

NY and NJ Harbor Deepening Project Market Survey

Hardcopies of the Market Survey may be obtained by contacting Steven Weinberg at steve.r.weinberg@nan02.usace.army.mil, or PHONE 212-264-9080.

Background Information

The New York District, U.S. Army Corps of Engineers (District) is in the process of developing the execution plan for the \$1.8 billion New York & New Jersey Harbor Deepening Project for the deepening of various channels within the Port of New York and New Jersey to a depth of 50 feet or more. The project will include the dredging of soft silts, clay, sand, gravel, glacial till and rock. It is anticipated that drilling and blasting of rock will be required in order to achieve the required excavated depth. Placement of the dredged material will be at either upland sites, the Historic Area Remediation Site (HARS), an aquatic placement site and/or at artificial reefs. The New York and New Jersey Harbor Deepening project will include dredging of the following channels to the required depths indicated below. In addition to the required depths below, 1.5 feet of paid over-depth will be permitted.

| Channel | Volume | Depth | Length |
|-------------------------------|--------------------------|--------------|---------------|
| Ambrose Channel | | 53 ft | 63,600 ft |
| | Contract 1: 5,624,500 cy | | |
| | Contract 2: 5,624,500 cy | | |
| Anchorage Channel | | 50 ft | 19,000 ft |
| | Contract 1: 1,684,000 cy | | |
| | Contract 2: 2,760,000 cy | | |
| Kill Van Kull | | 52 ft | 31,800 ft |
| | Contract 1: 2,256,000 cy | | |
| | Contract 2: 4,568,000 cy | | |
| Newark Bay | | 52 ft | 14,000 ft |
| | Contract 1: 3,200,000 cy | | |
| | Contract 2: 3,021,000 cy | | |
| Elizabeth Channel | | 52 ft | 11,500 ft |
| | Contract 1: 1,519,000 cy | | |
| Arthur Kill (to Howland Hook) | | 52 ft | 14,400 ft |
| | Contract 1: 822,000 cy | | |
| | Contract 2: 759,000 cy | | |
| | Contract 3: 1,837,000 cy | | |

| Channel | Volume | Depth | Length |
|---------------------|--------------------------|--------------|---------------|
| Port Jersey Channel | | 52 ft | 10,000 ft |
| | Contract 1: 4,013,000 cy | | |
| Bay Ridge Channel | | 50 ft | 18,000 ft |
| | Contract 1: 4,813,000 cy | | |

Total Required Excavated Material to be dredged: 42,501,000 cy

The material to be dredged from this project is composed of recent or Holocene sediments, Pleistocene sediments and various types of bedrock. Recent, Holocene sediments consist of loose to dense Sand and very soft to stiff Silt and Clay. Pleistocene sediments consist of moderately dense to very dense Sand and Gravel (Till) and soft to very stiff Silt and Clay. Cobbles and Boulders are common within the Pleistocene section. The most common bedrock types are Shale, Sandstone, Diabase, and Serpentinite.

Placement of dredged material

The contract documents will categorize the dredged material on the basis of its placement location. In general terms, the Rock will be disposed at artificial reef sites located in New Jersey and New York, the Pleistocene material will be disposed of at the HARS and the Holocene material unsuitable for placement at the HARS will be processed and placed at permitted upland sites. The rock material to be dredged from this project may be placed at one of the following locations*.

| New Jersey | Approximate Locations |
|-----------------------|-------------------------------------|
| Axel Carson Reef Site | 60 Nautical miles from project area |
| Sandy Hook Reef Site | 5 nautical miles off Sandy Hook, NJ |
| Sea Girt Reef Site | 4 nautical miles off Sea Girt, NJ |
| Shark River Reef Site | 14.8 nautical miles offshore |
| New York | |
| Hempstead Reef Site | located off of Jones Inlet |

*The availability of these sites is subject to change

Non-rock material unsuitable for placement at the HARS will be placed at an upland site(s) submitted by the contractor. The Contractor will be required to provide with his bid the name of the site(s), operator of the site(s) and the location of the site(s). The apparent low bidder will have a period of time, presently estimated to be 70 calendar days, to demonstrate to the Government that the facility is permitted, functional and capable of processing the dredged material. The Contractor will be responsible for performing any testing of materials required for the Contractor identified site.

The Government has identified the HARS for placement of suitable non-rock material removed under this Project. Non-rock material is defined as material that is less than 2.5 inches in diameter. Vessels that contain less than 25% non-rock material (i.e.,

vessels containing 75% or more rock material) will not be transported to the HARS; these will go to the artificial reefs. The HARS (which includes the former 2.2 square nautical mile Mud Dump Site) is a 15.7 square nautical mile area located approximately 3.5 nautical miles east of Highlands, New Jersey and 7.7 nautical miles south of Rockaway, Long Island.

Quantity of dredged material

The quantities below are based on surveys and borings performed during the preparation of the Feasibility Study. The estimate of the volumes of material to be dredged is based on the assumption that the side slopes of the completed channels will be 1 vertical to 3 horizontal in non-rock and 1 vertical to 1 horizontal in rock. The estimated in-place volumes for the excavation for the New York & New Jersey Harbor Deepening Project are as follows: Rock 5,613,000 cy; Non-Rock (Suitable for HARS) 31,288,000 cy; Non-Rock (Unsuitable for HARS) 5,600,000 cy. The total amount of material to be dredged is 42,501,000 cy.

SURVEY OF THE DREDGING INDUSTRY

The following is a confidential survey questionnaire designed to apprise the US Army Corps of Engineers, NY District, of prospective dredging contractors project execution capabilities. Please provide your response to the following questions. All questions are in regard to the New York and New Jersey harbor-deepening project. At the end of this survey you will be asked to provide your comments.

General

- 1) Have you ever worked on dredging jobs similar in nature to this project? If so, please describe the project and for whom the work was performed. Identify a point of contact and phone number, if possible.
- 2) Have you performed dredging within the waters of the Port of New York and New Jersey?
- 3) Would you be willing to bid on the project previously described? If the answer is No, please explain why not?
- 4) Would you be bidding on this project as a sole contractor, prime contractor with subcontractor(s) or as a joint venture?
- 5) Is there a dollar limit on the size contract that you would bid?
- 6) What is the largest dredging contract, in dollars, on which you were the prime contractor?
- 7) What is your bonding capacity per contract? What is your total bonding capacity?

Equipment

- 8) What type of dredge equipment do you own and or operate that is suitable for the work described? Please list each piece of equipment capable of performing each type of work described, i.e. dredging of Non-HARS material, HARS material and Rock. For each dredge that you list, please specify its capacity, bucket size(s), pump horsepower, and other salient characteristics.
- 9) Identify which dredge(s), including support equipment (tug, scows, drill boat, etc), you would employ on this project. Also, for each dredge, identify the digging depth, bucket size by material and breakout force (if appropriate).

10) If necessary, would you build additional dredges and/or other equipment to meet the needs of this project? If so, what type of equipment would you build and how long would it take to build it? If you were to build a dredge, what type of dredge would you build?

11) How many dump scows and hopper scows do you have available for use? Please list the name of the scow, it's type and the capacity.

12) Do you have experience with the placement of dredged material at sub-aqueous sites? At upland placement sites?

13) Have you drilled and blasted rock on prior dredging projects?

14) How many drill boats do you own? How many drill rigs are on each drill boat?

15) If you do not own any drill boats, will you be able to acquire the proper equipment necessary to drill and blast rock?

16) If necessary, would you build drill boats to meet the needs of this project? If so how long would it take to build the number of drill boats that you have in mind?

17) Please list any history with the dredging of non-HARS material. Also list the processing and placement sites (with respective POC and phone number) needed to place the material.