminants such as selenium, pesticides, or poly aromatic hydrocarbons. These chemicals are known to cause adverse effects on all life stages of green sturgeon. Due to minimization measures described above, the Project is not expected to contribute chemical contamination to the water in the action area in more than the small amounts that are re-suspended from the bottom during dredging activities. Therefore, NMFS does not expect adverse effects to the Sediment Quality PBF.

#### Conclusion: SDPS Green Sturgeon Critical Habitat

Implementation of the minimization measures will be sufficient to protect all PBFs of SDPS green sturgeon critical habitat in the action area. Thus, the potential effects to green sturgeon critical habitat in the action area are expected to be insignificant.

#### *Effects to Salmon and Steelhead Individuals*

The Projects have the potential to affect all life stages of the listed salmonids occurring in the action area due to entrainment in the clamshell bucket or water intake screen; reduced fitness resulting from temporary increases in turbidity; reduced fitness resulting from temporary reduction in benthic prey; and disturbance from vessel traffic. The effects caused by these project components have been reduced or minimized by incorporating the minimization measures described in the Proposed Action section.

#### Entrainment in Clamshell Bucket or Water Intake Screen

There is a very remote possibility that a juvenile salmonid could be captured in the clamshell bucket and removed along with the dredge spoils. Water will be drafted from Humboldt Bay at the Redwood Marine Terminal Berth II as part of the dewatering operation, where there is remote possibility of entrainment on the intake screen. However, the work will occur when listed salmonid use of the action area is very low, thus minimizing exposure of juveniles. Any juveniles present in the action area during the work window would be expected to be present in the deeper channels outside the work area. Pinnix et al. 2013 found that SONCC coho salmon juveniles predominantly occurred in deep channels and NMFS expects that listed salmonids will prefer the deeper channels and are expected to avoid the work areas, thus the possible effects of entrainment are discountable.

#### Turbidity

As previously described in the Effects to Critical Habitat section, operation of the clamshell dredge is expected to reduce water quality through the suspension of sediments and the resulting temporary increases in turbidity. Turbid waters are expected to extend no more than 500 feet from work sites. When spoils are taken to the Redwood Marine Terminal Berth II for dewatering, waters are drained from the dredge slurry and returned to Humboldt Bay. Return water from the dewatering operations may be more turbid than ambient conditions in Humboldt Bay, and create a minor and temporary increase in localized turbidity that would likely not extend beyond 200 feet during the short amount of time required for dewatering. The work will occur when listed salmonid use of the action area is low, thus minimizing exposure of both juveniles and adults. If any life stages were present, it is expected they would be present in the deeper subtidal channel. Pinnix et al. 2013 found that SONCC coho salmon residency in the Bay was very low and predominantly occurred in deep channels. Listed salmonids will be able to avoid the work areas as ample suitable habitat is available within the action area. Therefore, NMFS expects no adverse effect to listed salmonids resulting from turbidity.

#### Benthic Prey Reduction

The proposed action will result in the temporary loss of some benthic food resources within the area of the dredge footprint of the Project. Given the proposed work window, the majority of the disturbance to prey resources in the action area will occur during times when salmonid use of the action area is very low. As salmonid use of the action area increases in the spring months the following year, the dredged areas would have had several months to recover and be recolonized by benthic organisms. Furthermore, the preferred prey resources for juvenile salmonids (Dungeness crab larvae, Pacific herring larvae, harpacticoid copepods, etc) would not be affected by the Project. Because prey resources are not expected to be significantly affected, NMFS does not expect any fitness related consequences to individuals. Therefore, NMFS expects the effects of a temporary reduction in benthic prey to be insignificant.

#### Disturbance from Vessel Traffic

As described in the Proposed Action section, an increase in sound and disturbance related to the dredging work itself, in addition to the barges, scows, or tugs needed to transport dredge spoils is expected. The Fisheries Hydroacoustic Working Group (FHWG) has developed injury threshold criteria for listed fish species (FHWG 2008). The FHWG identified sound pressure levels of 206 dB-peak (peak decibels) at 10 m as being injurious to fish. Accumulated sound exposure levels (SEL) at 10 m of 187 dB for fishes that are greater than 2 grams are considered to cause temporary shifts in hearing, resulting in temporarily decreased fitness (i.e., reduced foraging success, reduced ability to detect and avoid predators) (FHWG 2008). The low level acoustics produced by vessels or from operation of the clamshell dredge are not likely to result in any negative physiological response or injury to any of the life stages of all the listed salmonid species. Vessel traffic may startle individual fish on the rare occasion when vessel traffic comes into close proximity of individuals. This brief startle response is not expected to result in any fitness consequence or increase rates of predation. Therefore, vessel traffic and associated disturbance is not expected to adversely affect listed salmonids.

#### Conclusion: Individual Salmon and Steelhead

There is little potential for combined effects given the size and location of where most of the activities are proposed to occur. For example, if a listed juvenile salmonid is startled by vessel traffic, it would leave and flee into other suitable habitat nearby before experiencing any sediment-related effects. NMFS concludes that all of the effects caused by the Project, when evaluated as a



whole for the potential for combined or synergistic effects, would have an insignificant effect on individual Chinook salmon, coho salmon, and steelhead.

#### *Effects to SDPS Green Sturgeon Individuals*

The Projects have the potential to affect SDPS green sturgeon due to entrainment in the clamshell bucket or water intake screen; reduced fitness resulting from temporary increases in turbidity; reduced fitness resulting from habitat reduction or loss; and disturbance from vessel traffic. The effects caused by these project components have been reduced or minimized by incorporating the minimization measures previously described.

#### *Entrainment in Clamshell Bucket or Water Intake Screen*

The only life stages of SDS green sturgeon expected to be present are the larger sub-adult and adult life stages. Both sub-adult and adult life stages are too large to be captured inside of a clamshell bucket or to be impinged on water intake screens. Furthermore, based on Pinnix (2008) and Goldsworthy et al. (2016), SDPS green sturgeon spend most of their time in the northern reaches of the North Bay near Sand Island. NMFS expects exposure of SDPS green sturgeon to be very limited, based on their high use of the North Bay. NMFS expects possible effects of entrainment to be discountable.

#### *Turbidity*

As previously described, turbidity is expected to result from dredging activities and extend as far as 500 feet from work sites and 200 feet from the water return site when spoils are dewatered onshore at the Redwood Marine Terminal Berth II. Most sturgeon are generally benthic foragers and not visual predators (Moyle 2002). The green sturgeon retina is dominated by rods as the primary photoreceptors, indicating that they are adapted to environments characterized by low light levels (Sillman et al. 2005). This indicates that green sturgeon vision is likely not to be particularly sensitive or acute (Sillman et al. 2005), and therefore resilient to the minor increases in turbidity expected to be caused by the Projects. As a benthic foraging species they are adapted to living in estuaries with fine sediment bottoms and inhabit streams with high levels of turbidity (Allen and Cech 2007). The temporary increases in turbidity are not expected to reduce feeding opportunities nor the fitness of SDPS green sturgeon individuals, a species which is known to rely on other senses over eyesight. Furthermore, NMFS expects that few SDPS green sturgeon would be exposed to increased turbidity in the action area, given their high use of the North Bay (Pinnix 2008 and Goldsworthy et al. 2016). Therefore, the effects of turbidity from the proposed action are expected to be insignificant to SDPS green sturgeon.

#### *Benthic Prey Reduction*

The proposed action will result in the temporary loss of some benthic food resources within the area of the dredge footprints of the Projects. As previously discussed, the majority of SDPS green sturgeon are found in the North Bay and Entrance Bay, and most will not be exposed to any effects of the Project inside of the action area. Because prey resources will only be temporarily affected, and there is ample suitable habitat elsewhere, NMFS does not expect any fitness related consequences to individuals. Therefore, NMFS expects the effects of a temporary reduction in benthic prey to be insignificant.

#### *Disturbance from Vessel Traffic*

As described in the Proposed Action section, an increase in sound and disturbance related to the dredging work itself, in addition to the barges, scows, or tugs needed to transport dredge spoils is expected. The FHWG has developed injury threshold criteria for listed fish species (FHWG 2008). The FHWG identified sound pressure levels of 206 dB-peak (peak decibels) at 10 m as being injurious to fish. Accumulated sound exposure levels (SEL) at 10 m of 187 dB for fishes that are greater than 2 grams are considered to cause temporary shifts in hearing, resulting in temporarily decreased fitness (i.e., reduced foraging success, reduced ability to detect and avoid predators) (FHWG 2008). The low level acoustics produced by vessels or from operation of the clamshell dredge are not likely to result in any negative physiological response or injury to SDPS green sturgeon. Vessel traffic may startle individual fish on the rare occasion when vessel traffic comes into close proximity of individuals. This brief startle response is not expected to result in any fitness consequence or increase rates of predation. Furthermore, NMFS expects that few SDPS green sturgeon would be exposed to sound and disturbance in the action area, given their high use of the North Bay (Pinnix 2008 and Goldsworthy et al. 2016). Therefore, vessel traffic and expected sound levels produced is expected to be insignificant to SDPS green sturgeon individuals.

#### **Conclusion: Individual SDPS Green Sturgeon**

There is little potential for combined effects to occur. For example, if a SDPS green sturgeon is startled by vessel traffic, it would leave and flee into other suitable habitat nearby before experiencing any sediment-related effects. NMFS concludes that all of the effects caused by the Project, when evaluated as a whole for the potential for combined or synergistic effects, would have an insignificant effect on individual SDPS green sturgeon.

#### **Conclusion**

Based on this analysis, NMFS concurs with the Corps that the proposed action may affect, but is not likely to adversely affect SONCC coho salmon, CC Chinook salmon, NC steelhead, and Southern DPS green sturgeon or their designated critical habitats.

#### **Reinitiation of Consultation**

Reinitiation of consultation is required and shall be requested by [*name of action agency*] or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and (1) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (2) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this concurrence letter; or if (3) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16). This concludes the ESA portion of this consultation.

### **MAGNUSON-STEVENSON FISHERY CONSERVATION AND MANAGEMENT ACT**

Under the MSA, this consultation is intended to promote the protection, conservation and enhancement of EFH as necessary to support sustainable fisheries and the managed species' contribution to a healthy ecosystem. For the purposes of the MSA, EFH means "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity", and includes the associated physical, chemical, and biological properties that are used by fish (50 CFR 600.10), and "adverse effect" means any impact which reduces either the quality or quantity of EFH (50 CFR

600.910(a)). Adverse effects may include direct, indirect, site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

This analysis is based, in part, on the EFH assessment provided by the Corps and descriptions of EFH for Pacific coast groundfish (PFMC 2014), coastal pelagic species (PFMC 1998), and Pacific coast salmon (PFMC 1999) contained in the FMPs developed by the Pacific Fishery Management Council and approved by the Secretary of Commerce. In estuarine and marine areas, Pacific Coast Salmon EFH extends from the nearshore and tidal submerged environments within state territorial waters out to the full extent (200 miles) of the U.S. Exclusive Economic Zone (EEZ) offshore of Washington, Oregon, and California north of Point Conception to the Canadian border (PFMC 1999). The Pacific Groundfish EFH includes all waters from the mean high water line, and the upriver extent of saltwater intrusion in river mouths, along the coasts of Washington, Oregon, and California seaward to the boundary of the EEZ (PFMC 2014). The east-west geographic boundary of Coastal Pelagic EFH is defined to be all marine and estuarine waters from the shoreline along the coasts of California, Oregon, and Washington offshore to the limits of the EEZ and above the thermocline where sea surface temperatures range between 10°C and 26°C. The southern extent of EFH for Coastal Pelagics is the United States-Mexico maritime boundary. The northern boundary of the range of Coastal Pelagics is the position of the 10°C isotherm, which varies both seasonally and annually (PFMC 1998). Thus, the proposed Projects occur within EFH for various Federally-managed species in the Pacific Coast Salmon, Pacific Groundfish, and Coastal Pelagics FMPs.

#### **Adverse Effects on Essential Fish Habitat**

NMFS determined the proposed action would adversely affect EFH for Pacific Coast Salmon, Pacific Coast Groundfish, and Coastal Pelagic Species Fishery Management Plans as follows:

- Temporarily degraded water quality within the action area due to the generation of suspended sediment caused by dredging activities
- Temporary reduction in benthic prey after the dredging is complete and before recovery and recolonization occur
- Potential loss of eelgrass

Furthermore, the project is located in a Habitat Area of Particular Concern (HAPC) for various federally managed fish species within the Pacific Coast Groundfish FMP and Pacific Coast Salmon FMP. HAPC are described in the regulations as subsets of EFH that are rare, particularly susceptible to human-induced degradation, especially ecologically important, or located in an environmentally stressed area. Designated HAPC are not afforded any additional regulatory protection under MSA; however, federal projects with potential adverse impacts to HAPC are more carefully scrutinized during the consultation process. As defined in the Pacific Groundfish and Pacific Salmon FMP, Humboldt Bay, including the project area, is identified as estuary and seagrass (i.e., eelgrass) HAPC.

#### **Adverse Effects to Water Quality**

Elevated SSCs in Humboldt Bay and the Pacific Ocean are a relatively frequent occurrence. SSC levels can naturally increase due to wave action on shallow mudflats, storm runoff being delivered from local tributaries, algae blooms, and turbid water from the Eel River entering on incoming tides. It is common for SSCs in Humboldt Bay to range from 40 to 100 milligrams per liter or more during the year (Swanson et al. 2012). Significant increases in turbidity usually begin to occur in September or October with the onset of the wet season, and peak between December and February (Swanson et

al. 2012). There is an expected temporary increase in turbidity during the initial episode of dredging, and less significant increases in subsequent dredging episodes as the dredge volumes will be smaller after the initial episode. When spoils are taken to the Redwood Marine Terminal Berth II for dewatering, return water may be more turbid than ambient conditions in Humboldt Bay, and create a minor and temporary increase in localized turbidity that would likely not extend beyond 200 feet during the short amount of time required for dewatering. Brief episodes of turbidity will also occur at HOODS resulting from the disposal of dredge spoils. The high current and wind environment at HOODS is expected to quickly ameliorate suspended sediments and turbidity. In addition, the duration of exposure will be temporary, which would reduce the duration of any adverse effects.

#### Effects of Reduction in Benthic Habitat/Prey

The proposed action will result in the temporary loss of some benthic food resources within the area of the dredge footprint of the Projects. After dredging, the benthic environment will likely be largely devoid of life and will recover and be recolonized over time by benthic fauna and infauna. Most benthic species will have recovered or recolonized the area by the following season. Although recovery and recolonization may occur in several months, repeated annual dredging may cause adverse effects as the dredge area may not recover in between dredging efforts.

#### Effects to Eelgrass

The WIM was constructed in 1978 and the District purchased a 22-acre mitigation site located at the end of Park Street in Eureka. The 22-acre Park Street mitigation site continues to serve as mitigation for ongoing impacts from marina infrastructure and maintenance dredging at WIM. NMFS expects eelgrass may exist in very low abundance in some portions of the WIM which may be exposed to dredging or to the effects caused by dredging operations (turbidity). The District (2018a) suggests that eelgrass is present episodically along the slope of the WIM. Therefore, there is a high likelihood that eelgrass present in WIM during dredging may be effected, or in some cases lost. However, the 22-acre mitigation site at Park Street continues to compensate for any effects to eelgrass in the WIM.

The FLBL was constructed in 1981, and during construction it was recognized that the continued operation of the travel lift would require periodic maintenance dredging. The California Coastal Commission had required mitigation to ensure that the creation and subsequent maintenance dredging of the travel lift facility would not result in a net loss of habitat. The District (2018b) had mitigated for the creation and continued operation of the Fields Landing Boat Yard and travel lift by mitigating one acre of tidal mudflat and eelgrass as part of the Broadway-Wetlands Restoration Project. Therefore, all of the eelgrass that will be impacted during dredging of the travel lift area has been previously mitigated for as the Broadway-Wetlands Restoration Project continues to compensate for all future effects related to the facility.

Despite the previously completed mitigation work, the maintenance dredging that is planned to occur at the WIM and FLBL will remove and disrupt the future colonization of eelgrass in the dredge footprints. After dredging is complete, depths within the dredge footprints will be temporarily unsuitable for the re-colonization of eelgrass. The continued suppression of suitable growing depths will result in a reduction of eelgrass habitat in the action area, although additional compensatory habitat has been created elsewhere.


Eelgrass within 500-feet of the work sites or within 200 feet of the water return at Redwood Marine Terminal Berth II may be affected by brief periods of turbidity. As the tides change, the turbid

waters will likely extend in different directions from the work site and affect eelgrass to the north and south of the work site. The tides will help minimize exposure of individual plants and work is expected to be completed in less than two weeks. The District also proposes to monitor turbidity and discontinue work if turbidity exceeds 20% over ambient conditions. Therefore, NMFS does not expect any sediment or turbidity-related effects to eelgrass outside of the dredge footprint.

The Corps must reinitiate EFH consultation with NMFS if the proposed action is substantially revised in a way that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH determinations (50 CFR 600. 920(l)). This concludes the MSA portion of this consultation. NMFS has no EFH conservation recommendations to suggest.

Please direct questions regarding this letter to Matt Goldsworthy at (707) 825-1621 or via email at Matt.Goldsworthy@noaa.gov.

Sincerely,



Jeffrey Jahn  
South Coast Branch Chief

cc: Copy to ARN File # 151422WCR2019AR00146

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**CALIFORNIA COASTAL COMMISSION**

NORTH COAST DISTRICT OFFICE  
1385 EIGHTH STREET, SUITE 130  
ARCATA, CA 95521  
VOICE (707) 826-8950  
FAX (707) 826-8960  
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*Mailed original*  
*8/14/2019*



August 9, 2019

Adam Wagschal  
Director of Harbor Operations  
Humboldt Bay Harbor, Recreation & Conservation District  
P.O. Box 1030  
Eureka, CA 95502-1030

RE: **Issuance of CDP 1-19-00407** to (1) construct two temporary dewatering basins (one at each location) to dewater dredged material from planned routine maintenance dredging operations at Fields Landing and Woodley Island Marina for the potential beneficial reuse of suitable dredged sediment at an approved location; (2) extract seawater from Humboldt Bay for re-slurrying of dredged material within the hopper barge to facilitate its transport to the temporary dewatering basins at each site; and (3) temporarily place piping infrastructure at each site between the dredge vessel(s) and the dewatering sites and between the dewatering sites and existing storm drain inlets to transport slurry material and ultimately discharge the dewatering effluent back into Humboldt Bay.

Dear Adam:

As you know, after a public hearing held on August 7, 2019 in Eureka, the California Coastal Commission unanimously approved the above-referenced coastal development permit (CDP). The CDP was approved subject to five special conditions, two of which (Special Conditions 1 and 4) require information to be submitted prior to commencement of development. Therefore, we are issuing the permit.

Enclosed please find two copies of the CDP. **Please sign the original and return it to this office at the letterhead address.** Retain the copy for your files. After we receive the signed original, the permit will be fully effective.

As always, we appreciate your cooperation and patience throughout the Commission's review of your project. If you have any questions about CDP condition compliance during or after project implementation, please don't hesitate to contact me.

Sincerely,

Clancy DeSmet  
Coastal Program Analyst II

Encl: CDP 1-19-0407 (two copies)

Cc: Humboldt County Planning

**CALIFORNIA COASTAL COMMISSION**

NORTH COAST DISTRICT OFFICE  
1385 8<sup>TH</sup> STREET • SUITE 130  
ARCATA, CA 95521  
VOICE (707) 826-8950  
FAX (707) 826-8960



# W11b

Filed: 7/17/19  
180<sup>th</sup> day: 1/13/20  
Staff: C. DeSmet-A  
Staff Report: 7/26/19  
Hearing Date: 8/7/19

## STAFF REPORT: REGULAR CALENDAR

**Application No.:** 1-19-0407

**Applicant:** Humboldt Bay Harbor, Recreation & Conservation District

**Location:** At two locations on Humboldt Bay: (1) Fields Landing Boat Yard on the east side of the bay off of Depot Road in Fields Landing, and (2) Redwood Marine Terminal II on the west side of the bay south of Samoa off of Vance Avenue, Humboldt County

**Project Description:** (1) Construct two temporary dewatering basins (one at each location) to dewater dredged material from planned routine maintenance dredging operations at Fields Landing and Woodley Island Marina for the potential beneficial reuse of suitable dredged sediment at an approved location; (2) extract seawater from Humboldt Bay for re-slurrying of dredged material within the hopper barge to facilitate its transport to the temporary dewatering basins at each site; and (3) temporarily place piping infrastructure at each site between the dredge vessel(s) and the dewatering sites and between the dewatering sites and existing storm drain inlets to transport slurry material and ultimately discharge the dewatering effluent back into Humboldt Bay.

**Staff Recommendation:** Approval with conditions.

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## SUMMARY OF STAFF RECOMMENDATION

The scope of this CDP application concerns activities related to the reuse of dredged material from planned routine maintenance dredging activities that are exempt from the need for CDP authorization pursuant to Coastal Act section 30610(d) and the Commission's regulations (Title 14 CCR § 13252). The Humboldt Bay Harbor, Recreation & Conservation District (Harbor District) plans to dredge Woodley Island Marina and the Fields Landing Boat Yard Travel Lift (haul out ramp) on Humboldt Bay. Rather than dispose of the dredged material (which is not suitable for beach nourishment due to its fine grain size and texture) at the approved ocean disposal site located three miles offshore from Humboldt Bay, the Harbor District proposes to dewater the materials at two paved upland sites on the bay for the potential beneficial reuse of the dewatered sediments in an approved restoration project area in Humboldt Bay called White Slough Tidal Marsh Restoration. The Commission's federal consistency unit reviewed and approved the White Slough project in 2015, including the placement of dredged materials and other sediments at the restoration site.

To facilitate the beneficial reuse of dredged material, after dredging, when the material is in the hopper barge, it must be reslurried before it can be transported to upland sites adjacent to the bay for dewatering. Therefore, this CDP application considers the Harbor District's proposed extraction of seawater from the bay for the reslurrying process, the transport of slurry material through temporary pipelines to two dewatering sites on the bay, and the proposed dewatering and discharge activities. Temporary dewatering basins would be constructed using k-rails or similar structures supporting an impermeable liner. The edges of the liner would be held in place with soft weights such as sandbags. A controllable opening or weir would be constructed on one side of the basin. A temporary piping system would be installed extending from dewatering basins to existing storm drains that drain to Humboldt Bay. The maximum area of the temporary dewatering basins would be approximately 60,000 square feet at Redwood Marine Terminal II and 40,000 square feet at the Fields Landing Boat Yard.

The primary issues raised by this application include the project's consistency with the Coastal Act's policies requiring protection of coastal waters and marine resources and the priority of coastal-dependent development. The Harbor District has proposed various measures to minimize the potential for fish impingement and entrainment impacts related to proposed reslurrying activities. These include (1) restricting the work window to the period of July 1 to October 15 to minimize effects to listed species; (2) designing the intake device to meet certain flow rate and screening standards for fish protection, and (3) implementing various operational best management practices (BMPs) that will further protect listed fish species and water quality. Staff recommends Special Conditions 2 and 3 to require that the Harbor District undertake the project in accordance with all proposed protective measures and BMPs described in the project description to protect marine resources, biological productivity, and the quality of coastal waters consistent with Coastal Act sections 30230 and 30231. In addition, staff recommends Special Condition 4 to require the applicant to submit a dredged material disposal plan for the Executive Director's review and approval. This condition will ensure that the handling and disposal of dredged material is carried out in a manner that will avoid significant disruption to marine habitats, consistent with Section 30233(b) of the Coastal Act.

Staff believes that with the recommended conditions, the proposed dewatering of dredged material project is consistent with all applicable Chapter 3 policies of the Coastal Act.

The motion to adopt the staff recommendation of approval with special conditions is found on Page 5.

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## APPENDIX

Appendix A – Substantive File Documents

## EXHIBITS

Exhibit 1 – Regional Location Map

Exhibit 2 – Vicinity Map

Exhibit 3 – Figures and Plans

Exhibit 4 – Water Intake Design and Details

## I. MOTION AND RESOLUTION

The staff recommends that the Commission adopt the following resolution:

### **Motion:**

*I move that the Commission approve coastal development permit 1-19-0407 pursuant to the staff recommendation.*

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

### **Resolution:**

*The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Ac. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.*

## II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment:** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration:** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable amount of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation:** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment:** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.



5. **Terms and Conditions Run with the Land:** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

### III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Corps of Engineers Approval.** PRIOR TO COMMENCEMENT OF DEVELOPMENT AUTHORIZED UNDER CDP No. 1-19-0407, the Permittee shall provide to the Executive Director a copy of a permit issued by U.S. Army Corps of Engineers for the intake and discharge facilities, or evidence that no permit is required. The Permittee shall inform the Executive Director of any changes to the project required by the Corps. Such changes shall not be incorporated into the project until the Permittee obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.
2. **Operational Best Management Practices.** The Harbor District shall implement the following proposed protection measures and operational BMPs to protect the water quality and aquatic habitat of Humboldt Bay:
  - (i) Reslurrying, dewatering, and associated decant discharge activities shall only be performed between July 1 and October 15 unless the Executive Director approves minor extensions to the work window for good cause;
  - (ii) Vegetable-based or biodegradable hydraulic fluids shall be used, if possible, in equipment operating over water or without secondary containment;
  - (iii) Equipment shall be inspected and serviced prior to mobilization. Routine inspections shall occur throughout the project and leaks shall be repaired immediately when discovered;
  - (iv) Spill kits equipped with enough material to provide preliminary containment for a volume of material that can reasonably be expected to spill shall be maintained on the barge and the dock. Spill containment trays shall be placed around all equipment on the barge deck;
  - (v) Temporary dewatering basins shall be constructed with an impermeable liner, and the perimeter of the liner shall be secured to minimize the potential for uncontrolled discharge of polluted dredge slurry;
  - (vi) Trash racks shall be placed at the outlet of pipes delivering dredge slurry from the hopper to dewatering basins to be captured, removed, and disposed of at an appropriate facility based on the type of recovered debris;
  - (vii) All temporary pipes used to transport dredge slurry material between the hopper barge and dewatering basins and between basins and discharge points for decant effluent shall be welded together to avoid any risk of leaks;
  - (viii) At the discharge sites, a liner and sandbags shall be used to direct flow to the bay and waddles shall be used for filtering out sediments;

- (ix) Turbidity shall be monitored as proposed within 500 feet of discharge points to ensure that discharge water turbidity does not exceed bay water turbidity by more than 20%. Operations shall be adjusted as necessary to ensure allowed turbidity levels are maintained. At a minimum, turbidity shall be monitored (a) immediately before discharge begins; (b) every two hours during discharge; and (c) after any potential change to the discharge (e.g., addition of new dredged material to a dewatering unit or changed configuration of baffling); and
- (x) If the dredged material is determined from test results to be incompatible with placement at White Slough as determined by the Regional Water Board, the material shall be disposed of at an approved location outside of the coastal zone or at a permitted site within the coastal zone authorized to receive the material.

**3. Screened Intake System Design Standards and Procedures.** The authorized seawater intake system shall be used in accordance with the design and specifications proposed under CDP Application No. 1-19-0407, which have been reviewed and approved by both the National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife (CDFW), including use of the following proposed standards and procedures to ensure the device is adequately designed for the protection of listed fish species in Humboldt Bay:

- (i) Prior to use of the new screened intake device for pumping dredged material, the Harbor District shall conduct a water approach velocity test to confirm the calculated values are met. The test shall be conducted during work windows required by Special Condition 2 and will be conducted by taking water velocity measurements at multiple points on each side of the screen using a handheld water flow meter. Test results shall be submitted to the Executive Director for review and approval;
- (ii) Round or square (measured diagonally) openings in intake screens shall not exceed 2.38 millimeters (mm) (3/32");
- (iii) Slotted openings in the screen shall not exceed 1.75mm (0.0689");
- (iv) Approach velocity shall not exceed 0.2 feet per second (fps) for self-cleaning screens or 0.05 fps for non-self-cleaning screens;
- (v) Overall screen porosity shall be a minimum of 27%;
- (vi) The pump that would be used would draw a maximum of 1,500 gallons per minute (gpm).
- (vii) For a non-self-cleaning screen, the screened intake device shall be removed from the bay water and manually cleaned with brushes and/or water after every time that water is pumped to the hopper to ensure that the screen is operating as designed; and
- (viii) The Harbor District shall provide monthly monitoring reports to the Executive Director that will include photos of the screen before and after cleaning and a description of any material on the screen after use. This information will confirm the screen is being cleaned and maintained as required to meet the required and verified approach velocities.

The Permittee shall maintain the required screen in operable condition throughout the life of the project.

**4. Dredge Material Disposal Plan**

- (i) PRIOR TO COMMENCEMENT OF DEVELOPMENT AUTHORIZED BY COASTAL DEVELOPMENT PERMIT NO. 1-19-0407, the Permittee shall submit, for the review and written approval of the Executive Director, a plan for the disposal of dredge material in the event that said material will not be disposed of for beneficial reuse in an approved restoration project restoration area in Humboldt Bay called "White Slough Tidal Marsh Restoration." The plan shall identify a disposal site that is in an upland area where dredge materials may be lawfully disposed and describe the manner by which the material will be removed from the construction site.
- (ii) The Permittee shall undertake development in accordance with the approved final Debris Removal Plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

- 5. Future Uses and Improvements.** This approval is limited to the uses and development specifically permitted by Coastal Development Permit 1-19-0407. All development must occur in strict compliance with the proposal as set forth in the application, subject to any special conditions. Any deviation from the approved plans must be submitted for review by the Executive Director to determine whether an amendment to this coastal development permit is required. Any additional development, including, but not limited to maintaining temporary dewatering basins on site for longer than proposed under this application, additional episodes of reslurrying and dewatering operations beyond the initial pilot study authorized by this CDP, or repair or replacement of seawater intake and discharge facilities, will require an amendment to the permit or a new coastal development permit unless the Executive Director determines that no amendment or new coastal development permit is legally required.

**IV. FINDINGS AND DECLARATIONS**

The Commission hereby finds and declares as follows:

**A. PROJECT DESCRIPTION**

The Humboldt Bay Harbor, Recreation & Conservation District (Harbor District) requests authorization to: (1) construct two temporary dewatering basins, one at Fields Landing Boat Yard and one at Redwood Marine Terminal II (RMT II), to dewater dredged material from planned maintenance dredging operations at Fields Landing and the Woodley Island Marina for the potential beneficial reuse of suitable dredged sediment at an approved location; (2) extract seawater from Humboldt Bay for re-slurrying of dredged material within the hopper barge to facilitate its transport to the temporary dewatering basins at each site; and (3) temporarily place piping infrastructure at each site between the dredge vessel(s) and the dewatering sites and between the dewatering sites and existing storm drain inlets to transport slurry material and ultimately discharge the dewatering effluent back into Humboldt Bay.

### **Purpose and Need/Background**

In 2018, the Executive Director determined the routine maintenance dredging activities at Woodley Island Marina and the Fields Landing Boat Yard Travel Lift (haul out ramp) to be exempt from CDP requirements pursuant to Coastal Act section 30610(d) and the Commission's regulations (Title 14 CCR § 13252).<sup>1</sup> The exempt activities involve routine maintenance dredging of less than 100,000 cubic yards of material using an excavator and/or crane with a closed clamshell bucket. The disposal of dredged material in federal waters, which is not suitable for beach nourishment due to its grain size and texture (mostly fine sediment), at the federally designated Humboldt Open Ocean Disposal Site (HOODS) was reviewed by the Commission's federal consistency division, which determined that the proposed disposal at HOODS would not affect coastal resources.<sup>2</sup> The exempt maintenance activities are planned to be undertaken between mid-August and mid-October of this year. Therefore, the exempt routine maintenance dredging activities are not under review within the scope of this CDP application. However, rather than dispose of the dredged material at HOODS, the Harbor District now proposes to dewater the materials for potential beneficial reuse in an approved restoration project area in Humboldt Bay called White Slough Tidal Marsh Restoration.<sup>3</sup> The dewatering and discharge activities associated with the exempt maintenance dredging operations are described below.

### **Reslurrying of Dredged Material and Dewatering Activities**

Dredging and dewatering is anticipated to take approximately a month to complete and the same equipment and vessels will be used for dredging operations at both locations (Woodley Island Marina and Fields Landing). Upon dredging the material at each site, material would be deposited into the hopper on a barge. Once full, the barge and hopper would be towed to and moored adjacent to the RMT II and/or Fields Landing dewatering sites. Dewatering may occur at only one or the other of the sites, but temporary dewatering basins (described below), up to 60,000 square feet in size (volume capacity up to 129,600 cubic feet), are proposed at each site to provide flexibility for the dredging contractor.

Once the barge is moored, the dredged material would be reslurried and pumped to the temporary dewatering basin. Pumps would be used to draw-in bay water to a submerged screened intake structure (described further below) and pump it directly into the hopper to reslurry the dredged material. The barge hopper would be water-tight to contain dredged material and water during use. Reslurried material then would be pumped from the hopper to the dewatering basin through a system of 12-inch HDPE pipes. At Terminal II, the piping would run along the dock and existing paved and concrete surfaces. At Fields Landing, the piping would span from the barge to a paved area before reaching the dewatering basin. Pipe sections would be welded together to avoid any risk of leaks. The pumping process would require approximately 60-80% water by volume. The amount of water estimated to be required for pumping a 500 cubic

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<sup>1</sup> See Commission File No. 1-18-0272-X for Fields Landing maintenance dredging and 1-18-0196-X for Woodley Island maintenance dredging.

<sup>2</sup> See Commission File No. NE-0002-18 for disposal of the dredged material from Woodley Island Marina at HOODS and NE-0006-18 for disposal of the dredge material from Fields Landing at HOODS.

<sup>3</sup> This project, on the Humboldt Bay National Wildlife Refuge (South Bay unit), began implementation in 2015. On May 1, 2015, the Commission's federal consistency unit reviewed the project proposal from the U.S. Fish and Wildlife Service under ND-0011-15 and concurred with the Service's negative determination. The Commission's review and approval includes the placement of dredge materials and other sediments at the restoration site.

yard load of dredged material from the hopper to the dewatering basin at 70% water is approximately 169,000 gallons. All bay water pumping would follow the intake screening standards described below.

In general, some debris captured in the dredged material is expected to be left in the hopper after the slurry has been pumped out. The Harbor District proposes to manually remove the debris and disposed of it at an appropriate facility based on the type of debris recovered in the process. In addition, the slurry will be run through a trash rack immediately before it enters the dewatering basins (i.e. trash racks will be placed at the outlet of the pipes delivering the dredge slurry from the hopper to the dewatering basins). Debris would be captured by trash racks, removed, and disposed of at an appropriate facility based on the type of recovered debris.

#### RMT II Site

At the RMT II site (Exhibits 1-2), the Harbor District is authorized under an existing CDP from Humboldt County<sup>4</sup> to use existing clarifiers<sup>5</sup> (settling tanks) on the property for the purpose of dewatering dredged material. Under this existing County CDP, dewatering effluent is authorized for disposal to “manhole #5,” an existing drainage system that drains to the ocean through an existing outfall line. Under the subject proposed CDP application, the Harbor District proposes to discharge dewatering effluent from the clarifiers at RMT II to Humboldt Bay instead of to the ocean as currently permitted. Within 24 hours after placement of the dredged materials in the clarifiers, effluent in the clarifiers is expected to achieve enough clarity to be within 20% of the background turbidity of Humboldt Bay, at which point the water would be slowly discharged from the top through a controlled opening. A temporary pipeline (6- to 12-inch HDPE) would be placed to route the water to an existing stormwater drain inlet near Humboldt Bay, with pumping as needed. Before discharging to Humboldt Bay, the water would be filtered through baffles, pipe filter socks, and/or drop inlet filters. During discharge, bay water and decant water turbidity would be monitored using a handheld turbidity meter. If discharge water turbidity exceeds bay water turbidity by 20% or more then discharging would cease. Discharge would not restart until solids within the dewatering structures have adequately settled and/or filtering methods have been adjusted in order to meet the turbidity standard. Once the water is pumped off the top of the settled dredged material, the remaining material would be allowed to further dry for a period of 5-10 days which would allow the material to firm up enough for equipment handling.

Additionally, the Harbor District proposes to construct a temporary dewatering basin at RMT II adjacent to the bay shoreline and north of the existing dock (Exhibit 3). The temporary basin would remain on site for up to one year, after which point it would be dismantled. The temporary dewatering basin would be used in addition to or in lieu of the water clarifiers described above. The temporary dewatering basin would be constructed with K-rails or similar structures supporting an impermeable liner. The edges of the liner would be held in place with soft weights such as sandbags. A controllable opening or weir would be constructed on one side of the basin. The same piping methods described above would be used to deliver dredge slurry to the basin and to pump decant water back to Humboldt Bay through an existing storm drain system. The maximum area of the temporary dewatering basin would be 60,000 square feet (volume capacity

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<sup>4</sup> Humboldt County CDP No. 16-049 was approved by the County on December 13, 2018.

<sup>5</sup> The clarifiers historically were used for pulp mill operations on the site, which operated from approximately 1960 to 2008.

= 129,600 cubic feet) (Exhibit 3). Discharge of dewatering effluent would be through an existing storm drainpipe (discharge process described below).

#### Fields Landing Site

At the Fields Landing site (Exhibits 1-2), dredging of the travel lift (haul out ramp) will take place from the paved upland boat yard area. Dredged material would be directly transferred to the temporary dewatering basin or transferred to a watertight container, which would relocate the material to the temporary dewatering basin. The temporary dewatering basin would be constructed as described above but would be smaller (approximately 40,000 square feet in size). The basin would be constructed on top of existing asphalt or concrete surfaces near the west side of the property [Exhibit]. Boats at Fields Landing would be relocated to other paved areas on site. The temporary basin would remain on site for up to six months, after which point it would be dismantled.

#### **Discharge to Humboldt Bay**

To estimate sediment settling times for dredged sediments, a laboratory test was conducted using Woodley Island Marina sediments suspended in 1 foot of bay water. Based on the settling test, after 24 hours particles of solid dredged material settle out and displace the majority of the water to the surface. Within 24 hours after the placement of dredged materials in temporary dewatering basins at each site, water in the dewatering basins is expected to achieve enough clarity to be within 20% of the background turbidity of Humboldt Bay (which is the standard required by the Regional Water Board), and at this point the water would be gently let off the top through a controlled opening. A temporary pipeline system, described above, would route the water to existing stormwater drains at each site.

Before discharging to Humboldt Bay at each site, the water would be filtered through baffles, pipe filter socks, and/or drop inlet filters. During discharge to Humboldt Bay, bay water and decant water turbidity would be monitored using a handheld turbidity meter and compared at the following times: (a) immediately after discharge has commenced; (b) every two hours during discharge; and (c) after any potential change to the discharge (e.g. addition of new dredged material to a dewatering basin or changed configuration of baffling). If discharge water exceeds bay water turbidity by 20% or more, then discharging would cease operation. Discharge would only recommence when the solids within the dewatering structures have adequately settled and/or filtering methods have been adjusted in order to meet the turbidity standards.

The anticipated rate of discharge at each site is 20 gallons per minute (gpm) with a velocity of 0.01 feet per second (fps), which is substantially lower than discharge volume and rate during average winter rain events. After initial dewatering, the solids in the dewatering basin would continue to settle and displace water as it compacts under its own weight. In total, approximately 135,000 gallons of water is expected to be removed per 1,000 cubic yards of sediment removal. After 5-7 days of additional settling, the material is expected to be within the moisture range low enough to handle with equipment to transport to the beneficial reuse site.

#### **Pumping and Intake Screening Standards**

All bay water pumping for dredged material reslurrying would include use of a screened intake device consisting of a 6-foot by 6-foot by 10-foot stainless steel perforated "basket" (Exhibit 4). The device would be designed to extract seawater through a tubing system connected to the

hopper in a manner that avoids impingement and entrainment of fish. The structure would be suspended in the water from the side of the barge or from the side of the existing dock at the RMT II site. There would be at least 3 feet to 6 feet of water depth both above and below the submerged device when in operation (i.e., the device would be at least 3 to 6 feet below the surface of the water and at least 3 to 6 feet above the bay bottom when in operation). In addition, the proposed device would meet the following criteria, which are recommended by NMFS and CDFW for protection of listed fish species in the bay:

1. Round or square (measured diagonally) openings shall not exceed 2.38 millimeters (mm) (3/32 inches);
2. Slotted openings in the screen shall not exceed 1.75mm (0.0689");
3. Approach velocity shall not exceed 0.2 feet per second (fps) for self-cleaning screens or 0.05fps for non-self-cleaning screens; and
4. Overall screen porosity shall be a minimum of 27%.

The pump that would be used would draw a maximum of 1,500 gallons per minute (gpm). The device would be removed from the bay water and manually cleaned with brushes and/or water after every time that water is pumped to the hopper, which may be multiple times per day.

#### **Removal of Dewatered Dredged Material from Sites**

Pursuant to Regional Water Board Requirements, prior to dredging, material within the dredging area will be sampled using incremental sampling methodology (ISM). Sampling results will be compared to existing sampling results for the White Slough Restoration Project, which is located within the Humboldt Bay National Wildlife Refuge. The Commission approved this project through its federal consistency division in May of 2015 (Commission File No. ND-0011-15). The primary purpose of the White Slough Tidal Restoration Project, implemented by the U.S. Fish and Wildlife Service, is to restore and enhance salt marsh habitat on diked former tidelands, and to enhance existing degraded brackish and freshwater wetlands to create additional native wildlife habitat. The restoration work, which has been ongoing over the past few years and is expected to continue for several additional years, involves the placement of thousands of cubic yards of sediment material within the marsh restoration area.

If the dewatered dredged material from the temporary dewatering basins is found to be compatible with placement in the White Slough Restoration area, it would be trucked from temporary dewatering basins to the approved site. If the material is determined to be incompatible with placement at White Slough, the Harbor District proposes to dispose of the material only at an approved location capable of receiving the material. The Commission approval of the White Slough Restoration Project through its federal consistency division in May of 2015 included the approval of placement of soils and dredged material in the restoration area from a variety of sources. Therefore, the dredged material disposal at White Slough is not being reviewed under the scope of this CDP application. However, if the dewatered material were to be targeted for disposal or beneficial reuse at a site in the coastal zone other than White Slough, additional CDP authorization from the Commission may be required.



## **B. ENVIRONMENTAL SETTING**

The Fields Landing Boat Yard is approximately 33 acres and is located on the east side of Humboldt Bay in the unincorporated community of Fields Landing approximately 6.6 miles south of Eureka (APN 307-101-002). The subject site is a secured boat yard that is owned and operated by the Harbor District. The property is locally planned and zoned for coastal dependent industrial uses under the Humboldt County LCP. The facility site consists of boat storage areas; a boat cleaning and maintenance work yard; boat launch; rest rooms; a covered boat repair shop; office, and store; storage area for the boat lift; and a dock. Vessels may be hauled out of the water and moved via the mobile boat lifting hoist (150-ton capacity). This secure facility is fenced and has 24-hour surveillance. A floating dock is secured to the outside (east) of the three existing pilings that extend towards the federal channel off the end of the eastern dock finger. The dock is used when multiple vessels are launched to perform vessel checks post-launching, and prior to heading out to sea. The floating concrete dock is approximately 5 feet wide and 24 feet long (in 8' sections). A gangway is installed to provide access from the pier to the floating dock.

The facility operates under an approved stormwater pollution prevention plan from the North Coast Regional Water Quality Control Board. The facility has one industrial drainage area, which is almost entirely paved. The industrial area at the site flows to a drainage inlet in the eastern portion of the site.

Redwood Marine Terminal II (RMT II) is approximately 68.49 acres and is located in Humboldt County on the Samoa Peninsula approximately 5 miles east of Eureka (APN 401-112-021). The Harbor District acquired the former pulp mill site in 2013. The site, RMT II, is designated and zoned for coastal-dependent industrial use and had significant historic usage from the time it was constructed in the 1960s until approximately 2008 when the pulp mill closed permanently. Existing site infrastructure including industrial equipment, laboratories, warehouses, offices, site roadways, and water/wastewater infrastructure was originally developed during this time to support site activities and employees.

This industrial site has been in operation on the Samoa Peninsula for over 50 years. In December 2015, the County approved a CDP<sup>6</sup> for site infrastructure improvements, which allowed for necessary maintenance of existing infrastructure. The Harbor District received new market tax credits to make existing renovations including: new roofing, building siding and access doors, water and fire suppression upgrades, electrical upgrades including substation and energy efficiency retrofits, and upgraded security fencing. Additionally, recently implemented upgrades include: installation of fiber optic cables, electrical repairs/upgrades to site buildings, installation of a 730 Kwh rooftop solar array, and site drainage improvements. In sum, the Harbor District has also made significant investment in the adjacent dock facilities. Existing operations on RMT II include aquaculture, sea salt production, and various interim uses.

## **C. STANDARD OF REVIEW**

The proposed project is located in the Commission's retained jurisdiction. The County of Humboldt has a certified local coastal program (LCP), but the site is within an area shown on State Lands Commission maps over which the state retains a public trust interest. Therefore, the

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<sup>6</sup> Humboldt County CDP No. 15-043

standard of review that the Commission must apply to the project is the Chapter 3 policies of the Coastal Act.

#### **D. OTHER AGENCY APPROVALS**

**Humboldt Bay Harbor, Recreation, and Conservation District.** The Harbor District was created by the State Legislature in 1970 to oversee development of the harbors and ports of Humboldt County for the benefit of the people. The Harbor District has permit jurisdiction over all tidelands and submerged lands within Humboldt Bay and administers sovereign tidelands and submerged lands over most of Humboldt Bay pursuant to a legislative grant. The Harbor District approved Administrative Permit Amendments for maintenance dredging at Woodley Island (No. A-2018-02 Amendment #1) and Fields Landing (No. A-2018-03 Amendment #1) on July 10, 2019.

**North Coast Regional Water Quality Control Board.** The Regional Board requires a water quality certification (WQC) for projects involving dredging and/or filling activities under Section 401 of the Clean Water Act. The Harbor District has coordinated with the Regional Board and obtained permit(s) for the proposed project (Water Quality Permit No. 1B180035WNHU issued July 11, 2019).

**U.S. Army Corps of Engineers.** The Corps may have regulatory authority over the proposed project under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 1344) and/or Section 404 of the Clean Water Act. Section 10 of the Rivers and Harbors Act regulates structures or work in navigable waters of the United States. Section 404 of the Clean Water Act regulates fill or discharge of materials into waters and ocean waters. **Special Condition 1** is attached to require that the Harbor District obtain any necessary approvals from the Corps for the proposed project.

**National Marine Fisheries Service.** Through its consultation with the Corps, NMFS published a letter of concurrence for the proposed project on July 17, 2019. NMFS concludes that the project as proposed (with proposed implementation and minimization measures) will not result in significant adverse effects to listed species, including salmon, steelhead, green sturgeon, or eelgrass (which is classified as essential fish habitat).

**California Department of Fish & Wildlife.** CDFW, in its administration of the California Endangered Species Act (CESA), requires an Incidental Take Permit (ITP) for “take” of listed species incidental to otherwise lawful development projects. If the seawater diversion proposed under this CDP application is implemented as proposed consistent with CDFW guidelines for intake screening, CDFW staff has informed Commission staff that CDFW will not require an ITP for the project, because the project is expected to avoid incidental take of CESA-listed coho salmon and longfin smelt, as discussed in the following section.

#### **E. PROTECTION OF COASTAL WATERS**

Section 30230 of the Coastal Act states the following:

*Marine resources shall be maintained, enhanced, and where feasible, restored.  
Special protection shall be given to areas and species of special biological or*

*economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231 of the Coastal Act states the following:

*The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Section 30233(b) of the Coastal Act states the following:

*Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems.*

The project has the potential to impact marine resources and the biological productivity and quality of coastal waters in several ways. First, the proposed diversion of seawater for the reslurrying operations could impact various species of sensitive fish that have the potential to inhabit the project area waters. Second, the proposed discharge of decant water back into Humboldt Bay following dewatering of dredged material potentially could impact water quality as well as offshore eelgrass, which is classified by the National Marine Fisheries Service as “essential fish habitat” and considered a species of special biological significance due to its importance as foraging and spawning habitat for numerous marine organisms and seabirds. Third, the improper handling and disposal of dredged material could result in water quality impacts. Each of these potential impacts and appropriate mitigation measures to protect and maintain marine resources and water quality is discussed below

#### **Potential diversion impacts and mitigation measures**

The proposed diversion of seawater for the reslurrying operations has the potential to adversely affect marine resources and the biological productivity of coastal waters in Humboldt Bay by potentially causing adverse impacts to various species of sensitive fish that have the potential to inhabit the project area waters. Three species of salmonids, including the Southern Oregon/Northern California Coasts Evolutionarily Significant Unit (ESU) of coho salmon (*Oncorhynchus kisutch*), California Coastal ESU Chinook salmon (*O. tshawytscha*), and Northern California ESU steelhead (*O. mykiss*), are present in Humboldt Bay both as adults during their migration from the sea into spawning rivers in the fall and winter and as juveniles as they move downstream into the ocean in the spring and early summer. All three salmon species are listed as threatened under the federal ESA (coho also is listed as threatened under the California ESA). Longfin smelt (*Spirinchus thaleichthys*), listed as a threatened species under the California ESA, and generally spawns in freshwater and moves downstream to estuarine

conditions to grow, including within Humboldt Bay waters. Once among the most abundant fish species in Humboldt Bay, present in larval, juvenile, and adult life stages, longfin smelt were considered to be possibly extinct there by 1996<sup>7</sup>. In recent years, however, longfin smelt have again been observed in Humboldt Bay and are thought to be present year-round.<sup>8</sup>

The removal of seawater through intake structures is known to result in the impingement and entrainment of marine life. The type and quantity of marine life that may be adversely affected in this way is related to the size and velocity of the intake structures. Larger, high-velocity structures can cause the impingement and entrainment of larger organisms that can include adult fish, while smaller low-velocity structures can typically only impinge and entrain smaller larval and juvenile organisms. While impingement (capture of fish and marine organisms against an intake screen due to suction) can often result in the injury or mortality of the affected organism, adverse effects of entrainment (capture of fish and marine organisms in the intake stream) vary based on the type of intake system (configuration of pipes, pressure changes, temperatures) and ultimate use of the entrained water.

As discussed above, the Harbor District has proposed various measures to minimize the potential for fish impingement and entrainment impacts. These include: (1) restricting the work window to the period of July 1 to October 15 to minimize effects to listed species; (2) designing the intake device to meet certain flow rate and screening standards for fish protection, including (a) ensuring that the device will be suspended in the water from the side of the barge or from the side of the existing dock at the RMT II site with at least 3 feet to 6 feet of water depth both above and below the submerged device when in operation; (b) using screening with round or square (measured diagonally) openings that do not exceed 2.38 millimeters (mm) (3/32 inches), and slotted openings shall not exceed 1.75mm (0.0689"); (c) ensuring that approach velocity at the intake ports shall not exceed 0.2 feet per second (fps) for self-cleaning screens or 0.05fps for non-self-cleaning screens; (d) maintaining a minimum overall screen porosity of 27%; and (e) if using a non-self-cleaning screen, ensuring that the device will be removed from the bay water and manually cleaned with brushes and/or water after every time that water is pumped to the hopper, which may be multiple times per day.

CDF&W staff has reviewed the proposed measures to minimize fish impingement and entrainment, and has informed Commission staff that the project is expected to avoid incidental take of coho salmon and longfin smelt.

In addition, the Harbor District has proposed to implement the project in accordance with various operational best management practices (BMPs) that will further protect listed fish species and water quality. These include, various water quality BMPs and also restricting the work window to the period of July 1<sup>st</sup> to October 15<sup>th</sup> when listed salmonids are not typically migrating through the area.

The Commission attaches **Special Conditions 2 and 3** to require that the Harbor District undertake the project in accordance with all proposed protective measures and BMPs described

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<sup>7</sup> Eldridge and Bryan 1972; U.S. Fish and Wildlife Service 1996.

<sup>8</sup> Pinnix et al. 2005.

in the project description and summarized above to protect marine resources, biological productivity, and the quality of coastal waters consistent with Sections 30230 and 30231.

**Potential water quality discharge impacts and mitigation measures**

The proposed discharge of decant water back into Humboldt Bay following dewatering of dredged material potentially could impact water quality as well as offshore eelgrass, which is classified by the National Marine Fisheries Service as “essential fish habitat” and considered a species of special biological significance due to its importance as foraging and spawning habitat for numerous marine organisms and seabirds. Eelgrass beds occur directly offshore from both RMT II and Fields Landing. Eelgrass impacts could occur either as a result of elevated turbidity levels around the discharge points during discharge of the decant water or as a result of scour from high-velocity discharge. The project also could result in water quality impacts through uncontrolled spills of equipment fluids or uncontained dredge slurry during transport of slurry material along temporary pipelines.

As discussed, the proposed dewatering operations will result in decant water being piped through temporary pipelines to existing stormwater discharge points – one in Fields Landing and one at RMT II. During typical rain events, stormwater discharge flows through these stormwater drains into Humboldt Bay. During normal heavy rains each winter, the volume of stormwater discharge and rate at which it flows through the stormwater drains into Humboldt Bay is much higher than the proposed maximum volume and rate of discharge under this CDP application (approximately 20 gallons per minute at a velocity of 0.01 feet per second). To ensure that the volume and rate of discharge do not result in unacceptable turbidity levels or scour, the Harbor District has proposed to monitor turbidity at discharge points to ensure that turbidity levels are not elevated by more than 20 percent relative to ambient levels (20% is the standard required by the North Coast Regional Water Quality Control Board). Turbidity is proposed to be monitored (a) immediately before discharge begins; (b) every two hours during discharge; and (c) after any potential change to the discharge (e.g., addition of new dredged material to a dewatering unit or changed configuration of baffling). The Commission attaches **Special Condition 2-ix** to require the turbidity monitoring as proposed.

In addition, the Harbor District has proposed several additional operational measures to further protect water quality throughout the course of the proposed work. These include, but are not limited to, the following: (1) vegetable-based or biodegradable hydraulic fluids shall be used, if possible, in equipment operating over water or without secondary containment; (2) equipment shall be inspected and serviced prior to mobilization and throughout the project operations, and leaks shall be repaired immediately when discovered; (3) spill kits shall be maintained on the barge and dock; (4) temporary dewatering basins shall be constructed with an impermeable liner, and the perimeter of the liner shall be secured to minimize the potential for uncontrolled discharge of polluted dredge slurry; (5) trash racks shall be placed at the outlet of pipes delivering dredge slurry from the hopper to dewatering basins to be captured, removed, and disposed of at an appropriate facility based on the type of recovered debris; (6) all temporary pipes used to transport dredge slurry material between the hopper barge and dewatering basins and between basins and discharge points for decant effluent shall be welded together to avoid any risk of leaks; and (7) the discharge sites, a liner and sandbags shall be used to direct flow to the bay and waddles shall be used for filtering out sediments. These proposed measures are required by **Special Conditions 2** to ensure that the Harbor District undertakes the project in a

manner that will protect marine resources and the water quality consistent with Sections 30230 and 30231.

**Potential spoils handling and disposal impacts and mitigation measures**

As previously discussed, the scope of this CDP application does not include the dredging aspects of the project, since the planned routine maintenance dredging was determined to be exempt from CDP requirements under Coastal Act section 30610(d) and the Commission's regulations (Title 14 CCR § 13252). However, this application includes the upland dewatering of the dredged material for its potential beneficial reuse in an existing permitted restoration project on the Humboldt Bay National Wildlife Refuge. As discussed above, the Harbor District will sample the dredged material pursuant to the Regional Water Board-approved incremental sampling methodology (ISM) and compare the results with previous sediment sampling results taken at the White Slough Restoration Project site. If the material constituent levels are determined to be equivalent to or lower than the levels at the receiving restoration site, the dewatered dredged material will be transported from RMT II and Fields Landing to the restoration site by truck for beneficial reuse. In the past, sediment material sampled from Woodley Island Marina and from Fisherman's Channel in King Salmon have been approved by the Regional Water Board for beneficial reuse at White Slough. The Commission's federal consistency division approved the placement of suitable dredged material and other sediments at the White Slough Restoration Project site in 2015 (Commission File No. ND-0011-15). Thus, while the Harbor District plans to beneficially reuse the sediment in this manner, the scope of this CDP application does not include the placement of the material at White Slough as planned by the Harbor District.

Nevertheless, Section 30233(b) of the Coastal Act requires that dredging and spoils disposal be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. The section also requires that dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems. Therefore, the Commission must ensure that the handling and disposal of dredged material that are being reviewed under the scope of this CDP application are carried out to avoid significant disruption to habitats.

While some of the material that is dredged from Humboldt Bay during routine maintenance dredging operations is suitable for beach nourishment purposes, such as the material that is annually dredged by the Army Corps of Engineers from the bay entrance area, the materials that are dredged during routine maintenance dredging from the docks and marinas in the interior portions of the bay, such as Woodley Island Marina and Fields Landing, are not suitable for beach replenishment (incompatible grain size and texture). The material has, however, been found in the past to be compatible with the planned receiving site (White Slough).

As previously discussed, the Harbor District has proposed various measures to protect water quality during operational handling of the dredged material including constructing temporary dewatering basins with a secured impermeable liner; welding pipes together in temporary pipelines used to transport dredge slurry material between the hopper barge and dewatering basins and between basins and discharge points for decant effluent; and using trash racks to recover any dredged debris prior to transport to dewatering basins and properly disposing

recovered debris. These proposed measures, among other water quality protection measures, are required to be implemented by **Special Condition 2**.

Finally, the project application states that if the material is determined from test results to be incompatible with placement at White Slough as determined by the Regional Water Board, the Harbor District proposes to dispose of the material only at an approved location capable of receiving the material. This requirement is included in Special Condition 2. However, if the dredged material ultimately is not to be disposed of at White Slough, the Commission must ensure that the handling and disposal of dredged material is appropriately carried out to avoid significant disruption to habitats. Therefore, the Commission attaches **Special Condition 4**. This condition requires the applicant to submit a dredged material disposal plan for review and approval.

Therefore, the project, as proposed and conditioned, will be carried out in a manner in which marine resources are maintained, species of special biological significance are given special protection, the biological productivity of coastal waters is sustained, and healthy populations of all species of marine organisms will be maintained. Additionally, the project, as conditioned, will maintain the biological productivity of coastal waters and estuarine habitats appropriate to maintain optimum populations of marine organisms.

#### **F. PRIORITY OF COMMERCIAL FISHING AND CDI USES**

Section 30234 of the Coastal Act states, in applicable part:

*Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided...*

Section 30234.5 of the Coastal Act states:

*The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.*

Section 30255 of the Coastal Act states, in applicable part:

*Coastal-dependent uses shall have priority over other developments on or near the shoreline... When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.*

Section 30701(b) of the Coastal Acts states:

*Existing ports, including the Humboldt Bay Harbor, Recreation, and Conservation District, shall be encouraged to modernize and construct necessary facilities within their boundaries in order to minimize or eliminate the necessity for future dredging and filling to create new ports in areas of the state.*



The Coastal Act prioritizes protection of certain priority uses over other competing uses without priority. The Coastal Act provides that coastal-dependent developments, including coastal-related developments and coastal recreation uses, shall have priority over other developments on or near the shoreline. Generally, these priority land uses include uses that by their nature must be located on the coast to function, such as ports and commercial fishing facilities, and uses that encourage the public's use of the coast, such as various kinds of visitor-serving recreational facilities. Coastal-dependent industrial facilities are encouraged to locate or expand within existing sites, and CDI is given priority over visitor-serving commercial recreational facilities that enhance public opportunities for coastal recreation. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support. Coastal-related developments may include facilities that support commercial fishing and aquaculture (e.g., storage and work areas, berthing and fish receiving, areas for fish processing for human consumption, and aquaculture support facilities).

The Coastal Act, as cited above, recognizes the Port of Humboldt Bay as one of the state's primary economic and coastal resources and an essential element of the national maritime industry. The dredging and beneficial reuse of dredge spoils will only serve to further the CDI potential and priority of Humboldt Bay and the Harbor District.

Existing operations at RMT II include aquaculture, sea salt production, and various interim uses. It is undisputed that the aquaculture and sea salt production are uses that require a site on, or adjacent to, the sea to be able to function at all. The various interim uses are not coastal-dependent and are not analyzed as such.

Existing operations at Fields Landing Boat Yard consists of boat storage areas; a boat cleaning and maintenance work yard; boat launch; covered boat repair shop; storage area for the boat lift; and a dock. The existing uses at Fields Landing are coastal-dependent, and it is important that any disruption of existing CDI uses be minimized.

The proposed project will avoid significant disruption of existing uses. For example, existing uses at RMT II will not be disrupted, because there is ample vacant land for the existing and new coastal-dependent uses. Aside from the proposed temporary dewatering basin, the infrastructure and facilities are on hand. Additionally, any conceivable impacts would be short-term due to the proposed duration of the project. The temporary dewatering basin at RMT II is proposed to remain for only one year. Similarly, the duration of the use of the temporary dewatering basin at Fields Landing is proposed to be only 6 months. Fields Landing also can accommodate the temporary dewatering basin because the Harbor District can move the boats on site and the repair work can continue uninterrupted. Finally, **Special Condition 5** requires the permittee to obtain a permit amendment if the temporary dewatering basins will be retained longer than currently proposed.

Therefore, the Commission finds that the project as proposed does not diminish the prioritization of coastal-dependent uses, consistent with Coastal Act section 30255.

## **G. PUBLIC ACCESS AND RECREATION**

Section 30210 of the Coastal Act requires that maximum public access shall be provided consistent with public safety needs and the need to protect natural resource areas from overuse. Section 30212 of the Coastal Act requires that access from the nearest public roadway to the shoreline be provided in new development projects except where it is inconsistent with public safety, military security, or protection of fragile coastal resources, or adequate access exists nearby. Section 30211 requires that development not interfere with the public's right to access gained by use or legislative authorization. Section 30214 of the Coastal Act provides that the public access policies of the Coastal Act shall be implemented in a manner that takes into account the capacity of the site and the fragility of natural resources in the area. In applying Sections 30210, 30211, 30212, and 30214, the Commission also is limited by the need to show that any denial of a permit application based on these sections, or any decision to grant a permit subject to special conditions requiring public access, is necessary to avoid or offset a project's adverse impact on existing or potential access.

As noted previously, the project sites are located on industrial sites on Humboldt Bay. The project sites do not currently support public access. The proposed project will not block access along the shoreline and will not increase the demand for public access. Therefore, the Executive Director finds that the proposed project will not adversely affect public access and the project as proposed without new public access is consistent with the requirements of Coastal Act Sections 30210, 30211, 30212, and 30214.

## **H. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

The Harbor District is the lead agency for the project under CEQA and determined that the project is exempt from CEQA pursuant to a Class 4 categorical exemption, which exempts minor public or private alterations in the condition of land, water, and/or vegetation which do not remove healthy, mature, scenic trees (See §15304. Minor Alterations to Land). This includes minor temporary use of land having negligible or no permanent effects on the environment and maintenance dredging (§15034(e) and (g)).

Section 13096 of the Commission's administrative regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The Executive Director incorporates his findings on conformity with the Chapter 3 policies of the Coastal Act at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed above, the development has been conditioned to be found consistent with the policies of the Coastal Act. Mitigation measures, which will minimize all adverse environmental impacts, have been required as permit special conditions. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse

1-19-0407 (Humboldt Bay Harbor District)

impact that the activity may have on the environment. Therefore, the Executive Director finds that the development as conditioned to mitigate the identified impacts can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

## CALIFORNIA COASTAL COMMISSION

NORTH COAST DISTRICT OFFICE  
1385 EIGHTH STREET, SUITE 130  
ARCATA, CA 95521  
VOICE (707) 826-8950  
FAX (707) 826-8960  
[WWW.COASTAL.CA.GOV](http://WWW.COASTAL.CA.GOV)



# W11b

**CDP NO. 1-19-0407**

**(HUMBOLDT BAY HARBOR DISTRICT)**

**AUGUST 7, 2019**

### APPENDIX

#### APPENDIX

Appendix A – Substantive File Documents

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## **Appendix A**

- Commission File No. 80-P-21
- Commission File Nos. 1-18-0272-X and 1-18-0196-X
- Commission File Nos. NE-0002-18 and NE-0006-18
- Commission File No. ND-0011-15
- Humboldt County Files – CUP 16-062; CDP 18-048; and CDP 18-041
- Harbor District File Nos. – A-2018-02 Amendment #1 and A-2018-3 Amendment #1
- NMFS File Nos. WCRO-2019-01797 and WCRO-2019-01850
- NCRWQB File Nos. 1B180038WNHU and 1B180101WNHU
- Correspondence – CDF&W emails dated 7/3/19; 7/5/19; 7/16/19; and 7/22/19

**W11b**

**CDP NO. 1-19-0407**

**(HUMBOLDT BAY HARBOR DISTRICT)**

**AUGUST 7, 2019**

**CORRESPONDENCE**

## DeSmet, Clancy@Coastal

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**From:** NorthCoast@Coastal  
**Sent:** Wednesday, July 24, 2019 1:31 PM  
**To:** DeSmet, Clancy@Coastal  
**Cc:** Robinson, Aurora@Coastal  
**Subject:** FW: Public Comment on August 2019 Agenda Item Wednesday 11b - Application No. 1-19-0407 (Humboldt Bay Harbor, Recreation

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**From:** Larry Doss [<mailto:larryo@mingtree.com>]  
**Sent:** Wednesday, July 24, 2019 1:24 PM  
**To:** NorthCoast@Coastal  
**Subject:** Public Comment on August 2019 Agenda Item Wednesday 11b - Application No. 1-19-0407 (Humboldt Bay Harbor, Recreation

My name is Larry Doss, I am currently one of five commissioners for the Humboldt Bay Harbor, Recreation and Conservation District.

Thank you to the Coastal Commission for allowing this item be placed on the agenda while the Commission meets in Humboldt County.

In Regards to the request for amending the dredging plan for the Humboldt Bay Harbor, Recreation and Conservation District (HBHRCD) is important to all residents of Humboldt County, the amendment is to simply dewater the dredged material on District Land and to reuse the soil in a variety of beneficial ways, verses shipping the dredge spoils to an off shore dump site. There is a long history of beneficial reuse for dredge sediment in Humboldt Bay the HBHRCD is looking at this proposed method as one option for now. Some side benefits to the proposed amendment is less cost to the District for dredging, no dredging spoils being delivered to the off shore Hoods disposal location, and the necessary abatement of navigation hazards in a timely manner. The Coastal Commission approval of this amendment would complete the long list of government agencies that have approved of the HBHRCD dewatering option. Simply by approving the proposed amendment allows the District to manage and execute a long term dredging maintenance program.

Thank you for your consideration.

Larry O. Doss  
HBHRCD, District 1 Commissioner

**Larry O. Doss** BRE # 01196417 \* Broker / President \* **Ming Tree, Realtors**  
509 J Street Eureka, CA 95501 \* Desk 707-269-4341 Mobile 707-599-3332 \* [larryo@mingtree.com](mailto:larryo@mingtree.com)  
[www.mingtree.com](http://www.mingtree.com)



## CALIFORNIA COASTAL COMMISSION

NORTH COAST DISTRICT OFFICE  
1385 EIGHTH STREET, SUITE 130  
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VOICE (707) 826-8950  
FAX (707) 826-8960  
[WWW.COASTAL.CA.GOV](http://WWW.COASTAL.CA.GOV)



# W11b

**CDP NO. 1-19-0407**

**(HUMBOLDT BAY HARBOR DISTRICT)**

**AUGUST 7, 2019**

### **EXHIBITS**

#### **EXHIBITS**

Exhibit 1 – Regional Location Map

Exhibit 2 – Project Location Map

Exhibit 3 – Figures & Plans

Exhibit 4 – Water Intake Design and Details



Dredge Intake Screen Sizing  
Humboldt Bay Harbor District  
Mike Foget, PE  
7/9/2019

### 1. Screen Box Size -Actual

Length	10 ft
Width	6 ft
Height	6 ft
Long Sides	120 sf
Short Sides	72 sf
Top	36
Bottom	36 sf
<b>Total Box Area</b>	<b>264.0 sf</b>

### 2. Screen Area -Design

Flow Rate	1,500 gpm
	3.34 cfs
Max Approach Velocity	0.05 ft/s
Min Void Area	66.82 sf
Max Void Ratio	0.27
<b>Min Screen Surface Area</b>	<b>247.5 sf</b>

### 3. Max Flow Rate

Void Diameter	0.09375 in
	0.0078125 ft
Void Area (each)	4.79E-05 sf
Void Ratio	0.27
Total Void Area	71.3 sf
Max Approach Velocity	0.05 ft/s
	3.56 cfs
<b>Max Flow Rate</b>	<b>1,600 gpm</b>

Clancy De Smet  
Coastal Program Analyst  
California Coastal Commission  
1385 Eight Street  
Arcata, CA 95521

July 17, 2019

Re: Coastal Development Permit Application No. 1-19-0407: Screening Methods and Requirements

Dear Mr. De Smet,

I am writing on behalf of Humboldt Bay Harbor District (District) in response to the Coastal Commission's email to the District dated July 17, 2019. Coastal Commission's email requests information regarding CDP Application No. 1-19-0407. Summaries of the requests and responses are provided below.

Coastal Commission Request	District Response
Confirm that the screen will be at least 6 feet below the surface and 6 feet above the bottom when in operation.	At Redwood Marine Terminal II, there is adequate depth at all tides to allow for this and we will meet this requirement.  At Fields Landing, water depth is shallower. We will attempt to locate the screen in deep enough water to accommodate this. However, at a minimum, we will ensure that the screen is 3 feet below the surface and 3 feet above the bottom when in operation.
Conduct a water approach velocity test of the screen prior to using it for dredging operations to confirm the calculated values are met.	The District will conduct the requested test to ensure the calculated values are met. The test will be conducted by taking water velocity measurements at multiple points on each side of the screen using a handheld water flow meter.
Submit monthly monitoring report(s) to the Commission to confirm the screen is being cleaned and maintained as required.	The District will provide monthly monitoring reports that will include photos of the screen before and after cleaning and a description of any material on the screen after use.

Thank you for your consideration of the permit application.

Sincerely,



Adam Wagschal  
Director of Harbor Operations

## North Coast Regional Water Quality Control Board

July 11, 2019

Humboldt Bay Harbor, Recreation, and Conservation District  
Attn: Larry Oetker  
601 Startare Drive  
Eureka, CA 95501  
loetker@humboldtbay.org

Dear Mr. Oetker:

**SUBJECT: AMENDMENT TO THE FEDERAL CLEAN WATER ACT, SECTION 401,  
WATER QUALITY CERTIFICATION FOR THE WOODLEY ISLAND  
MAINTENANCE DREDGING PROJECT**

File: Woodley Island Maintenance Dredging Project; WDID 1B180035WNHU;  
ECM PIN CW-846146

On May 14, 2019, The North Coast Regional Water Board (Regional Water Board) received a request to amend the Federal Clean Water Act, section 401, Water Quality Certification (certification) for the Woodley Island Maintenance Dredging Project (project). We have determined that the July 23, 2018 certification may be amended to allow for an alternative to disposal. The applicant is proposing adding an option for the dewatering and reuse of resulting dredged materials if the sediment is deemed suitable. The Regional Water Board and the Applicant have worked together to develop beneficial reuse sediment testing and analysis to determine suitability criteria. This Project is an opportunity to use these criteria while maintaining disposal as an option if criteria are not met for reuse. The following language will replace the language in the original certification, respectively:

Finding 4: Project Description: The primary purpose of the Project is to conduct maintenance dredging in the marina to the designed channel depth of - 14ft. Mean Lower Low Water for boat access. The Project includes dredging approximately 19.3 acres of the Humboldt Bay floor, removing up to 300,000 cubic yards (cy) of sediment over ten years (not to exceed 100,000 cy in any 12-month period). The Applicant shall conduct the maintenance dredging with a closed clamshell bucket to minimize turbidity and will monitor turbidity within 500 feet of dredging to ensure water quality objectives are maintained during dredging. The Applicant conducted a Sampling and Analysis Plan in 2015. The final Analytical Report, dated March 2, 2017, identify that the sediment contains a

predominance of silt and clay (~>90% fine sediment) and similar or lower chemical constituent levels previously approved for maintenance dredging and disposal. The Applicant proposes to use a sealed dump scow to transfer and transport the dredged sediment to the Humboldt Open Ocean Disposal Site (HOODS) for permanent disposal and has received U.S. Environmental Protection Agency (EPA) approval for disposal.

As an alternative to disposal, the Applicant proposes to sample and analyze the dredge sediment for possible beneficial reuse at an approved location. If the dredge sediment is deemed suitable for reuse at an approved location the Applicant will dewater the dredge sediment and reuse as described in the amendment. If the dredge sediment is not suitable for reuse the material will be disposed of at HOODS or an approved disposal facility. The Applicant proposes to follow the guidelines in the *Woodley Island Marina – Maintenance Dredging Project Description Amendment*, dated May 14, 2019.

Finding 7: Avoidance, Minimization and Mitigation for Project Impacts: The Project includes a plan to monitor turbidity within 500 feet of dredging and / or dewatering to ensure water quality objectives are maintained. during dredging and If necessary, adaptive measures or Best Management Practices (BMPs) will be taken to avoid and minimize exceedances greater than 20% above background turbidity levels. The Project proposes to employ BMPs to prevent or reduce any discharges during transfer and transport to HOODS or the proposed dewatering and approved reuse site. Compensatory mitigation for the impacts to eel grass (*Zostera marina*) due to the construction of the marina in 1978 included the purchase of 22 acres in Eureka where mitigation included restoring tidal action to the property and fresh water wetland enhancement. No additional compensatory mitigation is required for maintenance dredging within the marina footprint.

Condition 1: No dredged material shall be permitted to overflow, leak, or spill from barges, bins, or dump scows during transportation from the dredging site to HOODS. No overflow or decant water shall be discharged from any barge at any time. Dredge material shall be removed only by closed clamshell bucket. Dredged material volume shall not exceed 100,000 cubic yards in any 12-month period. The Applicant proposes to follow the guidelines in the *Woodley Island Marina – Maintenance Dredging Project Description Amendment*, dated May 14, 2019. Dewatering shall be conducted as described in the amendment including adaptive measures to ensure turbidity water quality objectives are met. Any dredged material stored onsite while being processed to be taken to an approved beneficial reuse site or to HOODS shall be moved as soon as possible, not exceeding more than one year of temporary residence.

The Applicant shall apply appropriate stormwater BMPs for dredge spoils that remain onsite during rain events. If material is stored onsite during the rainy season the Applicant shall submit a water quality control plan or SWPPP that describes management of stored sediment in a manner that prevents storm water discharge.

I hereby issue an amendment to Finding 4, Finding 7, and Condition 1 of the Certification for the Woodley Island Maintenance Dredging Project (WDID 1B180035WNHU; ECM PIN CW-846146) certifying that the remainder of the Water Quality Certification sections of the July 23, 2018, Order are still valid.

If you have any questions or comments, please contact Brandon Stevens at (707) 576-2377 or [Brandon.Stevens@waterboards.ca.gov](mailto:Brandon.Stevens@waterboards.ca.gov).

Sincerely,

For: Matthias St. John  
Executive Officer

190711\_Woodley\_Island Amendment

cc: State Water Resources Control Board, [Stateboard401@waterboards.ca.gov](mailto:Stateboard401@waterboards.ca.gov)  
Jennifer Siu, EPA Region 9, [siu.jennifer@epa.gov](mailto:siu.jennifer@epa.gov)  
Debra O'Leary, U.S. Army Corps of Engineers, [debra.a.o'leary@usace.army.mil](mailto:debra.a.o'leary@usace.army.mil)  
Rebecca Garwood, CDFW, [rebecca.garwood@wildlife.ca.gov](mailto:rebecca.garwood@wildlife.ca.gov)  
Vanessa Blodgett, Plan West Partners, [vanessab@planwestpartners.com](mailto:vanessab@planwestpartners.com)  
George Williamson, [districtplanner@humboldtby.org](mailto:districtplanner@humboldtby.org)



## **Exhibit C**

### **Coastal Development Permit Amendment Application Package and Approvals for use of a Clamshell Bucket to Offload Dredged Material at Redwood Terminal II and for an Expanded Dewatering Area**

1. A copy of the permit amendment application package, and follow up letter with additional information, submitted to the California Coastal Commission to allow for (1) a larger approved area for construction and use of temporary dewatering basins; and (2) use of a clamshell bucket to offload the dredged material.
2. Email notice from the North Coast Regional Water Quality Control Board indicating that a permit amendment is not required for the larger dewatering basin or clamshell bucket offloading method.
3. Email notice from the US Army Corps of Engineers indicating that a permit amendment is not required for the larger dewatering basin or clamshell bucket offloading method.

**CALIFORNIA COASTAL COMMISSION**

NORTH COAST DISTRICT OFFICE

1385 8<sup>TH</sup> STREET, SUITE 130

ARCATA, CA 95521-5967

PH (707) 826-8950 FAX (707) 826-8960

MEMORANDUM

TO: Coastal Development Permit Applicants

FROM: Coastal Commission

SUBJECT: Notice Concerning Important New Disclosure Requirements

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Starting on January 1, 1993, a California law has required that all persons who apply to the Commission for a coastal development permit must provide to the Commission “the names and addresses of all persons who, for compensation, will be communicating with the Commission or Commission staff on their behalf.” (Public Resources Code section 30319.) As of January 1, 1994, the law also requires that applicants also provide the same information with respect to persons who communicate with the commission or the staff on behalf of his or her business partners. The law provides that failure to comply with the disclosure requirement prior to the time that a communication occurs is a misdemeanor that is punishable by a fine or imprisonment. Additionally, a violation may lead to denial of the permit.

In order to implement this requirement, you are required to do three things. The first thing concerns question 2 on page 1 of the application, which requires that an applicant provide the “[n]ame, mailing address and telephone number of applicant’s representative if any ...” When answering this question, an applicant should list all representatives who will communicate on his or her behalf or on behalf of his or her business partners, for compensation, with the Commission or the staff. This could include a wide variety of people such as lawyers, architects, biologists, engineers, etc.

Second, when submitting a completed application, an applicant should include a signed and dated copy of this notice.

Third, if an applicant determines after an application has been submitted that one or more people will be communicating on his or her behalf or on behalf of his or her business partners for compensation who were not listed on the completed application form, the applicant must provide a list in writing of those people and their addresses to the staff. The list must be received before the communication occurs.

By signing below, I indicate that I have read and understood this information.

May 13, 2020

\_\_\_\_\_  
DATE  
\_\_\_\_\_  
SIGNATURE

## APPLICATION FOR AMENDMENT TO COASTAL DEVELOPMENT PERMIT

Application for an amendment to a previously issued coastal development permit may be made by submitting this form, completed and signed, together with the materials described below and the application fee.

Pursuant to 14 Cal. Admin. Code Sections 13164 and 13168, materials to be submitted are:

1. Revised plans showing the proposed amendment; these must have been approved by the local planning agency. Please submit evidence of approval.
2. Stamped, addressed envelopes for re-notification of all property owners and residents within 100 feet of the development and list of same.
3. An application fee of \$1,249.00. (as of July 1, 2019) (If the amendment is determined by the Commission to be a major, rather than minor, change, the fee is 50% of the new permit application fee.)

Upon receipt of the above information, the Executive Director will determine whether the amendment request should be rejected on the basis that the proposed amendment would lessen or avoid the intent of a previously approved permit condition. 14 Cal. Admin. Code Section 13168. If the amendment request is filed, the Executive Director will then determine whether the amendment request is immaterial or material. If the Executive Director finds that the proposed amendment is immaterial, notification is sent to surrounding property owners and the site must be posted with a form which will be sent to you. If no objections are received, the amendment is approved, and you will be sent an amended permit. If material, the request will be set for a public hearing. You have the right to request that the Commission make a determination of materiality independent of that previously made by the Executive Director. 14 Cal. Admin. Code Section 13166.

Please provide the information below and on the reverse. If you have any questions, contact this office.

### APPLICANT

NAME: Humboldt Bay Harbor District

ADDRESS: 601 Startare Drive, Eureka, CA 95501

PHONE: 707 496 2088

COASTAL PERMIT NUMBER: 1-19-0407

DATE OF ISSUANCE: 8/7/2019

### APPLICANT'S REPRESENTATIVE (if any)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### FOR OFFICE USE ONLY:

Date Received: \_\_\_\_\_

Date Filed: \_\_\_\_\_

Application Fee Received: \_\_\_\_\_

DESCRIPTION OF PROPOSED AMENDMENT: \_\_\_\_\_

The proposed amendment involves (1) increasing the allowed area and volume capacity of  
temporary dredged material dewatering basins and (2) allowing for an alternative method  
of dredged material offloading. (Also see Attachment 1)

### CERTIFICATION

I hereby certify that I or my authorized representative will complete and post the "Notice of Proposed Permit Amendment" form furnished me by the Commission in a conspicuous place on the development property upon receipt of said notice.

I hereby certify that to the best of my knowledge the information in this application and all attached exhibits is full, complete, and correct, and I understand that any misstatement or omission of the requested information or any information subsequently requested may be grounds for denying the application, for suspending or revoking a permit issued on the basis of these or subsequent representations, or for the seeking of such other and further relief as may seem proper to the Commission.



\_\_\_\_\_  
Signature of Applicant(s) or Agent

NOTE: If signed by agent, applicant must sign below.

I hereby authorize \_\_\_\_\_ to act as my representative and bind me in all matters concerning this application.

\_\_\_\_\_  
Signature of Applicant(s)

# APPLICATION FOR COASTAL DEVELOPMENT PERMIT

## APPENDIX A

### DECLARATION OF CAMPAIGN CONTRIBUTIONS

Government Code Section 84308 prohibits any Commissioner from voting on a project if he or she has received campaign contributions in excess of \$250 within the past year from project proponents or opponents, their agents, employees or family, or any person with a financial interest in the project.

In the event of such contributions, a Commissioner must disqualify himself or herself from voting on the project.

Each applicant must declare below whether any such contributions have been made to any of the listed **Commissioners** or **Alternates** (see last page).

CHECK ONE

☒

The applicants, their agents, employees, family and/or any person with a financial interest in the project **have not contributed** over \$250 to any Commissioner(s) or Alternate(s) within the past year.

☐

The applicants, their agents, employees, family, and/or any person with a financial interest in the project **have contributed** over \$250 to the Commissioner(s) or Alternate(s) listed below within the past year.

Commissioner or Alternate \_\_\_\_\_

Commissioner or Alternate \_\_\_\_\_

Commissioner or Alternate \_\_\_\_\_



May 13, 2020

\_\_\_\_\_  
*Signature of Applicant or Authorized Agent*

\_\_\_\_\_  
*Date*

Please type or print your name

Adam Wagschal

## APPENDIX B

### LOCAL AGENCY REVIEW FORM

#### SECTION A (TO BE COMPLETED BY APPLICANT)

Applicant Humboldt Bay Harbor, Recreation and Conservation District

Project Description The proposed project modification would (1) increase the allowable surface area and volume capacity for dewatering dredged material; and (2) allow for alternative dredged material offloading methods.

Location 364 Vance Ave, Samoa, CA 95564

Assessor's Parcel Number 401-112-012, 401-112-011, 401-112-021, 401-112-024

#### SECTION B (TO BE COMPLETED BY LOCAL PLANNING OR BUILDING INSPECTION DEPARTMENT)

Zoning Designation Industrial / Coastal Dependent du/ac

General or Community Plan Designation Industrial / Coastal Dependent, Industrial / General du/ac

#### Local Discretionary Approvals

☒ Proposed development meets all zoning requirements and needs no local permits other than building permits.

☐ Proposed development needs local discretionary approvals noted below.

*Needed*   *Received*

<input type="checkbox"/>	<input type="checkbox"/>	Design/Architectural review
<input type="checkbox"/>	<input type="checkbox"/>	Variance for _____
<input type="checkbox"/>	<input type="checkbox"/>	Rezone from _____
<input type="checkbox"/>	<input type="checkbox"/>	Tentative Subdivision/Parcel Map No. _____
<input type="checkbox"/>	<input type="checkbox"/>	Grading/Land Development Permit No. _____
<input type="checkbox"/>	<input type="checkbox"/>	Planned Residential/Commercial Development Approval
<input type="checkbox"/>	<input type="checkbox"/>	Site Plan Review
<input type="checkbox"/>	<input type="checkbox"/>	Condominium Conversion Permit
<input type="checkbox"/>	<input type="checkbox"/>	Conditional, Special, or Major Use Permit No. _____
<input type="checkbox"/>	<input type="checkbox"/>	Other _____

#### CEQA Status

☒ Categorically Exempt   Class 4   Item \_\_\_\_\_

☐ Negative Declaration Granted (Date) \_\_\_\_\_

☐ Environmental Impact Report Required, Final Report Certified (Date) \_\_\_\_\_

☐ Other \_\_\_\_\_

Prepared for the City/County of Humboldt Bay Harbor District by Adam Wagschal

Date May 13, 2020 Title Deputy Director

Application No. \_\_\_\_\_

## APPENDIX C

## LIST OF PROPERTY OWNERS AND OCCUPANTS WITHIN 100 FEET AND THEIR ADDRESSES

(MAKE ADDITIONAL COPIES OF THIS SHEET AS NECESSARY)

[illegible]




APPENDIX D  
(Amendment Application)

DECLARATION OF POSTING

At the time the application is submitted for filing, the applicant must post, at a conspicuous place, easily read by the public and as close as possible to the site of the proposed development, notice that an application for the proposed development has been submitted to the Commission. Such notice shall contain a general description of the nature of the proposed development. The Commission furnishes the applicant with a standardized form to be used for such posting. If the applicant fails to post the completed notice form and sign the Declaration of Posting, the Executive Director of the Commission shall refuse to file the application. 14 Cal. Code Regs. Section 13054(d).

Please sign and date this Declaration of Posting form when the site is posted; it serves as proof of posting. It should be returned to our office with the application.

<p>Pursuant to the requirements of California Code of Regs. Section 13054(d), I hereby certify that on <u>May 14, 2020</u>, I or my authorized representative posted the <b>Notice</b> <small>(date of posting)</small></p> <p><b>of Pending Permit</b> for application to obtain a coastal development permit for the development of <u>Dredged material offloading and dewatering.</u></p> <p>_____</p> <p>_____</p> <p style="text-align: center;"><small>(description of development)</small></p> <p>Located at <u>364 Vance Avenue, Samoa, CA 95564</u></p> <p style="text-align: center;"><small>(address of development or assessor's parcel number)</small></p> <p>The public notice was posted at <u>364 Vance Avenue, Samoa, CA and 601 Startare Drive, Eureka, CA</u></p> <p style="text-align: center;"><small>(a conspicuous place, easily seen by the public and as close as possible to the site of the proposed development)</small></p> <div style="text-align: right; margin-top: 20px;"> _____ <small>(signature)</small></div> <div style="text-align: right; margin-top: 10px;"><u>May 14, 2020</u> _____ <small>(date)</small></div>	
--	--

NOTE: Your application cannot be processed until this **Declaration of Posting** is signed and returned to this office.

FOR OFFICE USE ONLY

PERMIT NUMBER ..... \_\_\_\_\_

RECEIVED ..... \_\_\_\_\_

DECLARATION COMPLETE ..... \_\_\_\_\_

## APPENDIX E

### STANDARD CONDITIONS FOR APPROVED PERMITS

Below are standard conditions of approved permits that have been routinely applied by the Coastal Commission pursuant to its regulations. These conditions are required on all administrative, consent calendar, and regular hearing approved permits.

#### STANDARD CONDITIONS

1. Notice of Receipt and Acknowledgment. The permit is not valid and construction shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If construction has not commenced, the permit will expire two years from the date on which the Commission voted on the application, or in the case of administrative permits, the date on which the permit is reported to the Commission. Construction shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All construction must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any question of intent or interpretation of any condition will be resolved by the Executive Director of the Commission.
5. Inspections. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

# NOTICE OF PENDING PERMIT

A PERMIT APPLICATION FOR DEVELOPMENT ON THIS SITE IS  
PENDING BEFORE THE CALIFORNIA COASTAL COMMISSION.

PROPOSED DEVELOPMENT: \_\_\_\_\_

Dredged material offloading and dewatering.

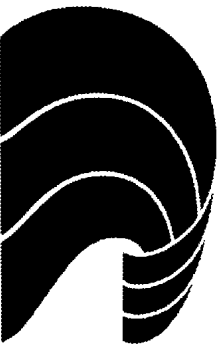
LOCATION: \_\_\_\_\_ 364 Vance Avenue, Samoa, CA 95564

APPLICANT: \_\_\_\_\_ Humboldt Bay Harbor District

APPLICATION NUMBER: \_\_\_\_\_ (Pending)

DATE NOTICE POSTED: \_\_\_\_\_ May 14, 2020

FOR FURTHER INFORMATION, PLEASE PHONE OR WRITE THE  
OFFICE LISTED BELOW BETWEEN 8 A.M. AND 5 P.M., WEEKDAYS.



CALIFORNIA COASTAL COMMISSION  
NORTH COAST DISTRICT OFFICE  
1385 8<sup>th</sup> Street  
Arcata, CA 95521  
(707) 826-8950

## **Attachment 1**

### **Description of Proposed Amendment**

**Redwood Marine Terminal II Dredged Material Offloading  
and Dewatering Project  
Proposed Amendment**

The proposed amendment would (1) allow for an alternative method to transfer dredged material from a barge to temporary dewatering basins; and (2) increase the allowable surface area and volume capacity for dredged material dewatering within temporary dewatering basins. Details are provided below.

**1. Alternative Method to Transfer Dredged Material from a Barge to Temporary Dewatering Basins**

Existing permits allow for offloading of dredged material from a barge and transfer to dewatering basins with the following steps: (1) pump bay water into the barge to reslurry the dredged material; (2) pump the dredge slurry from the barge to the dewatering basins. The proposed amendment would allow for an alternative method to move the material from the barge to the dewatering basins with the following steps: (1) moor a barge containing dredged material near the dock and use an excavator on a barge to transfer the dredged material to trucks on the dock; (2) offload the dredged material from the trucks into the dewatering basins. Figures 1 and 2 show details regarding the currently permitted process and proposed amendment.

**2. Increase the Allowable Surface Area and Volume Capacity for Dredged Material Dewatering within Temporary Dewatering Basins**

The project's existing Coastal Development Permit allows for the construction and use of temporary dredged material dewatering basins in the area shown in Figure 1. The Coastal Development Permit allows the dewatering basins to be a maximum of 60,000 square feet (sf) with a volume capacity up to 129,000 cubic feet (cf). The District has determined that this area and volume may not be adequate to dewater 10,000 cubic yards (cy) of material that may be offloaded and dewatered at the site in 2020. With the proposed amendment, the dewatering process would be the same but the allowed dewatering basin area would be 200,000 sf with a capacity of 430,000 cf. Figure 2 shows the area within which the basins would be developed. This area is over 560,000 sf, only a portion of it would be used.

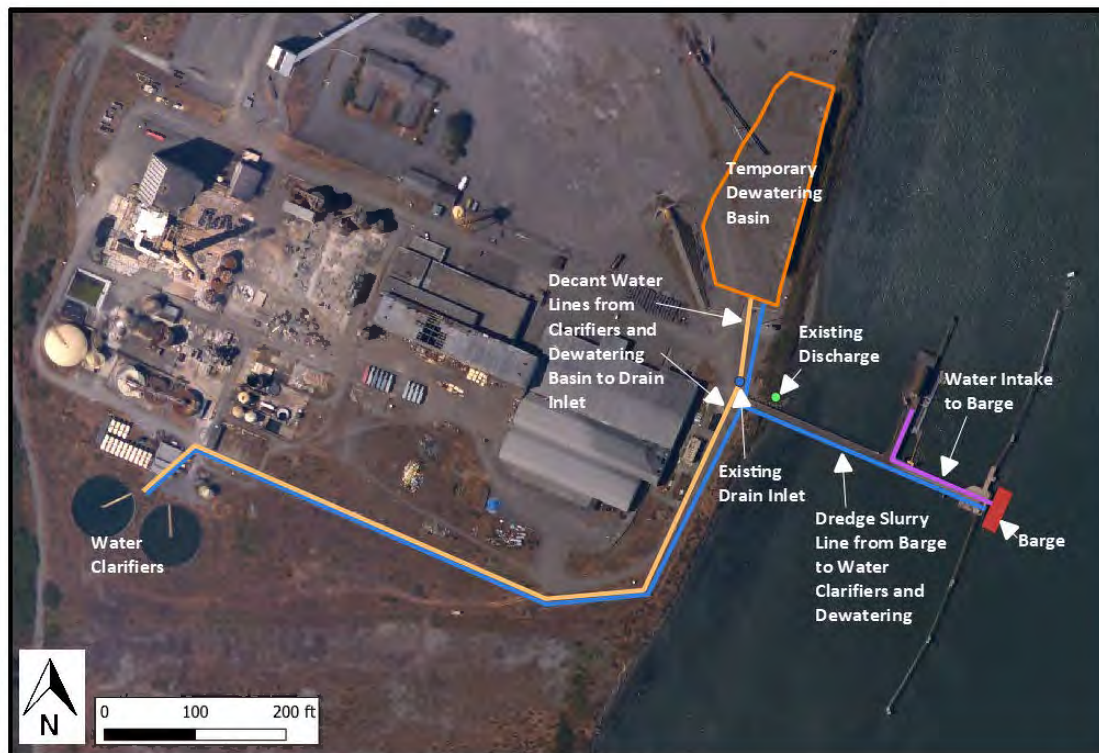


Figure 1. Configuration of currently permitted dredged material offloading and dewatering.



Figure 2. Proposed dredged material offloading components, dewatering area and eelgrass (*Zostera marina*). Eelgrass at the site was mapped in June, 2017.

### **Potential Impacts to Dock Access**

There are two existing tenants that use the dock: Pacific Flake and Taylor Shellfish. Pacific Flake has a water intake on the dock that is used periodically and Taylor Shellfish has an oyster nursery that is accessed regularly. The proposed offloading process (item 1 above) would have temporary impacts to dock access by the tenants. The District has proposed the following criteria which would minimize access impacts. District staff is currently discussing this with the tenants to ensure that their operations are not significantly impacted.

1. During times in which existing dock tenants may require access to the dock, off-loading will be limited as follows.
  - a. Within any 24 hour period, there will be a maximum of four dredge material off-loading events.
  - b. Each off-loading event will be a maximum of one-hour.
  - c. During each off-loading event, the contractor will work with existing dock tenants to minimize impacts to access. For example, pedestrians, bikes and forklifts will be allowed to pass after individual trucks are loaded.
  - d. The contractor will notify existing tenants regarding the estimated schedule of off-loading events.

### **Eelgrass Impact Avoidance**

Eelgrass (*Zostera marina*) is a sensitive plant species that occurs within shallower waters on site. Specifically, there is a shallow shelf extending from shore approximately 130-200 feet and there is shallow “band” directly opposite a finger dock. This shallow area likely formed as a result of shoaling due to the finger dock. Eelgrass at the site was mapped in 2017 and is shown in Figure 2. The eelgrass is often visible in aerial photographs and from boats. Barges and related mooring equipment would avoid mapped and visible eelgrass.

### **Summary**

Other than the two items described above, the project would remain the same. Previously permitted methods would still be allowable in addition to the methods currently proposed. The purpose of the proposed amendment is to allow flexibility in methods to allow dredging contractors design creativity to minimize costs and to succeed. The proposed project may be viewed as a pilot project to determine ideal methods to efficiently dewater dredged material in preparation for applying it at beneficial use projects rather than disposing of it outside of the Eureka Littoral Cell (e.g., at the Humboldt Open Ocean Disposal Site).

Thank you for considering the proposed amendment.

Adam Wagschal  
707 496 2088  
awagschal@humbolddbay.org



COMMISSIONERS

1<sup>st</sup> Division

Larry Doss

2<sup>nd</sup> Division

Greg Dale

3<sup>rd</sup> Division

Stephen Kullmann

4<sup>th</sup> Division

Richard Marks

5<sup>th</sup> Division

Patrick Higgins

**Humboldt Bay**  
**Harbor, Recreation and Conservation District**  
(707) 443-0801  
P.O. Box 1030  
Eureka, California 95502-1030



May 25, 2020

California Coastal Commission  
Attn: Cat Holloway  
1385 8<sup>th</sup> Street, Suite 130  
Arcata, CA 95521

**RE: Follow up information for proposed amendment to Permit 1-19-0407**

Dear Ms. Holloway,

On May 13, 2020, the Humboldt Bay Harbor District (District) submitted an amendment application for Permit 1-19-0407. On May 22, 2020, Coastal Commission and District staff conducted a site visit to assess the proposed amendment. This letter provides project information that was requested during the site visit.

1. Copies of project approvals from other agencies.
  - a. Attachment A is an email from North Coast Regional Water Quality Control Board staff approving the proposed amendment.
  - b. On May 12, 2020 I submitted proposed amendment information to Debra O'Leary at the US Army Corps of Engineers and discussed the amendment with Ms. O'Leary. Ms. O'Leary indicated that she will likely be able to approve the amendment administratively with an email letter.
  - c. The District Board will consider approving the amendment during their June 11, 2020 Board Meeting.
2. Below is an updated site map. Barges would avoid eelgrass by a minimum of 20 feet and the shellfish nursery by a minimum of 50 feet.



3. The following measures would be implemented to protect eelgrass and the shellfish nursery from potential impacts.
  - a. Truck beds would be sealed to prevent spillage during transportation.
  - b. Excavator / crane operators would be directed to minimize the potential for spillage by allowing bucket loads to drip into the barge hopper prior to swinging the material to the trucks.
  - c. District staff would inspect operations at the beginning of off-loading and periodically to ensure spillage is avoided. District staff and the contractor would take pro-active measures to reduce spillage if any is observed. For example, measures could include reducing the amount of material in each bucket load or moving the barge to a different location.
  - d. Clear markings (flags and/or paint) would be made on the dock that delineate eelgrass buffer boundaries. Operations would not be allowed within the 20 foot eelgrass buffer or eelgrass areas.
4. The following measures would be implemented to prevent dock damage from truck use.
  - a. The dock would be inspected prior to the project and any minor repairs necessary would be implemented.
  - b. Crane mats or similar equipment would be used to distribute truck weights more evenly across the dock.
  - c. Contract requirements will ensure that the contractor leaves the dock in the same or better condition as prior to the project.

Please contact me at (707) 496-2088 or [awagschal@humboldtbay.org](mailto:awagschal@humboldtbay.org) with any questions.

Thank you,

A handwritten signature in black ink, appearing to be 'AW', with a long horizontal stroke extending to the right.

Adam Wagschal, Deputy Director

**From:** [Stevens, Brandon D.@Waterboards](mailto:Stevens.Brandon.D.@Waterboards)  
**To:** [Adam Wagschal](mailto:Adam.Wagschal)  
**Subject:** RE: Dredging  
**Date:** Thursday, May 14, 2020 12:34:16 PM  
**Attachments:** [CC Permit Amendment PD - 2020 0513.pdf](#)

---

Hi Adam,

Without digging through the application materials, was the dewatering basin size proposed that early? If not, I don't think the certification would have necessarily specified the dewatering basin size as long as the various proposed sizes didn't have differing amounts of jurisdictional impacts.

Since there isn't a material change with the amount of material dredged, the location of the outfall, or the method manner of dredging, the attached request is acceptable by the North Coast Regional Water Quality Control Board.

This email does not authorize any additional dredge or fill impacts to jurisdictional features. Please contact me if you have any questions.

Thanks,

**Brandon Stevens**

Environmental Scientist  
Nonpoint Source/401 Certification Unit  
North Coast Regional Water Board  
5550 Skylane Boulevard, Suite A  
Santa Rosa, CA 95403  
[brandon.stevens@waterboards.ca.gov](mailto:brandon.stevens@waterboards.ca.gov)  
Office: 707-576-2377

*The governor of California has issued a statewide shelter in place order due to the COVID-19 emergency. The Water Boards are continuing day-to-day work protecting public health, safety, and the environment. However, most staff are working remotely and we continue to check email regularly. Thank you and stay healthy and safe.*

**From:** Adam Wagschal <[awagschal@humboldt看bay.org](mailto:awagschal@humboldt看bay.org)>  
**Sent:** Wednesday, May 13, 2020 4:36 PM  
**To:** Stevens, Brandon D.@Waterboards <[Brandon.Stevens@Waterboards.ca.gov](mailto:Brandon.Stevens@Waterboards.ca.gov)>  
**Subject:** RE: Dredging

EXTERNAL:

Hi Brandon,

It is the same site as considered in the existing certification. The CDP has a maximum size, but I don't see a similar requirement in the certification. The methods for draining back to the bay, containment, length of residence, etc. would all be the same.

I attached the PD that I developed for the Coastal Commission. This describes the proposed changes, but as I previously mentioned, I don't think the Certification has the same requirements as the CDP and I do not know if an amendment to the Certification is needed.

Please let me know your thoughts on this after reviewing the attachment. Call anytime to discuss, my schedule is pretty open.

Thanks! Adam  
707 496 2088

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**From:** Stevens, Brandon [D.@Waterboards](mailto:D.@Waterboards) <[Brandon.Stevens@Waterboards.ca.gov](mailto:Brandon.Stevens@Waterboards.ca.gov)>  
**Sent:** Wednesday, May 13, 2020 1:18 PM  
**To:** Adam Wagschal <[awagschal@humboldt看.org](mailto:awagschal@humboldt看.org)>  
**Subject:** RE: Dredging

Hey Adam,

Hmm interesting...

I would think we might need a little more detailed information. If the place of dewatering is a new spot, RMT II? And the whole setup including water draining back to the bay, containment, length of residence time etc is all new it would be good to get a site / project description including photos and it might be something to add to the cert as an amendment?

Sort of sounds like a "material change" and would be good to review and issue an amendment if you feel necessary. If it is at the same spot as the clarifiers and very similar outfall, may not be necessary.

Thanks,

**Brandon Stevens**

Environmental Scientist  
Nonpoint Source/401 Certification Unit  
North Coast Regional Water Board  
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Santa Rosa, CA 95403  
[brandon.stevens@waterboards.ca.gov](mailto:brandon.stevens@waterboards.ca.gov)  
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**From:** Adam Wagschal <[awagschal@humboldt看.org](mailto:awagschal@humboldt看.org)>

**Sent:** Monday, May 11, 2020 4:15 PM

**To:** Falcone, Gil@Waterboards <[Gil.Falcone@waterboards.ca.gov](mailto:Gil.Falcone@waterboards.ca.gov)>; Stevens, Brandon D.@Waterboards <[Brandon.Stevens@Waterboards.ca.gov](mailto:Brandon.Stevens@Waterboards.ca.gov)>

**Subject:** Dredging

EXTERNAL:

Hi Brandon and Gil,

I hope you are well.

We are working towards dredging at Woodley Island Marina this year with dewatering at RMT II and future beneficial use. We are having challenges associated with use of the existing clarifiers that we previously proposed. We are working on a better solution which would involve:

1. Larger temporary dewatering basins (i.e., basins built with k-rails and liners) than previously envisioned.
2. Rather than reslurrying and pumping the dredge material from the barge to the dewatering units, using an excavator to transfer the material from the dredge barge to trucks and from the trucks to the nearby (e.g., a few hundred feet) dewatering basins.

This process would eliminate the need to pump bay water for reslurrying and thus completely avoid any associated potential bio impacts. It would also reduce the amount of water that needs to be managed for dewatering.

The Certification and Amendment did not establish a maximum size of dewatering basins or specifically describe the reslurrying process. Do you know if some type of amendment would be required for the two items listed above?

I'm currently working through this topic with Melissa Kraemer and will start coordinating with Debra O'Leary.

Thanks, Adam

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Adam Wagschal  
Humboldt Bay Harbor, Recreation and Conservation District  
Office: 707-443-0801  
Cell: 707-496-2088  
[humbolddbay.org](http://humbolddbay.org)

**From:** [O'Leary, Debra A CIV USARMY CESP \(USA\)](#)  
**To:** [Adam Wagschal](#)  
**Subject:** RE: Project Alternative  
**Date:** Thursday, May 28, 2020 1:13:11 PM

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Hi Adam,

The Corps permit will not require a modification because the change of method of unloading the dredged sediment is a such a minor change provided that care is taken to prevent sediment from being dropped in the bay during offloading. If you have any questions please let me know.

-Debra

-----Original Message-----

From: Adam Wagschal [<mailto:awagschal@humboldtby.org>]  
Sent: Tuesday, May 26, 2020 2:19 PM  
To: O'Leary, Debra A CIV USARMY CESP (USA) <Debra.A.O'Leary@usace.army.mil>  
Subject: [Non-DoD Source] RE: Project Alternative

Hi Debra,

I'm just checking in about the proposed modification to the dredged material off-loading method. I attached correspondence with NC Regional Water Quality Control Board staff indicating that the Water Board will not require a permit amendment.

Please let me know if you require any further information and if you have determined whether some type of amendment will be required for the Army Corps permit.

Thank you, Adam

707 496 2088

From: Adam Wagschal  
Sent: Thursday, May 14, 2020 4:16 PM  
To: O'Leary, Debra A CIV USARMY CESP (USA) <Debra.A.O'Leary@usace.army.mil>  
Subject: Project Alternative

Hi Debra,

Thank you for your time discussing the proposed Woodley Island Marina dredging project alternative. Permit File # 1996-22216 as modified by Permit Modification 1 allows for (1) dredging at Woodley Island Marina; (2) dredged material offloading at Redwood Marine Terminal II; and (3) dredge material dewatering at Redwood Marine Terminal II. The offloading method described in the existing permit involves reslurrying the dredged material and



pumping it from a barge to temporary dewatering basins. The Humboldt Bay Harbor District is pursuing approvals to allow for an alternative dredged material offloading method. Specifically, rather than the material being offloaded with pumps, an excavator would transfer the material from the barge to trucks on the dock. The trucks would deliver the dredged material to the temporary dewatering basins approximately 250 feet away from the dock, in the same area that is already permitted. Other than this proposed change to the offloading method, all permit conditions and considerations would remain the same. The proposed offloading configuration is shown in the figure below.

Please let me know if you need further information to consider this request or if the District can proceed with this alternative offloading method.

Thank you, Adam

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Adam Wagschal

Humboldt Bay Harbor, Recreation and Conservation District

Office: 707-443-0801

Cell: 707-496-2088

[humboldtbay.org](http://humboldtbay.org)