SECTION 00 00 01

COVER SHEET
02/26

PART 1 GENERAL

NEW YORK DISTRICT CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278-0090

INVENTATION FOR BIDS
FOR
MAINTENANCE DREDGING OF
REACH N04, TROY, NEW YOK
HUDSON RIVER FEDERAL NAVIGATION PROJECT

1. Attached is INVITATION FOR BIDS (IFB) NO. W912DS-26-B-A008.

2. BIDS MUST SET FORTH full, accurate, and complete information as requested by this Invitation for Bids, including attachments. The penalty for making false statements in bids is prescribed in Title 18, United States Code, Section 1001.

3. SUBMISSION OF BIDS: Complete details concerning proper submission of bids are contained in the INSTRUCTIONS, CONDITIONS, AND NOTICES TO BIDDERS (Section 00 21 16).

4. Note the REQUIREMENT FOR AFFIRMATIVE ACTION of the EQUAL OPPORTUNITY clause as it applies to the contract resulting from this solicitation. (See paragraph NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY in Section 00 72 00 of this IFB.)

5. NOTE THE CERTIFICATION OF NONSEGREGATED FACILITIES IN THIS SOLICITATION. Bidders, Offerors, and applicants are cautioned to note the "Certification of Nonsegregated Facilities" in the solicitation. Failure of bidder or offeror to agree to the certification will render his bid or offer non-responsive to the terms of solicitation involving awards of contracts exceeding $10,000, which are not exempt from the provisions of Equal Opportunity Clause. (1984 APR)

6. REPRESENTATIONS AND CERTIFICATIONS- SECTION 00 45 00
Bidders and Offerors are required to complete the REPRESENTATIONS AND CERTIFICATIONS and submit them with their bids.

7. THIS PROJECT IS NOT A SMALL BUSINESS SET-ASIDE.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

-- End of Section --

SECTION 00 00 02

CHECK LIST FOR BIDDERS
01/26

PART 1 GENERAL ATTACHED IS IFB FOR

MAINTENANCE DREDGING OF
REACH N04, TROY, NEW YORK
HUDSON RIVER FEDERAL NAVIGATION PROJECT

ALL INFORMATION REQUIRED BY THE TERMS OF THIS SOLICITATION MUST BE FURNISHED. MISTAKES OR OMISSIONS MAY RENDER YOUR BID INELIGIBLE FOR AWARD. IMPORTANT ITEMS FOR YOU TO CHECK ARE INCLUDED IN BUT NOT LIMITED TO THOSE LISTED BELOW. THIS INFORMATION IS FURNISHED ONLY TO ASSIST YOU IN SUBMITTING APROPER BID.

___HAVE YOU ACKNOWLEDGED ALL AMENDMENTS?

___HAVE YOU COMPLETED THE "REPRESENTATIONS AND CERTIFICATIONS” (SECTION 00 45 00) PORTION OF THE SOLICITATION?

___IS YOUR DUNS NUMBER LISTED ON THE STANDARD FORM 1442?

___IS YOUR BID PROPERLY SIGNED?

___A BID BOND IS REQUIRED. HAS YOUR SURETY PROVIDED YOU WITH A BID BOND ON STANDARD FORM 24 OR A SIMILAR FORM CONTAINING THE SAME LANGUAGE AS A STANDARD FORM 24?

___IS YOUR BID GUARANTEE IN THE PROPER AMOUNT?

___IS YOUR BID GUARANTEE PROPERLY SIGNED BY BOTH THE BIDDER AND SURETY AND ARE ALL REQUIRED SEALS AFFIXED?

___IS THE NAME IN WHICH YOU SUBMITTED THE BID THE SAME ON YOUR BID AS ON THE BID BOND?

___IS YOUR BID BOND INCLUDED WITH YOUR BID? (A LATE BID GUARANTEE IS TREATED THE SAME AS A LATE BID)

___HAVE YOU ENSURED THAT YOU HAVE NOT RESTRICTED YOUR BID BY ALTERING THE PROVISIONS OF THE SOLICITATION?

___WHEN REQUIRED, HAVE YOU ENTERED A UNIT PRICE FOR EACH BID ITEM? (THE SOLICITATION SPECIFICALLY STATES WHEN THIS IS NECESSARY.)

___ARE DECIMALS IN YOUR PRICES IN THE PROPER PLACE? ARE YOUR FIGURES LEGIBLE?

___IF YOU HAVE MADE ERASURES OR CORRECTIONS ON YOUR BID, ARE THEY INITIALED BY THE PERSON SIGNING THE BID?

___DOES THE ENVELOPE CONTAINING YOUR BID PROPERLY IDENTIFY THAT IT IS A SEALED BID AND DOES IT CONTAIN THE CORRECT SOLICITATION NUMBER AND BID OPENING TIME?

___WILL YOUR BID ARRIVE ON TIME? (SEE PARAGRAPH ENTITLED "LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF BIDS" IN THE INSTRUCTIONS, CONDITIONS, AND NOTICES TO BIDDERS, SECTION 00 21 16 OF THE SOLICITATION.)

NOTE: THERE ARE INCREASED SECURITY MEASURES AT JACOB K. JAVITS FEDERAL BUILDING, 26 FEDERAL PLAZA THAT MAY AFFECT THE TIME IT TAKES TO ENTER THE BUILDING. BIDDER IS RESPONSIBLE TO ENSURE THAT ITS BID IS SUBMITTED TIMELY.

BIDDER IS RESPONSIBLE TO ENSURE BID IS SUBMITTED ON TIME.

-- End of Section --

SECTION 00 01 15

LIST OF DRAWINGS
02/26

PART 1 GENERAL

1.1 SUMMARY

This section lists the drawings for the project pursuant to contract clause "DFARS 252.236-7001, Contract Drawings, Maps and Specifications."

1.2 CONTRACT DRAWINGS, MAPS, & SPECIFICATIONS

a. The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.

b. The Contractor shall:

(1) Check all drawings furnished immediately upon receipt;

(2) Compare all drawings and verify the figures before laying out the work;

(3) Promptly notify the Contracting Officer or Contracting Officer's Representative of any discrepancies;

(4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and

(5) Reproduce and print contract drawings and specifications as needed.

c. In general:

(1) Large-scale drawings shall in general govern over small-scale drawings. Information and data provided in contract specifications shall govern over similar information and data specified in contract drawings; and

(2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

d. Omissions from the drawings or specifications or the misdescription of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

e. The work shall conform to the following contract drawings and maps, all of which form a part of these specifications and are available in the office of the District Engineer, U.S. Army Corps of Engineers, New York District, 26 Federal Plaza, New York, N.Y. 10278-0090:

Contract drawings are as follows:

FY 2026 Maintenance Dredging of Reach N04 Hudson River Federal Navigation Project	
SHEET NO.	DESCRIPTION
Sheet 1	Index
Sheet 2	General Location & Coordinates
Sheet 3	Bathymetric Survey & Work Area
Sheet 4	Notes & Details

f. The Contractor shall check all drawings furnished to him immediately upon their receipt and shall promptly notify the Contracting Officer or Contracting Officer's Representative of any discrepancies. Figures marked on drawings shall in general be followed in preference to scale measurements unless dimensions are specified. Large-scale drawings shall in general govern over small-scale drawings. Information and data provided in contract specifications shall govern over similar information and data specified in contract drawings. The Contractor shall compare all drawings and verify the figures before laying out the work and will be responsible for any errors which might have thereby been avoided (DOD FAR Suppl. 52.236-7002).

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

-- End of Section --

SECTION 00 90 01

LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS
02/26

PART 1 GENERAL

1.1 SUBMITTALS

Not Used

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 ATTACHMENTS

The following attachments have been provided for reference to the bidder for use in performing the contract requirements.

3.1.1	Attachment	A	Daily Construction Quality Control Report
3.1.2	Attachment	B	Project Sign and Safety Sign
3.1.3	Attachment	C	Oil and Hazardous Material Operations
3.1.4	Attachment	D	Guideline for Preparing the Accident Prevention Plan
3.1.6	Attachment	E	Daily Report for Dredging-Pipeline, Dipper or Bucket Dredges
3.1.7	Attachment	F	USACE Transportation and Placement Log
3.1.8	Attachment	G	Daily Site Safety and Health Inspection Log
3.1.9	Attachment	H	Standard and Specifications for Silt Fence
3.1.10	Attachment	I	Sediment – Physical and Chemistry Data Reports
3.1.12	Attachment	J	Horizontal and Vertical Control
3.1.13	Attachment	K	Submittal Register

-- End of Section --

CONTRACTOR'S QUALITY CONTROL REPORT (QCR) (ER 1180-1-6)	DATE: | REPORT No |

CONTRACT NUMBER AND NAME OF CONTRACTOR	DESCRIPTION AND LOCATION OF THE WORK:

WEATHER CLASSIFICATION:

CLASS A No Interruptions of any kind from weather conditions occurring this or previous shifts.

CLASS B Weather occurred during this shift that caused a complete stoppage of all work.

CLASS C Weather occurred during this shift that caused a partial stoppage of work.

CLASS D Weather overhead excellent or suitable during shift. Work stopped due to results of previous adverse weather.

CLASS E Weather overhead excellent or suitable during shift but work partially stopped due to previous adverse manner.

OTHER Explain

CLASSIFICATION:

CLASS

_____

TEMPERATURE:

MAX ___ MIN ___

_____

PRECIPITATION:

INCHES ___

CONTRACTOR/SUBCONTRACTORS AND AREA OF RESPONSIBILITY FOR WORK PERFORMED TODAY:(*Attach list of items of equipment either idle or working as appropriate*)

a_____.

b _____.

c. _____.

d,_____.

e _____.

f. _____.

g. _____.

1. WORK PERFORMED TODAY: (*Indicate location and description of work performed refer to work by prime and/or subcontractors by letter in table above*)

2. TYPE AND RESULTS OF INSPECTION: (*Indicate whether: P- Preparatory, I - Initial, or F - Follow-up and include satisfactory work completed or deficiencies with action to be taken.):*

3. TESTS REQUIRED BY PLANS AND/OR SPECIFICATIONS PERFORMED AND RESULTS OF TESTS:

SAMPLE

4. **VERBAL INSTRUCTIONS RECEIVED:** (*List any instructions given by Government personnel on construction deficiencies, retesting required, etc., with action to be taken.)*

5. **REMARKS:** (*Cover any conflicts in plans, specifications or instructions: acceptability of incoming materials ; offsite surveillance activities; progress of work, delays, causes and extent thereof; days of no work with reasons for same. Note if a Preparatory or Initial Phase Meeting was held, and attach a copy of the checklist.*)

5. a. **REQUESTS FOR INFORMATION**: (*Note that there is an RFI attached to this daily report, assign a control number and attach a sheet to this report which fully describes the RFI , and recommends a solution if applicable.*)

☐ RFI Attached ; Control Number =

5. b. **ENVIRONMENTAL QUALITY CONTROL**
Environmental Quality Control Requirements are in place and have been checked? x Yes; ☐Not Applicable
Have any endangered species been encountered? ☐ Yes; x No
(If Yes, attach required reports in accordance with Section ENVIRONMENTAL PROTECTION!)

5. c. **VISITORS TO THE SITE (***List the name of all official visitors to the site and who they represent i.e. State DEP, OSHA)*

6. **SAFETY**: (*Include all infractions of the accident prevention plan; COE Safety and Health Requirements Manual, EM 385-1-1; or instructions from Government QA personnel. **Describe corrective actions taken.***)

Safety meeting held today? ☐ Yes, x No (If Yes, state the subject and report number of personnel in attendance)

Safety meeting subject: _____.
Number of Contractor personnel attending = _____. Number of subcontractor personnel attending = _____.

Name of Reporting QC Inspector/s:

Signature & Date:_____

CONTRACTOR's CERTIFICATION: I certify that the above report is complete and correct and that all material and equipment used, work performed and tests conducted during this reporting period were in compliance with the contract except as noted above.

_____
Contractor's QC System Manager/ Authorized Representative

SAMPLE

PREPARATORY PHASE CHECKLIST

Date Preparatory Meeting Held:

Contract No.: _____ Spec. Sect. & Para.:

Title:
Dwg. No.:

MAJOR DEFINABLE SEGMENT OF WORK: Fusing of 12" pipe. Bolting together of 12" floating discharge rubber hoses.

A. PERSONNEL PRESENT:

	NAME	POSITION	COMPANY
1.			
2.			
3.			
4.			

(List additional personnel on attached sheet)

B. HAS EACH SPEC. PARAGRAPH AND DRAWING AND SHOP DRAWING DETAIL BEEN STUDIED: Yes _____ No

C. TRANSMITTALS INVOLVED: Yes _____ No

	NUMBER & ITEM	CODE	CONTRACTOR/GOVT. APPROVAL
1.			
2.			
3.			
4.			
5.			
6.			

C-I. Have all items involved been approved? Yes _____ No

If No, list items:

D. ARE ALL MATERIALS ON HAND? Yes _____ No

D-I. Have all materials been checked for contract compliance against approved shop drawings? Yes _____ No

D-II. Items not on hand or not in accordance with transmittals:

1.
2.
3.
4.

SAMPLE

E. TESTS REQUIRED IN ACCORDANCE WITH CONTRACT REQUIREMENTS:

	TEST	PARAGRAPH
1.	NONE	
2.		
3.		

F. ACCIDENT PREVENTION PREPLANNING - HAZARD CONTROL MEASURES:

F-I. Applicable Outlines (Attach completed copies):

1.
2.
3.
4.

F-II. Operational Equipment Checklists:

ATTACHED FOR:

1.
2.
3.

ON FILE FOR:

1.
2.
3.

G. HAVE PROCEDURES FOR ACCOMPLISHING WORK BEEN REVIEWED WITH APPROPRIATE PEOPLE? Yes _____ No

H. HAS ALL PRELIMINARY WORK BEEN ACCOMPLISHED IN ACCORDANCE WITH CONTRACT REQUIREMENTS AND IS THIS SEGMENT OF WORK READY TO START? Yes _____ No

H-I. Explain any problems:

_____
Quality Control Representative

SAMPLE

INITIAL PHASE CHECKLIST

Contract No. _____ Date:

Spec. Para:

Description and Location of Work Inspected:

REFERENCE CONTRACT DRAWINGS:

A. PERSONNEL PRESENT:

	NAME	POSITION	COMPANY
1.			
2.			
3.			
4.			
5.			
6.			

B. MATERIALS BEING USED ARE IN STRICT COMPLIANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS. Yes _____ No

If not, explain:

C. PROCEDURES AND/OR WORK METHODS WITNESSED ARE IN STRICT COMPLIANCE WITH THE REQUIREMENT OF THE CONTRACT SPECIFICATIONS.
Yes _____ No

If not, explain:

D. WORKMANSHIP IS ACCEPTABLE. Yes _____ No

State areas where improvement is needed:

E. SAFETY VIOLATIONS AND CORRECTIVE ACTION TAKEN:

_____
Quality Control Representative

SAMPLE

PROJECT IDENTIFICATION SIGN
CIVIL PROJECT

The graphic format for this 4' x 6' sign panel follows the legend guidelines and layout as specified below. The large 4' x 4' section of the panel in the right is to be white with black legend. The 2' x 4' section of the sign on the left with the full corps Signature (reverse version) is to be screen printed Communications Red on the white background. The castle insignia will be furnished by the Government in pressure sensitive vinyl for affixing by the Contractor. See attached sheet for fabrication and mounting guidelines.

Legend Group 1: One to two-line description of Corps relationship to project
Color: white
Typeface: 1.25" Helvetica Regular
Maximum line length: 19"

Legend Group 2: Division or District Name (optional, Place below 10.5" Reverse Signature (6" Castle)
Color: white
Typeface: 1.25" Helvetica Regular

Legend Group 3: One-to three-line project title legend describes the work being done under this contract.
Color: Black
Typeface: 3" Helvetica Bold
Maximum line length: 42"

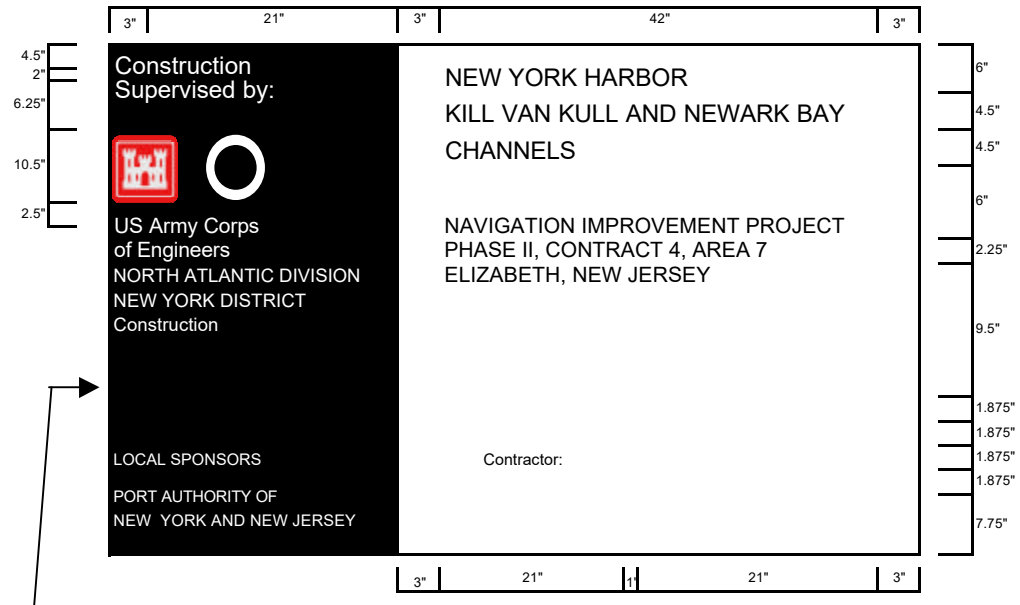
Legend Group 4: One-to two-line identification of project or facility (civil works) or name of sponsoring department (military).
Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

Cross-align the first of Legend Group 4 with the first line of the Corps Signature (US Army Corps) as shown.

Legend Group 5a-b: One-to-five line identification of prime contractors including: type (architect, general contractor, etc.), corporate or firm name, city, state. Use of Legend Group 5 is optional.
Color: Black
Typeface: 1.25" Helvetica Regular
Maximum line length: 21"

All typography is flush left and rag right upper and lower case with initial capitals only as shown. Letter and word spacing to follow Corps standards.

SAMPLE:



(Dimensions are in inches)

Sign Type	Legend	Panel Size	Post Size	Specification Code	Mounting Height	Color Bkg/Lgd
CID-01	various	4' x 6'	4' x 4'	HDO-3	48"	WH-RD/BK

Show non-Federal local partner's name and logo - Port Authority of New York and New Jersey

* Refers to the U.S. Army Corps of Engineers, "Sign Standards Manual", EPS-310-1-6.

Fabrication and Mounting Guidelines

As Construction Project identification signs and Safety Performance signs are to be fabricated and installed as described below. The signs are to be erected at a location designated by the contracting officer and shall conform to the size, format, and typographic standards.

The sign panels are to be fabricated from .75" High Density Overlay Plywood. Panel preparation to follow HDD specifications.

Sign graphics to be prepared on a white non-reflective vinyl film with positionable adhesive backing.

All graphics except for the Communications Red background with Corps signature on the project sign are to be die-cut or computer-cut non-reflective vinyl, pre-spaced legends prepared in the sizes and typefaces specified and applied to the background panel following the graphic formats shown on the attached sheets.

The 2'x4' Communications Red panel (to match PMS-032) with full Corps signature (reverse version) is to be screen printed on the white background. Identification of the District or Division may be applied under the signature with white cut vinyl letters prepared to Corps standards. Large scale reproduction artwork for the signature is provided on page 4.8 (photographically enlarge from 6.875" to 10.5"). **

Drill and insert six (6) .375" T-nuts from the front face of the HDD sign panel. Position holes as shown. Flange of T-nut to be flush with sign face.

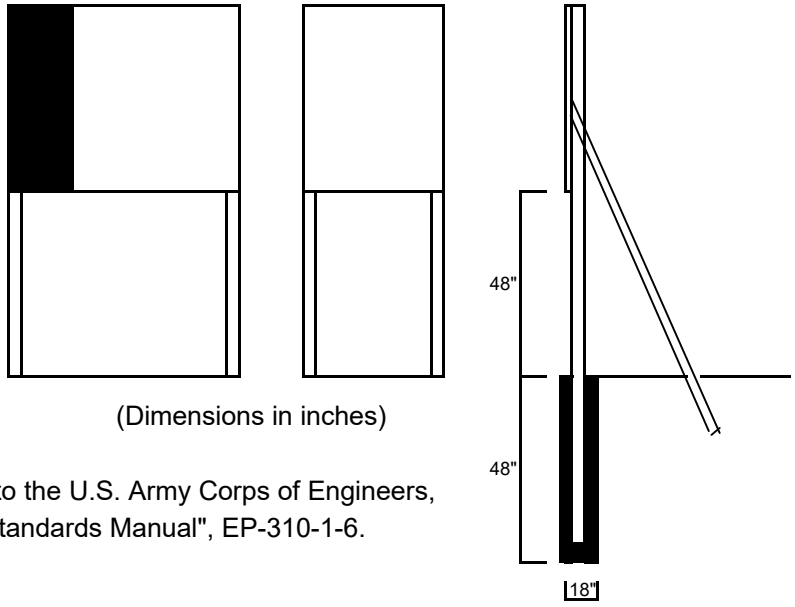
Apply graphic panel to prepared HDD plywood panel following manufacturers' instructions.

Sign uprights to be structural grade 4"x4" treated Douglas Fir or Southern Yellow Pine. No.1 or better. Post to be 12' long. Drill six (6) .375" mounting holes in uprights to align with T-nuts in sign panel. Countersink (.5") back of hole to accept socket head cap screw (4"x.375").

Assemble sign panel and uprights. Imbed assembled sign panel and uprights in 4' hole. Local soil conditions and/or wind loading may require bolting additional 2"x4" struts on inside face of uprights to reinforce installation as shown.

Detailed specifications for HDD plywood panel preparation are provided in Appendix B.**

Shown below the mounting diagram is a panel layout grid with spaces provided for project information. Photocopy this page and use as a worksheet when preparing sign legend orders.



(Dimensions in inches)

** Refers to the U.S. Army Corps of Engineers, "Sign Standards Manual", EP-310-1-6.

Construction Project Sign
Legend Group 1: Corps Relationship

1. _____
2. _____

Legend Group 2: Division/District Name

1. _____
2. _____

Legend Group 3: Project Title

1. _____
2. _____
3. _____

Legend Group 4: Facility Name

1. _____
2. _____

Legend Group 5a: Contractor/A&E

1. _____
2. _____
3. _____
4. _____
5. _____

Legend Group 5b: Contractor /A&E

1. _____
2. _____
3. _____
4. _____
5. _____

Safety Performance Sign
Legend Group 1: Project Title

1. _____
2. _____

Legend Group 2: Contractor/A&E

1. _____
2. _____

SAFETY PERFORMANCE SIGN

The graphic format, color, size and type-faces used on the sign are to be reproduced exactly as specified below. The title with First Aid logo in the top section of the sign, and the performance record captions are standard for all signs of this type. Legend Group 2 and 3 below identify the project and the contractor and are to be placed on the sign as shown. Safety record numbers are mounted on individual metal plates and are screw-mounted to the background to allow for daily revisions to posted safety performance record.

Legend Group1: Standard two-line title "safety is a Job Requirement", with (8" od.) Safety Green First Aid logo. Color: To match PMS 347
Typeface: 3" Helvetica Bold
Color: Balck

Legend Group 2: One- to two-line project title legend describes the work being done under this contract and name of host project.
Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

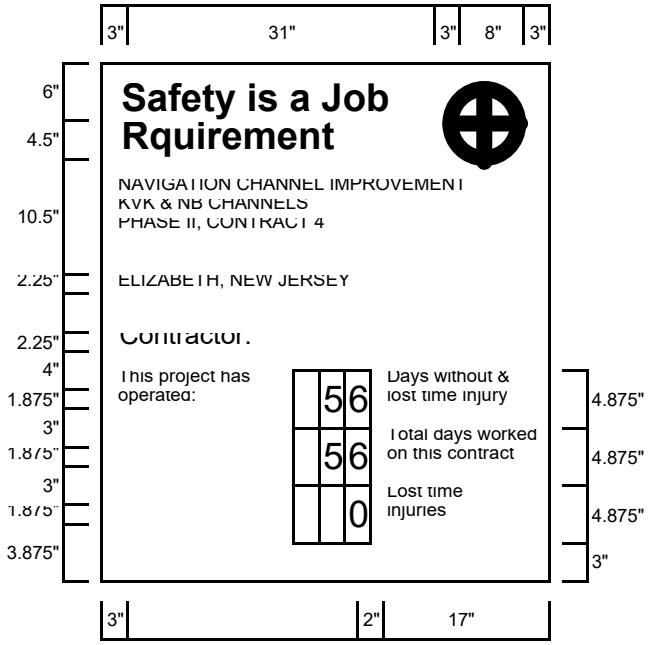
Legend Group 3: One - to two-line identification: name of prime contractor and city, state address.
Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

Legend Group 4: Standard safety record captions as shown.
Color: Black

Typeface: 1.25" Helvetica Regular

Replaceable numbers are to be mounted on white .060: aluminum plates and screw-mounted to background.
Color: Black
Typeface: 3" Helvetica Regular
Plate size: 2.5"x.5"

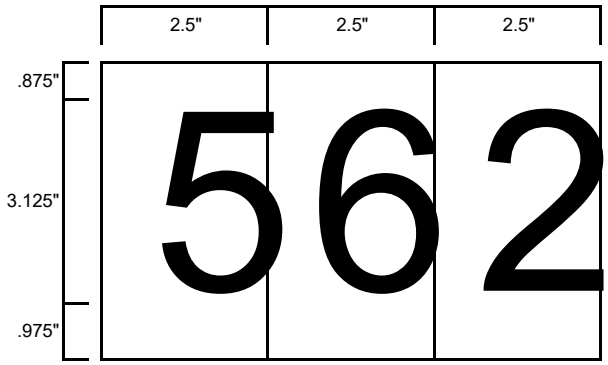
All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter- and word-spacing to follow Corps standards.



Dimensions inches.
See attached sheet for fabrication and mounting guidelines.

* Refer to the U.S. Army Corps of Engineers, "Sign Standards Manual", EPS-310-1-6.

Sign Type	Legend Size	Panel Size	Post Size	Specifications Code	Mounting Height	Color Bkg/Lgd
CID-02	various	4"x4"	4"x4"	HDO-3	48"	WH/BK-GR



[Code of Federal Regulations]
[Title 33, Volume 2]
[Revised as of July 1, 2005]
From the U.S. Government Printing Office via GPO Access
[**CITE**: **33CFR154.105**]

[Page 314-316]

TITLE 33--NAVIGATION AND NAVIGABLE WATERS

CHAPTER I--COAST GUARD, DEPARTMENT OF HOMELAND SECURITY (CONTINUED)

PART 154_FACILITIES TRANSFERRING OIL OR HAZARDOUS MATERIAL IN BULK --Table of Contents

Subpart A_General

Sec. 154.**105** Definitions.

As used in this part:
Barrel means a quantity of liquid equal to 42 U.S. gallons. Boundary Line means any of the lines described in 46 CFR part 7. Captain of the Port (COTP) means the U.S. Coast Guard officer commanding a Captain of the Port Zone described in Part 3 of this chapter, or that person's authorized representative.

Caretaker Status denotes a facility where all piping, hoses, loading arms, storage tanks, and related equipment in the marine transfer area are completely free of oil or hazardous materials, where these components have been certified as being gas free, where piping, hoses, and loading arms terminating near any body of water have been blanked, and where the facility operator has notified the COTP that the facility will be in caretaker status.

Commandant means the Commandant of the Coast Guard or an authorized representative.

Contiguous Zone means the entire zone established by the United States under Article 24 of the Convention on the Territorial Sea and the Contiguous Zone, but not extending beyond 12 miles from the baseline from which the breadth of the territorial sea is measured.

District Commander means the officer of the Coast Guard designated by the Commandant to command a Coast Guard District, as described in Part 3 of this chapter or an authorized representative.

Facility means either an onshore or offshore facility, except for an offshore facility operating under the jurisdiction of the Secretary of the Department of Interior, and includes, but is not limited to, structure, equipment, and appurtenances thereto, used or capable of being used to

transfer oil or hazardous materials to or from a vessel or public vessel. Also included are facilities that tank clean or strip and any floating structure that is used to support an integral part of the facility's operation. A facility includes federal, state, municipal, and private facilities.

Facility operator means the person who owns, operates, or is responsible for the operation of the facility. Hazardous material means a liquid material or substance, other than oil or liquefied gases, listed under 46 CFR 153.40 (a), (b), (c), or (e).

Marine transfer area means that part of a waterfront facility handling oil or hazardous materials in bulk between the vessel, or where the vessel moors, and the first manifold or shutoff valve on the pipeline encountered after the pipeline enters the secondary containment required under 40 CFR 112.7 or 49 CFR 195.264 inland of the terminal manifold or loading arm, or, in the absence of secondary containment, to the valve or manifold adjacent to the bulk storage tank, including the entire pier or wharf to which a vessel transferring oil or hazardous materials is moored.

MARPOL 73/78 means the International Convention for the Prevention of Pollution from Ships, 1973 (done at London, November 2, 1973) as modified by the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (done at London, February 17, 1978).

Mobile facility means any facility that can readily change location, such as a tank truck or tank car, other than a vessel or public vessel.

Monitoring device means any fixed or portable sensing device used to monitor for a discharge of oil or hazardous material onto the water, within or around a facility, and designed to notify operating personnel of a discharge of oil or hazardous material.

Officer in Charge, Marine Inspection (OCMI) means the U.S. Coast Guard officer commanding a Marine Inspection Zone described in Part 3 of this chapter, or an authorized representative.

Offshore facility means any facility of any kind located in, on, or under, any of the navigable waters of the United States, and any facility of any kind which is subject to the jurisdiction of the United States and is located in, on, or under any other waters, other than a vessel or a public vessel.

Oil means oil of any kind or in any form, including but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.

Onshore facility means any facility (including, but not limited to, motor vehicles and rolling stock) of any kind located in, on, or under any land within the United States other than submerged land.

Person in charge means an individual designated as a person in charge of transfer operations under Sec. 154.710 (for facilities) or Sec. 155.700 (for vessels) of this chapter.

STCW means the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers, 1978.

Self-propelled tank vessel means a self-propelled tank vessel other than a tankship.

Tank barge means a non-self-propelled tank vessel.

Tankship means a self-propelled tank vessel constructed or adapted primarily to carry oil or hazardous material in bulk in the cargo spaces.

Tank vessel means a vessel that is constructed or adapted to carry, or that carries, oil or hazardous material in bulk as cargo or cargo residue, and that--

(a) Is a vessel of the United States;
(b) Operates on the navigable waters of the United States; or
(c) Transfers oil or hazardous material in a port or place subject to the jurisdiction of the United States.

Transfer means any movement of oil or hazardous material to, from, or within a vessel by means of pumping, gravitation, or displacement. A transfer is considered to begin when the person in charge on the transferring vessel or facility and the person in charge on the receiving facility or vessel first meet to begin completing the declaration of inspection as required by Sec. 156.150 of this chapter. A transfer is considered to be complete when all the connections for the transfer have been uncoupled and secured with blanks or other closure devices and both of the persons in charge have completed the declaration of inspection to include the date and time the transfer was complete.

Vessel operator means a person who owns, operates, or is responsible for the operation of a vessel.

[CGD 75-124, 45 FR 7169, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36252, Sept. 4, 1990; CGD 79-116, 60 FR 17141, Apr. 4, 1995; CGD 93-056, 61 FR 41458, Aug. 8, 1996; 62 FR 3610, Jan. 24, 1997; CGD 79-116, 62 FR 25125, May 8, 1997]

TRANSFER OPERATIONS--Table of Contents

Subpart A_Oil and Hazardous Material Transfer Operations

Sec.
156.**100** Applicability.

156.105 Definitions.

156.107 Alternatives.

156.110 Exemptions.

156.111 Incorporation by reference.

156.112 Suspension order.

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Authority: 33 U.S.C. 1231, 1321(j); 46 U.S.C. 3703a, 3715; E.O.11735, 3 CFR 1971-1975 Comp., p. 793. Section 156.120(bb) and (ee) are also issued under 46 U.S.C. 3703.

This subpart applies to the transfer of oil or hazardous material on the navigable waters or contiguous zone of the United States to, from, or within each vessel with a capacity of 250 barrels or more; except that, this subpart does not apply to transfer operations within a public vessel.

[CGD 86-034, 55 FR 36255, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**105** Definitions.

Except as specifically stated in a section, the definitions in Sec. 154.**105** of this chapter apply to this subpart.

[CGD 90-071a, 59 FR 53291, Oct. 21, 1994]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**107** Alternatives.

(a) The COTP may consider and approve alternative procedures, methods, or equipment standards to be used by a vessel or facility operator in lieu of any requirements in this part if:

(1) Compliance with the requirement is economically or physically impractical;

(2) The vessel or facility operator submits a written request for the alternative at least 30 days before operations under the alternative are proposed, unless the COTP authorizes a shorter time; and

(3) The alternative provides an equivalent level of safety and protection from pollution by oil or hazardous material, which is documented in the request.

(b) The COTP takes final approval or disapproval action on any alternative requested, in writing, within 30 days of receipt of the request.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36255, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**110** Exemptions.

(a) The Assistant Commandant for Marine Safety, Security and Environmental Protection, acting for the Commandant, may grant an exemption or partial exemption from compliance with any requirement in this part, and the District Commander may grant an exemption or partial exemption from compliance with any operating condition or requirement in subpart C of this part, if:

(1) The vessel or facility operator submits an application for exemption via the COTP at least 30 days before operations under the exemption are proposed, unless the COTP authorizes a shorter time; and

(2) It is determined, from the application, that:

(i) Compliance with a specific requirement is economically or physically impractical;

(ii) No alternative procedures, methods, or equipment standards exist that would provide an equivalent level of safety and protection from pollution by oil or hazardous material; and

(iii) The likelihood of oil or hazardous material being discharged as a result of the exemption is minimal.

(b) If requested, the applicant must submit any appropriate information, including an environmental and economic assessment of the effects of and reasons for the exemption and proposed procedures, methods or equipment standards.

(c) The exemption may specify the procedures, methods, or equipment standards that will apply.

(d) An exemption is granted or denied in writing. The decision of the Assistant Commandant for Marine Safety, Security and Environmental Protection is a final agency action.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 88-052, 53 FR 25122, July 1, 1988; CGD 86-034, 55 FR 36255, Sept. 4, 1990; CGD 93-081, 60 FR 45017, Aug. 29, 1995; CGD 96-026, 61 FR 33666, June 28, 1996; CGD 93-056, 61 FR 41461, Aug. 8, 1996; CGD0 97-023, 62 FR 33364, June 19, 1997; USCG-2002-12471, 67 FR 41333, June 18, 2002]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**111** Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in paragraph (b) of this section, the Coast Guard must publish notice of the change in the Federal Register; and the material must be available to the public. All approved material is available for inspection at the U.S. Coast Guard, Office of Compliance (G-MOC), 2100 Second Street, SW, Washington, DC 20593-0001 and at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal--register/code--of--federal-- regulations/ibr--locations.html. All approved material is available from the sources indicated in paragraph (b) of this section.

(b) The material approved for incorporation by reference in this part and the sections affected are as follows:

Oil Companies International Marine Forum (OCIMF)
15th Floor, 96 Victoria Street, London SW1E 5JW, England.
Ship to Ship Transfer Guide (Petroleum), Second Edition, 1988--
156.330.

International Chamber of Shipping

12 Carthusian Street, London EC1M 6EB, England.
Guide to Helicopter/Ship Operations, Third Edition, 1989--156.330.

[CGD 93-081, 60 FR 45017, Aug. 29, 1995, as amended by CGD 96-026, 61 FR 33666, June 28, 1996; 69 FR 18803, Apr. 9, 2004]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**112** Suspension order.

The COTP or OCMI may issue a suspension order to suspend transfer operations to the vessel or facility operator when the COTP or OCMI finds there is a condition requiring action to prevent the discharge or threat of discharge of oil or hazardous material, or when the COTP or OCMI is unable to verify compliance with the regulations through an inspection. A suspension order:

(a) May be effective immediately;

(b) Is issued in writing unless it is effective immediately and then it may be issued orally and followed up in writing;

(c) Includes a statement of each condition requiring correction to--

(1) Prevent the discharge of oil or hazardous material; or

(2) Comply with Sec. 154.735 of this chapter; and

(d) Is withdrawn when the COTP, OCMI, or District Commander, as applicable, determines that the condition requiring action to prevent the discharge or threat of discharge of oil or hazardous material has been corrected or no longer exists.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36255, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**113** Compliance with suspension order.

(a) No vessel or facility operator to whom a suspension order has been issued may conduct transfer operations from the time the order is effective until that order is withdrawn by the applicable COTP, OCMI, or by the District Commander.

(b) The vessel or facility operator may request reconsideration of the suspension order either orally or in writing to the COTP or OCMI who issued it. The request may contain supporting documentation and evidence that the
vessel or facility operator wishes to have considered.

(c) Any person not satisfied with a ruling made under the procedure
contained in paragraph (b) of this section may appeal that ruling in writing, except as allowed under paragraph (e) of this section, to the Coast Guard District Commander of the district in which the suspension order was issued. The appeal may contain supporting documentation and evidence that the appellant wishes to have considered. The appeal does not stay the effect of the suspension order while the COTP or OCMI ruling is being reviewed. The District Commander issues a ruling after reviewing the appeal.

(d) The ruling by the District Commander is final agency action.

(e) If the delay in presenting a written appeal under paragraph (c)

of this section would have a significant adverse impact on the appellant, the appeal may initially be presented orally. If an initial presentation of the appeal is made orally, the appellant must submit the appeal in writing within five days of the oral presentation to the District Commander to whom the oral appeal was made, containing, at a minimum the basis for the appeal and a summary of the material presented orally.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36255, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**115** Person in charge: Limitations.

(a) No person may serve as the person in charge of transfer operations on more than one vessel at a time during transfers between vessels or between two or more vessels and a facility unless authorized by the COTP.

(b) No person may serve as the person in charge of both a vessel and a facility during transfer operations unless authorized by the COTP.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36255, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**118** Advance notice of transfer.

(a) The COTP may require a facility operator to notify the COTP of the time and place of each transfer operation at least 4 hours before it begins for facilities that:

(1) Are mobile;

(2) Are in a remote location;

(3) Have a prior history of oil or hazardous material spills; or

(4) Conduct infrequent transfer operations.

(b) In the case of a vessel to vessel transfer, the COTP may require a vessel operator of a lightering or fueling vessel to notify the COTP of the time and place of each transfer operation, as specified by the COTP, at least 4 hours before it begins.

(c) No person may conduct such transfer operations until advance notice has been given as specified by the COTP.

Note: The notification may be accomplished by submitting a written schedule, periodically updated to be current.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36255, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**120** Requirements for transfer.

A transfer is considered to begin when the person in charge on the transferring vessel or facility and the person in charge on the receiving facility or vessel first meet to begin completing the declaration of inspection, as required by Sec. 156.150 of this part. No person shall conduct an oil or hazardous material transfer operation unless:

(a) The vessel's moorings are strong enough to hold during all expected conditions of surge, current, and weather and are long enough to allow adjustment for changes in draft, drift, and tide during the transfer operation;

(b) Transfer hoses and loading arms are long enough to allow the vessel to move to the limits of its moorings without placing strain on the hose, loading arm, or transfer piping system;

(c) Each hose is supported to prevent kinking or other damage to the hose and strain on its coupling.

(d) Each part of the transfer system is aligned to allow the flow of oil or hazardous material;

(e) Each part of the transfer system not necessary for the transfer operation is securely blanked or shut off;

(f) The end of each hose and loading arm that is not connected for the transfer of oil or hazardous material is blanked off using the closure devices required by Sec. Sec. 154.520 and 155.805 of this chapter;

(g) The transfer system is attached to a fixed connection on the vessel and the facility except that when a vessel is receiving fuel, an automatic back pressure shutoff nozzle may be used;

(h) Each overboard discharge or sea suction valve that is connected to the vessel's transfer or cargo tank system is sealed or lashed in the closed position; except when used to receive or discharge ballast in compliance with 33 CFR Part 157;

(i) Each transfer hose has no unrepaired loose covers, kinks, bulges, soft spots, or any other defect which would permit the discharge of oil or hazardous material through the hose material and no gouges, cuts, or slashes that penetrate the first layer of hose reinforcement (``reinforcement'' means the strength members of the hose, consisting of fabric, cord and/or metal);

(j) Each hose or loading arm in use meets Sec. Sec. 154.500 and 154.510 of this chapter, respectively;

(k) Each connection meets Sec. 156.130;

(l) Any monitoring devices required by Sec. 154.525 of this chapter are installed and operating properly;

(m) The discharge containment equipment required by Sec. 154.545 of this chapter is readily accessible or deployed as applicable;

(n) The discharge containment required by Sec. Sec. 154.530, 155.310, and 155.320 of this chapter, as applicable, is in place and periodically drained to provide the required capacity;

(o) Each drain and scupper is closed by the mechanical means required by Sec. 155.310;

(p) All connections in the transfer system are leak free except that a component in the transfer system, such as the packing glands of a pump, may leak at a rate that does not exceed the capacity of the discharge containment provided during the transfer operation;

(q) The communications required by Sec. Sec. 154.560 and 155.785 of this chapter are operable for the transfer operation;

(r) The emergency means of shutdown required by Sec. Sec. 154.550 and 155.780 of this chapter, as applicable, is in position and operable;

(s) There is a person in charge on the transferring vessel or facility and the receiving vessel or facility except as otherwise authorized under Sec. 156.115;

(t) Each person in charge required by paragraph (s) of this section:

(1) Is at the site of the transfer operation and immediately available to the transfer personnel;

(2) Has in his or her possession a copy of the facility operations manual or vessel transfer procedures, as appropriate; and

(3) Conducts the transfer operation in accordance with the facility operations manual or vessel transfer procedures, as appropriate;

(u) The personnel required, under the facility operations manual and the vessel transfer procedures, to conduct the transfer operation:

(1) Are on duty; and

(2) Conduct the transfer operation in accordance with the facility operations manual or vessel transfer procedures, as appropriate;

(v) At least one person is at the site of the transfer operation who fluently speaks the language or languages spoken by both persons in charge;

(w) The person in charge of the transfer on the transferring vessel or facility and the person in charge of it on the receiving vessel or facility have held a conference, to ensure that each person in charge understands--

(1) The identity of the product to be transferred;

(2) The sequence of transfer operations;

(3) The transfer rate;

(4) The name or title and location of each person participating in the transfer operation;

(5) Details of the transferring and receiving systems including procedures to ensure that the transfer pressure does not exceed the maximum allowable working pressure (MAWP) for each hose assembly, loading arm and/or transfer pipe system;

(6) Critical stages of the transfer operation;

(7) Federal, state, and local rules that apply to the transfer of oil or hazardous material;

(8) Emergency procedures;

(9) Discharge containment procedures;

(10) Discharge reporting procedures;

(11) Watch or shift arrangement;

(12) Transfer shutdown procedures; and,

(13) If the persons use radios, a predetermined frequency for communications during the transfer, agreed upon by both.

(x) The person in charge of transfer operations on the transferring vessel or facility and the person in charge of transfer operations on the receiving vessel or facility agree to begin the transfer operation;

(y) Between sunset and sunrise the lighting required by Sec. Sec. 154.570 and 155.790 of this chapter is provided; and

(z) For transfer operations between tank barges from sunset to sunrise, lighting is provided as described in Sec. 155.790 of this chapter.

(aa) A transfer operation which includes collection of vapor emitted from a vessel's cargo tanks through a venting system not located on the vessel must have the following verified by the person in charge:

(1) Each manual valve in the vapor collection system is correctly positioned to allow the collection of cargo vapor;

(2) A vapor collection hose or arm is connected to the vessel's vapor connection;

(3) The electrical insulating device required by Sec. 154.810(g) of this chapter or 46 CFR 39.40-3(c) is fitted between the facility vapor connection and the vessel vapor connection;

(4) The initial loading rate and the maximum transfer rate are determined;

(5) The maximum and minimum operating pressures at the facility vapor connection are determined;

(6) The tank barge overfill control system, if installed, is connected to the facility, tested, and operating properly;

(7) The following have been performed not more than 24 hours prior to the start of the transfer operation:

(i) Each alarm and automatic shutdown system required by subpart E of part 154 of this chapter and 46 CFR part 39 has been tested and found to be operating properly, and

(ii) Analyzers required by Sec. 154.820(a), Sec. 154.824 (d) and (e) of this chapter or 46 CFR 39.40-3(a) have been checked for calibration by use of a span gas;

(8) Each vapor recovery hose has no unrepaired loose covers, kinks, bulges, soft spots, or any other defect which would permit the discharge of vapor through the hose material, and no external gouges, cuts, or slashes that penetrate the first layer of hose reinforcement; and

(9) The oxygen content of the vessel's cargo tanks, if inerted, is at or below 8 percent by volume.

(bb) If the transfer operation involves loading oil, as defined in Sec. 151.05 of this chapter, into a cargo tank, the overfill device required by Sec. 155.480 of this chapter is installed and operating properly.

(cc) Smoking is not permitted in the facilities marine transfer area except in designated smoking areas.

(dd) Welding, hot work operations and smoking are prohibited on vessels during the transfer of flammable or combustible materials, except that smoking may be permitted in accommodation areas designated by the master.

(ee) Each tank level or pressure monitoring device required under 33 CFR 155.490 must be activated and monitored whenever the tank is not actively being subjected to cargo operations.

(Approved by the Office of Management and Budget under control number 2115-0506)

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 88-102, 55 FR 25445, June 21, 1990; CGD 86-034, 55 FR 36255, Sept. 4, 1990; CGD 90-071a, 59 FR 53291, Oct. 21, 1994; CGD 93-056, 61 FR 41461, Aug. 8, 1996; CGD 79-116, 62 FR 25127, May 8, 1997; USCG-2001-9046, 67 FR 58524, Sept. 17, 2002]

Subpart A--Oil and Hazardous Material Transfer Operations

Sec. 156.**125** Discharge cleanup.

(a) Each person conducting the transfer operation shall stop the transfer operation whenever oil or hazardous material from any source is discharged:

(1) In the transfer operation work area; or

(2) Into the water or upon the adjoining shoreline in the transfer area.

(b) Except as permitted under paragraph (c) of this section, no person may resume the transfer operation after it has been stopped under paragraph (a) of this section, unless:

(1) Oil or hazardous material discharged in the transfer operation work area is cleaned up; and

(2) Oil or hazardous material discharged into the water or upon the adjoining shoreline is cleaned up, or is contained and being cleaned up.

(c) The COTP may authorize resuming the transfer operation if it is deemed appropriate.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36255, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**130** Connection.

(a) Each person who makes a connection for transfer operations shall:

(1) Use suitable material in joints and couplings to ensure a leak-free seal;

(2) Use a bolt in at least every other hole, and in no case less than four bolts, in each temporary bolted connection that uses a flange that meets American National Standards Institute (ANSI) standard flange requirements under Sec. 154.500(d)(2) of this chapter;

(3) Use a bolt in each hole in each temporary bolted connection that uses a flange other than one that meets ANSI standards;

(4) Use a bolt in each hole of each permanently connected flange;

(5) Use bolts of the correct size in each bolted connection; and

(6) Tighten each bolt and nut uniformly to distribute the load and sufficiently to ensure a leak free seal.

(b) A person who makes a connection for transfer operations must not use any bolt that shows signs of strain or is elongated or deteriorated.

(c) Except as provided in paragraph (d) of this section, no person may use a connection for transfer operations unless it is:

(1) A bolted or full threaded connection; or

(2) A quick-connect coupling acceptable to the Commandant.

(d) No person may transfer oil or hazardous material to a vessel that has a fill pipe for which containment cannot practically be provided unless an automatic back pressure shutoff nozzle is used.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36256, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**150** Declaration of inspection.

(a) No person may transfer oil or hazardous material to or from a vessel unless each person in charge, designated under Sec. Sec. 154.710 and 155.700 of this chapter, has filled out and signed the declaration of inspection form described in paragraph (c) of this section.

(b) No person in charge may sign the declaration of inspection unless he or she has determined by inspection, and indicated by initialling in the appropriate space on the declaration of inspection form, that the facility or vessel, as appropriate, meets Sec. 156.120.

(c) The declaration of inspection may be in any form but must contain at least:

(1) The name or other identification of the transferring vessel or facility and the receiving vessel or facility;

(2) The address of the facility or location of the transfer operation if not at a facility;

(3) The date and time the transfer operation is started;

(4) A list of the requirements in Sec. 156.120 with spaces on the form following each requirement for the person in charge of the vessel or facility to indicate by initialling that the requirement is met for the transfer operation; and

(5) A space for the date, time of signing, signature, and title of each person in charge during transfer operations on the transferring vessel or facility and a space for the date, time of signing, signature, and title of each person in charge during transfer operations on the receiving facility or vessel certifying that all tests and inspections have been completed and that they are both ready to begin transferring product; and

(6) The date and time the transfer operation is completed.

(d) The form for the declaration of inspection may incorporate the declaration-of-inspection requirements under 46 CFR 35.35-30.

(e) The vessel and facility persons in charge shall each have a signed copy of the declaration of inspection available for inspection by the COTP during the transfer operation.

(f) The operators of each vessel and facility engaged in the transfer operation shall retain a signed copy of the declaration of inspection on board the vessel or at the facility for at least 1 month from the date of signature.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36256, Sept. 4, 1990; CGD 93-056, 61 FR 41461, Aug. 8, 1996]

Subpart A--Oil and Hazardous Material Transfer Operations

Sec. 156.**160** Supervision by person in charge.

(a) No person may connect or disconnect a hose, top off a tank, or engage in any other critical procedures during the transfer operation unless the person in charge, required by Sec. 156.120(s), supervises that procedure.

(b) No person may start the flow of oil or hazardous material to or from a vessel unless instructed to do so by either person in charge.

(c) No person may transfer oil or hazardous material to or from a vessel unless each person in charge is in the immediate vicinity and immediately available to the transfer personnel.

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 86-034, 55 FR 36256, Sept. 4, 1990]

Subpart A_Oil and Hazardous Material Transfer Operations

Sec. 156.**170** Equipment tests and inspections.

(a) Except as provided in paragraph (d) of this section, no person may use any equipment listed in paragraph (c) of this section for transfer operations unless the vessel or facility operator, as appropriate, tests and inspects the equipment in accordance with paragraphs (b), (c) and (f) of this section and the equipment is in the condition specified in paragraph (c) of this section.

(b) During any test or inspection required by this section, the entire external surface of the hose must be accessible.

(c) For the purpose of paragraph (a) of this section:

(1) Each nonmetallic transfer hose must:

(i) Have no unrepaired loose covers, kinks, bulges, soft spots or any other defect which would permit the discharge of oil or hazardous material through the hose material, and no gouges, cuts or slashes that penetrate the first layer of hose reinforcement as defined in Sec. 156.120(i).

(ii) Have no external deterioration and, to the extent internal inspection is possible with both ends of the hose open, no internal deterioration;

(iii) Not burst, bulge, leak, or abnormally distort under static liquid pressure at least 1\1/2\ times the maximum allowable working pressure; and

(iv) Hoses not meeting the requirements of paragraph (c)(1)(i) of this section may be acceptable after a static liquid pressure test is successfully completed in the presence of the COTP. The test medium is not required to be water.

(2) Each transfer system relief valve must open at or below the pressure at which it is set to open;

(3) Each pressure gauge must show pressure within 10 percent of the actual pressure;

(4) Each loading arm and each transfer pipe system, including each metallic hose, must not leak under static liquid pressure at least 1\1/ 2\ times the maximum allowable working pressure; and

(5) Each item of remote operating or indicating equipment, such as a remotely operated valve, tank level alarm, or emergency shutdown device, must perform its intended function.

(d) No person may use any hose in underwater service for transfer operations unless the operator of the vessel or facility has tested and inspected it in accordance with paragraph (c)(1) or (c)(4) of this section, as applicable.

(e) The test fluid used for the testing required by this section is limited to liquids that are compatible with the hose tube as recommended by the hose manufacturer.

(f) The frequency of the tests and inspections required by this section must be:

(1) For facilities, annually or not less than 30 days prior to the first transfer conducted past one year from the date of the last tests and inspections;

(2) For a facility in caretaker status, not less than 30 days prior to the first transfer after the facility is removed from caretaker status; and

(3) For vessels, annually or as part of the biennial and mid-period inspections.

(g) If a facility or vessel collects vapor emitted from a vessel cargo tank with a vapor control system, the system must not be used unless the following tests and inspections are satisfactorily completed:

(1) Each vapor hose, vapor collection arm, pressure or vacuum relief valve, and pressure sensor is tested and inspected in accordance with paragraphs (b), (c), and (f) of this section;

(2) Each remote operating or indicating device is tested for proper operation in accordance with paragraph (f) of this section;

(3) Each detonation arrester required by Sec. 154.820, Sec. 154.826(a), and Sec. 154.828(a) of this chapter or 46 CFR 39.40-3(d), and each flame arrester required by Sec. 154.826(a), Sec. 154.828 (a) and (c) of this chapter has been inspected internally within the last year, or sooner if operational experience has shown that frequent clogging or rapid deterioration is likely; and

(4) Each hydrocarbon and oxygen analyzer required by Sec. 154.820(a) and Sec. 154.824 (d) and (e) of this chapter or 46 CFR 39.40-3(a) is calibrated:

(i) Within the previous two weeks, or

(ii) Within 24 hours prior to operation when the vapor control system is operated less frequently than once a week.

(h) Upon the request of the owner or operator, the COTP may approve alternative methods of compliance to the testing requirements of paragraph (c) of this section if the COTP determines that the alternative methods provide an equal level of protection.

(Approved by the Office of Management and Budget under control number 2115-0096)

[CGD 75-124, 45 FR 7177, Jan. 31, 1980, as amended by CGD 88-102, 55 FR 25445, June 21, 1990; CGD 86-034, 55 FR 36256, Sept. 4, 1990; CGD 93-056, 61 FR 41461, Aug. 8, 1996]

Subpart B--Special Requirements for Lightering of Oil and Hazardous Material Cargoes

Sec. 156.**200** Applicability.

Source: CGD 78-180, 49 FR 11172, Mar. 26, 1984, unless otherwise noted.

This subpart applies to each vessel to be lightered and each service vessel engaged in a lightering operation in the marine environment beyond the baseline from which the territorial sea is measured when the oil or hazardous material lightered is destined for a port or place subject to the jurisdiction of the U.S. This subpart does not apply to lightering operations involving public vessels, or to the dedicated response vessels and vessels of opportunity in accordance with the National Contingency Plan (40 CFR parts 9 and 300) when conducting response activities. These rules are in addition to the rules of subpart A of this part, as well as the rules in the applicable sections of parts 151, 153, 155, 156, and 157 of this chapter.

[CGD 93-081, 60 FR 45017, Aug. 29, 1995]

Subpart B_Special Requirements for Lightering of Oil and Hazardous Material Cargoes

Sec. 156.**205** Definitions.

(a) In addition to the terms defined in this section, the definitions in Sec. 154.105 of this chapter apply to this subpart and to subpart C.

(b) As used in this subpart and subpart C:

Lightering or Lightering operation means the transfer of a cargo of oil or a hazardous material in bulk from one vessel to another, including all phases of the operation from the beginning of the mooring operation to the departure of the service vessel from the vessel to be lightered, except when that cargo is intended only for use as fuel or lubricant aboard the receiving vessel.

Marine environment means--

(1) The navigable waters of the United States;

(2) The waters of an area over which the United States asserts exclusive fishery management authority; and

(3) The waters superadjacent to the Outer Continental Shelf of the United States.

Service vessel means the vessel which receives a cargo of oil or a hazardous material from another vessel in a lightering operation.

Vessel to be lightered means the vessel which transports a cargo of oil or a hazardous material to a place within the marine environment for transfer of that cargo to another vessel for further transport to a port or place subject to the jurisdiction of the United States. The term ``vessel to be lightered'' does not include drilling rigs, or offshore supply vessels transferring cargo intended for use as fuel or lubricant aboard the receiving vessel.

Work includes any administrative duties associated with the vessel whether performed on board the vessel or onshore.

[CGD 78-180, 49 FR 11172, Mar. 26, 1984, as amended by CGD 86-034, 55 FR 36256, Sept. 4, 1990; CGD 90-052, 58 FR 48436, Sept. 15, 1993; CGD 93-081, 60 FR 45017, Aug. 29, 1995]

Subpart B--Special Requirements for Lightering of Oil and Hazardous Material Cargoes

Sec. 156.**210** General.

(a) No vessel may transfer oil or hazardous materials in a port or place subject to the jurisdiction of the United States, if the cargo has been lightered from another vessel, unless:

(1) The regulations in this subpart have been complied with;

(2) Both the vessel to be lightered and service vessel have, on board, at the time of transfer, a valid Certificate of Inspection, Certificate of Compliance, or a Tank Vessel Examination Letter, as would have been required under 46 U.S.C. 3710 or 3711, had the transfer taken place in a port or place subject to the jurisdiction of the United States;

(3) The delivering and receiving vessels have on board at the time of transfer, evidence that each vessel is operating in compliance with section 311(j) of the Federal Water Pollution Control Act (33 U.S.C. 1321(j)) and applicable regulations issued under the authority of section 311(j) in the form of a Declaration of Inspection as required by Sec. 156.150 and a vessel response plan if required under part 155 of this chapter; and

Note: Under 46 U.S.C. 3715, the delivering and receiving vessels must have on board at the time of transfer, a Certificate of Financial Responsibility that would be required if the transfer had taken place in a location subject to the jurisdiction of the U.S. Regulations concerning

Certificates of Financial Responsibility for vessels using the navigable waters of the U.S. are in part 130 of this chapter.

(4) The vessel to be lightered has on board, at the time of transfer, an International Oil Pollution Prevention (IOPP) Certificate or equivalent documentation of compliance with Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), as would be required by Part 151 of this chapter for vessels in navigable waters of the United States. The IOPP Certificate or documentation of compliance shall be that prescribed by Sec.Sec. 151.19 and 151.21 of this chapter, and shall be effective under the same timetable as specified in Sec. 151.19.

(b) Lightering operations involving hazardous materials, other than oil, may be conducted only with the specific approval of the Commandant. A request to lighter hazardous materials, other than oil, must be submitted to Commandant (G-M) prior to the planned beginning of lightering operations. The request must include the information described in Sec. 156.215(a) to the extent known, for the initial transfer, and the estimated frequency of subsequent lightering operations. After the entry into force of Annex II to MARPOL 73/78, vessels lightering hazardous materials shall carry an International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (1973), if required by Annex II to MARPOL 73/78, or equivalent documentation of compliance with the annex.

(c) In an emergency, the COTP, upon request, may authorize a deviation from any rule in this part if the COTP determines that its application will endanger persons, property, or the environment.

(d) On vessels conducting lightering operations in a designated lightering zone, a licensed individual or seaman may not work, except in an emergency or a drill, more than 15 hours in any 24-hour period, or more than 36 hours in any 72-hour period, including the 24-hour and 72-hour periods prior to commencing lightering operations.

[CGD 78-180, 49 FR 11172, Mar. 29, 1984, as amended by CGD 88-052, 53 FR 25122, July 1, 1988; CGD 90-052, 58 FR 48436, Sept. 15, 1993; CGD 93-081, 60 FR 45017, Aug. 29, 1995; USCG-2002-12471, 67 FR 41333, June 18, 2002]

Subpart B--Special Requirements for Lightering of Oil and Hazardous Material Cargoes

Sec. 156.**215** Pre-arrival notices.

(a) The master, owner or agent of each vessel to be lightered must give at least 24 hours advance notice to the Captain of the Port nearest the lightering location or zone, prior to arrival in the lightering location or zone. This advance notice must include:

(1) The vessel's name, call sign or official number, and registry:

(2) The cargo type (if oil) or shipping name (if hazardous material) and approximate amount on board;

(3) The number of transfers expected and the amount of cargo expected to be transferred during each transfer;

(4) The lightering location or zone to be used;

(5) The estimated time of arrival in the lightering location or zone;

(6) The estimated duration of transfer operations; and

(7) The name and destination of service vessel(s).

(b) In the event the estimated time of arrival in the lightering location or zone changes by more than six hours, the Master, owner or agent of each vessel to be lightered must advise the Captain of the Port of this change as soon as possible.

(c) Where lightering is conducted as a result of collision,
grounding, tank rupture or any similar emergency, immediate notice must be given to the Captain of the Port.

(d) In addition to the other requirements in this section, the master, owner, or agent of a vessel that requires a Tank Vessel Examination (TVE) or other special Coast Guard inspection in order to lighter in a designated lightering zone must request the TVE or other inspection from the cognizant Captain of the Port at least 72 hours prior to commencement of lightering operations.

[CGD 78-180, 49 FR 11172, Mar. 26, 1984, as amended by CGD 90-052, 58 FR 48437, Sept. 15, 1993; CGD 93-081, 60 FR 45017, Aug. 29, 1995]

Subpart B_Special Requirements for Lightering of Oil and Hazardous Material Cargoes

Sec. 156.**220** Reporting of incidents.

(a) An immediate report must be made to the nearest Captain of the Port, by the service vessel, if fire, explosion, collision, grounding or any similar emergency, which poses a threat to the vessels involved, occurs during lightering.

(b) Any discharge of oil or hazardous material into the water shall be reported, by the service vessel, in accordance with the procedures specified in Sec. 151.15 of this chapter.

Subpart B--Special Requirements for Lightering of Oil and Hazardous Material Cargoes

Sec. 156.**225** Designation of lightering zones.

The District Commander is delegated the authority to designate lightering zones and their operating requirements, where they are necessary for safety or environmental protection. When a lightering zone has been designated, lightering operations in a given geographic area may only be conducted within the designated lightering zone.

Subpart B_Special Requirements for Lightering of Oil and Hazardous Material Cargoes

Sec. 156.**230** Factors considered in designating lightering zones.

The following factors are considered in designating a lightering zone:

(a) The findings of the environmental analysis or, if prepared, the Environmental Impact Statement;

(b) The proximity of the zone to:

(1) Shipping lanes;

(2) Vessel traffic schemes or vessel separation systems;

(3) Anchorages;

(4) Fixed structures;

(5) Designated marine sanctuaries;

(6) Commercial and recreational fishing areas;

(7) Environmentally sensitive areas; and

(8) Designated units of the National Park System, National Wild and Scenic Rivers System, National Wilderness Preservation System, properties included on the National Register of Historic Places and National Registry of Natural Landmarks, and National Wildlife Refuge System.

(c) The traditional use of areas for lightering operations;

(d) The normal weather and sea conditions in the areas, and their effect on lightering operations, and the fate of possible cargo discharges;

(e) The depth of water and underwater obstructions that may adversely impact anchorages and clearance of vessels;

(f) Other relevant safety, environmental, or economic data.

APPENDIX A

MINIMUM BASIC OUTLINE FOR ACCIDENT PREVENTION PLANS

An Accident Prevention Plan (APP) is a safety and health policy and program document. The following areas are typically addressed in an APP, but an APP shall be job-specific and shall also address any unusual or unique aspects of the project or activity for which it is written.

The APP shall interface with the employer's overall safety and health program, and a copy shall be available on the work site. Any portions of the overall safety and health program that are referenced in the APP shall be included as appropriate. ANSI/ASSE A10.38 should be referenced for Programmatic Issues.

> For LIMITED-SCOPE SERVICE, SUPPLY AND R&D CONTRACTS, for example, mowing (only), park attendant, rest room cleaning, the Contracting Officer and SOHO may allow an ABBREVIATED APP (customized APP requirements and waive the more stringent elements of this section)*. > See 01.A.11, and Appendix A, paragraph 11.*

1. SIGNATURE SHEET. Title, signature, and phone number of the following:

a. Plan preparer (Qualified Person, Competent Person, such as corporate safety staff person, QC);

b. Plan must be approved, by company/corporate officers authorized to obligate the company;

c. Plan concurrence (e.g., Chief of Operations, Corporate Chief of Safety, Corporate Industrial Hygienist, project manager or superintendent, project safety professional, project QC). Provide concurrence of other applicable corporate and project personnel (Contractor).

2. BACKGROUND INFORMATION. List the following:

a. Contractor;

b. Contract number;

c. Project name;

d. Brief project description, description of work to be performed, and location; phases of work anticipated (these will require an AHA).

3. STATEMENT OF SAFETY AND HEALTH POLICY. Provide a copy of current corporate/company Safety and Health Policy Statement, detailing commitment to providing a safe and healthful workplace for all employees. The Contractor's written safety program goals, objectives, and accident experience goals for this contract should be provided.

4. RESPONSIBILITIES AND LINES OF AUTHORITIES. Provide the following:

a. A statement of the employer's ultimate responsibility for the implementation of his SOH program;

b. Identification and accountability of personnel responsible for safety at both corporate and project level. Contracts specifically requiring safety or industrial hygiene personnel shall include a copy of their resumes. Qualifications shall include the OSHA 30-hour course or equivalent course areas as listed here:

(1) OSH Act/General Duty Clause;

(2) 29 CFR 1904, Recordkeeping;

(3) Subpart C: General Safety and Health Provisions, Competent Person;

(4) Subpart D: Occupational Health and Environmental Controls, Citations and Safety Programs;

(5) Subpart E: PPE, types and requirements for use;

(6) Subpart F: understanding fire protection in the workplace;

(7) Subpart K: Electrical;

(8 Subpart M: Fall Protection;

(9) Rigging, welding and cutting, scaffolding, excavations, concrete and masonry, demolition; health hazards in construction, materials handling, storage and disposal, hand and power tools, motor vehicles, mechanized equipment, marine operations, steel erection, stairways and ladders, confined spaces or any others that are applicable to the work being performed.

c. The names of Competent and/or Qualified Person(s) and proof of competency/qualification to meet specific OSHA Competent/Qualified Person(s) requirements must be attached. The District SOHO will review the qualifications for acceptance;

d. Requirements that no work shall be performed unless a designated competent person is present on the job site;

e. Requirements for pre-task safety and health analysis;

f. Lines of authority;

g. Policies and procedures regarding noncompliance with safety requirements (to include disciplinary actions for violation of safety requirements) should be identified;

h. Provide written company procedures for holding managers and supervisors accountable for safety.

5. SUBCONTRACTORS AND SUPPLIERS. If applicable, provide procedures for coordinating SOH activities with other employers on the job site:

a. Identification of subcontractors and suppliers (if known);

b. Safety responsibilities of subcontractors and suppliers.

6. TRAINING.

a. Requirements for new hire SOH orientation training at the time of initial hire of each new employee.

b. Requirements for mandatory training and certifications that are applicable to this project (e.g., explosive actuated tools, confined space entry, crane operator, diver, vehicle operator, HAZWOPER training and certification, PPE) and any requirements for periodic retraining/recertification.

c. Procedures for periodic safety and health training for supervisors and employees.

d. Requirements for emergency response training.
> See paragraph 9.b. below for a list of requirements that may require emergency response training.

7. SAFETY AND HEALTH INSPECTIONS.

a. Specific assignment of responsibilities for a minimum daily job site safety and health inspection during periods of work activity: Who will conduct (e.g., SSHO, PM, safety professional, QC, supervisors, employees – depends on level of technical proficiency needed to perform said inspections), proof of inspector's training/qualifications, when inspections will be conducted, procedures for documentation, deficiency tracking system, and follow-up procedures;

b. Any external inspections/certifications that may be required (e.g., USCG).

8. ACCIDENT REPORTING. The Contractor shall identify person(s) responsible to provide the following:

a. Exposure data (man-hours worked);

b. Accident investigations, reports, and logs: Report all accidents as soon as possible but not more than 24 hours afterwards to the Contracting Officer/Representative (CO/COR). The contractor shall thoroughly investigate the accident and submit the findings of the investigation along with appropriate corrective actions to the CO/COR in the prescribed format as soon as possible but no later than five (5) working days following the accident. Implement corrective actions as soon as reasonably possible;

c. The following require immediate accident notification:

(1) A fatal injury;

(2) A permanent total disability;

(3) A permanent partial disability;

(4) The hospitalization of three or more people resulting from a single occurrence;

(5) Property damage of $200,000 or more.

9. PLANS (PROGRAMS, PROCEDURES) REQUIRED BY THE SAFETY MANUAL. Based on a risk assessment of contracted activities and on mandatory OSHA compliance programs, the Contractor shall address all applicable occupational risks and compliance plans. Using the EM 385-1-1 as a guide, plans may include but not be limited to:

a. Layout plans (04.A.01);

b. Emergency response plans:

(1) Procedures and tests (01.E.01);

(2) Spill plans (01.E.01, 06.A.02);

(3) Firefighting plan (01.E.01, Section 19);

(4) Posting of emergency telephone numbers (01.E.05);

(5) Man overboard/abandon ship (Section19.A.04);

(6) Medical Support. Outline on-site medical support and off-site medical arrangements including rescue and medical duties for those employees who are to perform them, and the name(s) of on-site Contractor personnel trained in first aid and CPR. A minimum of two employees shall be certified in CPR and first-aid per shift/site (Section 03.A.02; 03.D);

c. Plan for prevention of alcohol and drug abuse (01.C.02);

d. Site sanitation plan (Section 02);

e. Access and haul road plan (4.B);

f. Respiratory protection plan (05.G);

g. Health hazard control program (06.A);

h. Hazard communication program (06.B.01);

i. Process Safety Management Plan (06.B.04);

j. Lead abatement plan (06.B.05 & specifications);

k. Asbestos abatement plan (06.B.05 & specifications);

l. Radiation Safety Program (06.E.03.a);

m. Abrasive blasting (06.H.01);

n. Heat/Cold Stress Monitoring Plan (06.I.02)

o. Crystalline Silica Monitoring Plan (Assessment) (06.M) ;

p. Night operations lighting plan (07.A.08);

q. Fire Prevention Plan (09.A);

r. Wild Land Fire Management Plan (09.K);

s. Hazardous energy control plan (12.A.01);

t. Critical lift Plan (16.H);

u. Contingency plan for severe weather (19.A.03);

v. Float Plan (19.F.04);

w. Site-Specific Fall Protection & Prevention Plan (21.C);

x. Demolition plan (to include engineering survey) (23.A.01);

y. Excavation/trenching plan (25.A.01);

z. Emergency rescue (tunneling) (26.A.);

aa. Underground construction fire prevention and protection plan (26.D.01);

bb. Compressed air plan (26.I.01);

cc. Formwork and shoring erection and removal plans (27.C);

dd. PreCast Concrete Plan (27.D);

ee. Lift slab plans (27.E);

ff. Steel erection plan (27.F.01);

gg. Site Safety and Health Plan for HTRW work (28.B);

hh. Blasting Safety Plan (29.A.01);

ii. Diving plan (30.A.13);

jj. Confined space Program (34.A).

10. RISK MANAGEMENT PROCESSES. Detailed project-specific hazards and controls shall be provided by an Activity Hazard Analysis (0I.A.13) for each major phase/activity of work.

11. **ABBREVIATED APP for LIMITED-SCOPE SERVICE, SUPPLY AND R&D CONTRACTS.** If service, supply and R&D contracts with limited scopes are awarded, the contractor may submit an abbreviated Accident Prevention Plan. This APP shall address the following areas **at a minimum**. If other areas of the EM 385-1-1 are pertinent to the contract, the contractor must assure these areas are addressed as well.

a. Title, signature, and phone number of the plan preparer.

b. Background Information to include: Contractor; Contract number; Project name; Brief project description, description of work to be performed, and location (map); The project description shall provide a means to evaluate the work being done (see AHA requirements in 01.A.13) and associated hazards involved. Contractor's APP shall address the identified hazards involved and the control measures to be taken.

c. Statement of Safety and Health Policy detailing their commitment to providing a safe and healthful workplace for all employees.

d. Responsibilities and Lines of Authorities – to include a statement of the employer's ultimate responsibility for the implementation of his SOH program; Identification and accountability of personnel responsible for safety at all levels to include designated site safety and health officer (SSHO) and associated qualifications. The District SOHO will review the qualifications for acceptance.

e. Training - new hire SOH orientation training at the time of initial hire of each new employee and any periodic retraining/recertification requirements.

f. Procedures for job site inspections - assignment of responsibilities and frequency.

g. Procedures for reporting man-hours worked and reporting and investigating any accidents as soon as possible but not more than 24 hours afterwards to the Contracting Officer/Representative (CO/COR). An accident that results in a fatal injury, permanent partial or permanent total disability shall be immediately reported to the Contracting Officer.

h. Emergency Planning. Employees working alone shall be provided an effective means of emergency communication. This may be cellular phone, two-way radio or other acceptable means. The selected means of communication must be readily available and must be in working condition.

i. Drinking Water provisions, toilet and washing facilities.

j. First Aid and CPR training (at least two employees on each shift shall be qualified/certified to administer first aid and CPR) and provision of first aid kit (types/size).

k. Personal Protective Equipment.

(1) WORK CLOTHING - Minimum Requirements. Employees shall wear clothing suitable for the weather however minimum requirements for work shall be short-sleeve shirt, long pants

(excessively long or baggy pants are prohibited) and leather work shoes. If analysis determines that safety-toed (or other protective) footwear is necessary (i.e., mowing, weedeating, chain saw use, etc), they shall be worn.

(2) Eye and Face Protection. Eye and face protection shall be worn as determined by an analysis of the operations being performed HOWEVER, all involved in chain saw use, chipping, stump grinding, pruning operations, grass mowing, weedeating and blowing operations shall be provided safety eyewear (Z87.1) as a minimum.

(3) Hearing Protection. Hearing protection must be worn by all those exposed to high noise activities (to include grass mowing and trimming, chainsaw operations, tree chipping, stump grinding and pruning).

(4) Head Protection. Hard hats shall comply with ANSI Z89.1 and shall be worn by all workers when a head hazard exists. At a minimum, hard hats shall be worn when performing activities identified in (2) above.

(5) High Visibility Apparel shall comply with ANSI/ISEA 107, Class 2 requirements at a minimum and shall be worn by all workers exposed to vehicular or equipment traffic.

(6) Protective Leg chaps shall be worn by all chainsaw operators.

(7) Gloves of the proper type shall be worn by persons involved in activities that expose the hands to cuts, abrasions, punctures, burns and chemical irritants.

(8) If work is being performed around water and drowning is a hazard, PFDs must be provided and worn as appropriate.

l. Machine Guards and safety devices. Lawn maintenance equipment must have appropriate guards and safety devices in place and operational.

m. Hazardous Substances. When any hazardous substances are procured, used, stored or disposed, a hazard communication program must be in effect and MSDSs shall be available at the worksite. Employees shall have received training in hazardous substances being used. When the eyes or body of any person may be exposed to corrosives, irritants or toxic chemicals, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within 10 seconds of the worksite.

n. Traffic control shall be accomplished in accordance with DOT's MUTCD.

o. Control of Hazardous Energy (Lockout/Tagout). Before an employee performs any servicing or maintenance on any equipment where the unexpected energizing or startup of the equipment could occur, procedures must be in place to ensure adequate control of this energy.

p. Driving, working on (i.e., working with equipment/mowers) while on slopes, working from/in boats/skiffs, etc shall also be considered and dealt with accordingly.

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U.S. Army Corps of Engineers
Safety Inspection Checklist
Accident Prevention Plan

Date of Inspection	

Location (Plant or Facility)	Contract Number
Contractor Name	Project Name
Inspector Name (Print)	Inspector Signature

This checklist serves as a guide only, it does not replace or eliminate the need to comply with the requirements set forth in Engineering Manual 385-1-1, Safety and Health Requirements Manual, dated 15 September 2008. The references included in this checklist correspond to the applicable sections of EM 385-1-1.

Item Description	Yes	No	N/A	Remarks (Any NO or N/A item)
1. Signature sheet				
a. Includes the title, signature, and phone number of the Plan Preparer (Qualified Person, Competent Person, such as corporate safety staff person, QC)				
b. Includes the title, signature, and phone number of the Plan Approver (company/corporate officers authorized to obligate the company.)				
c. Includes the name(s), signature(s), and title(s) for Plan Concurrence (provide concurrence of other applicable corporate and project personnel (contractor)) (*e.g. Chief of Operations, Corporate Chief of Safety, Corporate Industrial Hygienist, project manager or superintendent, project safety professional, project QC.*)				
2. Background information				
a. Includes the Contractor Name.				
b. Includes the Contract Number.				
c. Includes the Project Name.				
d. Includes the Brief Project Description.				
e. Includes the location of the project.				
f. Includes the Listing of Phases of Work and Hazardous Activities Requiring an Activity Hazard Analyses (AHA).				
3. Statement of Safety and Health Policy. Includes a copy of current corporate/company Safety and Health Policy Statement, detailing commitment to providing a safe and healthful workplace for all employees. Includes the Contractor's written safety program goals, objectives, and accident experience goals for the current contract.				
4. Responsibilities and Lines of Authorities				
a. Includes a statement of the employer's ultimate responsibility for the implementation of the SOH program				
b. Includes the identification and job responsibilities of personnel responsible for safety - at both corporate and project level – including their resumes.				
c. Includes the lines of authority.				

U.S. Army Corps of Engineers
Safety Inspection Checklist
Accident Prevention Plan

Date of Inspection

Item Description	Yes	No	N/A	Remarks (Any NO or N/A item)
5. Subcontractors and Suppliers				
a. Includes identification of subcontractors and suppliers (if known).				
b. Includes safety responsibilities of subcontractors and suppliers.				
6. Training				
a. Includes requirements for new hire SOH orientation training at the time of initial hire of each new employee.				
b. Includes the list of mandatory training and certifications applicable to this project (*e.g., explosive actuated tools, confined space entry, crane operator, diver; vehicle operator, HAZWOPER training and certification, PPE*) and any requirements for periodic retraining / recertification.				
c. Includes the identity requirements for emergency response training.				
d. Includes the procedures for periodic safety and health training for supervisors and employees				
7. Safety and Health Inspections				
a. Includes the name(s) of individual(s) responsible for conducting safety inspections. (*e.g., PM, safety professional, QC, supervisors, employees*)				
b. Includes proof of inspector's training / qualifications.				
c. Indicates when inspections will be conducted.				
d. Furnished sample forms upon which inspections will be recorded.				
e. Indicates deficiency tracking system and follow-up procedures.				
f. Includes the names of competent and / or qualified person(s) and proof of competency / qualification to meet specific OSHA competent / qualified person(s) requirements.				
g. Includes any external inspections / certifications which may be required. (*e.g., US Coast Guard*)				
8. Accident Reporting				
a. The plan identifies how, when, and who shall complete the Exposure data (man-hours worked).				
b. The plan identifies how, when, and who shall complete accident investigations, reports, and logs.				
c. The plan identifies how, when, and who shall make immediate notification of major accidents.				
9. Plans (Programs, Procedures) required by the Safety Manual				
a. Layout plans (04.A.01)				
b. Emergency response plans:				
(1) Procedures & Test (01.E.01)				
(2) Spill Plans (01.E.01, 06.A.02)				
(3) Fire Fighting Plan (01.E.01, 19.A.04)				
(4) Posting of Emergency Telephone Numbers (01.E.05)				

U.S. Army Corps of Engineers
Safety Inspection Checklist
Accident Prevention Plan

Date of Inspection

Based on a risk assessment of contracted activities and on mandatory OSHA compliance programs, the Contractor shall address all applicable occupational risks and compliance plans. Using the EM 385-1-1 as a guide, plans may include but not be limited to:

Item Description	Yes	No	N/A	Remarks (Any NO or N/A item)
9. Plans (Programs, Procedures) continued.				
(5) Man overboard/abandon ship (19.A.04)				
(6) Medical Support. Outline on-site medical support and off-site medical arrangements including rescue and medical duties for those employees who are to perform them, and the name(s) of on-site Contractor personnel trained in first aid and CPR. A minimum of two employees shall be certified in CPR and first-aid per shift/site (Section 03.A.02; 03.D)				
c. Plan for prevention of alcohol and drug abuse (01.C.02)				
d. Site Sanitation Plan (Section 02)				
e. Access and haul road plan (4.B)				
f. Respiratory Protection Plan (05.G)				
g. Health Hazard Control Program (06.A)				
h. Hazard Communication Program (06.B.01)				
i. Process Safety Management Plan (06.b.04)				
j. Lead Abatement Plan (06.B.05 & specifications)				
k. Asbestos Abatement Plan (06.B.05 & specifications)				
l. Radiation Safety Program (06.E.03.a)				
m. Abrasive blasting (06.H.01)				
n. Heat/Cold Stress Monitoring Plan (06.I.02)				
o. Crystalline Silica Monitoring Plan (Assessment) (06.M)				
p. Night Operations Lighting Plan (07.A.08)				
q. Fire Prevention Plan (09.A)				
r. Wild Land Fire Management Plan (09.K)				
s. Hazardous energy control plan (12.A.01)				
t. Critical Lift Procedures (16.H)				
u. Contingency Plan for Severe Weather (19.A.03)				
v. Float Plan (19.F.04)				
w. Site-Specific Fall Protection & Prevention Plan (21.C)				
x. Demolition plan (to include engineering survey) (23.A.01)				
y. Excavation/trenching plan (25.A.01)				
z. Emergency rescue (tunneling) (26.A.)				
aa. Underground construction fire prevention and protection plan (26.D.01)				
bb. Compressed air plan (26.I.01)				
cc. Formwork and shoring erection and removal plans (27.C)				

U.S. Army Corps of Engineers
Safety Inspection Checklist
Accident Prevention Plan

Date of Inspection

Based on a risk assessment of contracted activities and on mandatory OSHA compliance programs, the Contractor shall address all applicable occupational risks and compliance plans. Using the EM 385-1-1 as a guide, plans may include but not be limited to:

Item Description	Yes	No	N/A	Remarks (Any NO or N/A item)
9. Plans (Programs, Procedures) continued.				
dd. Pre Cast Concrete Plan (27.D)				
ee.Lift slab plans (27.E)				
ff. Steel erection plan (27.F.01)				
gg. Site Safety and Health Plan for HTRW work (28.B)				
hh. Blasting Safety Plan (29.A.01)				
ii. Diving plan (30.A.13)				
jj. Confined space Program (34.A)				
10. Risk Management Processes. Detailed project-specific hazards and controls shall be provided by an Activity Hazard Analysis (0I.A.13) for each major phase/activity of work.				

Other Remarks

REPORT OF OPERATIONS—PIPELINE, DIPPER OR BUCKET DREDGES

REPORTS CONTROL SYMBOL ENGCW-0-13

THRU:	TO:	FROM:	REPORT NO.

CHARACTER OF REPORT ☐ MAINTENANCE ☐ NEW WORK ☐ DAILY ☐ STATUS ☐ COMPLETION ☐ ANNUAL — DATE OR PERIOD

DREDGE

NAME AND TYPE	SIZE → PIPELINE in. dia. disch.	DIPPER OR BUCKET cu. yds. cap.
HORSEPOWER OF → DREDGE PUMP	SUCTION PIPE JET	CUTTER OR BUCKET / PROPULSION
NUMBER OF CREW MEMBERS → DREDGE / SHORE / OTHER PLANT / TOTAL	WORK SCHEDULE → SHIFTS PER DAY	DAYS PER WEEK

PROJECT AND BAR

NAME	AUTH DIMENSIONS → WIDTH	DEPTH	OVERDEPTH
LOCATION (include station numbers)			

CHARACTER OF MATERIAL

ABSOLUTE DENSITY GMS/liter	IN PLACE DENSITY GMS/liter	VOIDS RATIO
GRAIN SIZE $D_{.0}$ MM D_{50} MM D_{90} MM		GEOLOGICAL CLASSIFICATION

CONTRACT OR DREDGING ORDER NUMBER — ☐ CONTRACTOR ☐ HIRED LABOR — TOTAL NO. OF DAYS ON WHICH WORK WAS DONE

CHANNEL CONDITION

AVERAGE DEPTH →	BEFORE DREDGING	AFTER DREDGING	MINIMUM SOUNDING →	BEFORE DREDGING	AFTER DREDGING

RIVER STAGE

MINIMUM	TIME	MAXIMUM	TIME	GAGE LOCATION

WEATHER CONDITION (clear, cloudy, rain, snow, and fog) — VISIBILITY miles — WIND (maximum velocity & direction)

WORK PERFORMED

ITEM	UNIT	QUANTITY
AVERAGE WIDTH OF CUT	FEET	
TOTAL ADVANCE THIS PERIOD	FEET	
TOTAL ADV. PREVIOUS TO THIS PERIOD	FEET	
TOTAL ADVANCE TO DATE	FEET	
FLOATING PIPE: SHORE PIPE:		
TOTAL LENGTH OF DISCHARGE PIPE	FEET	
AVERAGE LIFT	FEET	
AVERAGE PUMP SPEED	R.P.M.	
AVG. DREDGED PER PUMP. HR, GROSS	CU.YDS.	
SCOWS LOADED	NUMBER	
AVERAGE LOAD PER SCOW	CU.YDS.	

CUBIC YARDS REMOVED

AMOUNT DREDGED THIS PERIOD:
(1) GROSS (computed amount)
(2) CREDITED (pay place)

AMOUNT PREVIOUSLY REPORTED:
(1) GROSS (computed amount)
(2) CREDITED (pay place)

TOTAL AMOUNT DREDGED TO DATE:
(1) GROSS (computed amount)
(2) CREDITED (pay place)

ATTENDANT PLANT

ITEM	NAME OR NUMBER	HOURS

NUMBER OF INSPECTIONS	BY DISTRICT PERSONNEL	BY DIV & OCE PERSONNEL

CONTRACT USE ONLY HAS ANYTHING DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM? ☐ NO ☐ YES (If "YES", explain under remarks on back)

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME (chargeable to cost of work)	HOURS	MIN.
PUMPING OR DREDGING		
PCT. OF EFFECTIVE RENTAL TIME %		
BOOSTER (in line) Hrs. Min.		
NON-EFFECTIVE WORKING TIME (chargeable to cost of work)		
HANDLING PIPE LINES		
HANDLING ANCHOR LINES		
CLEARING PUMP AND PIPE LINE		
CLEARING CUTTER OR SUCTION HEAD		
WAITING FOR SCOWS		
TO AND FROM WHARF OR ANCHORAGE		
CHANGING LOCATION OF PLANT ON JOB		
LOSS DUE TO OPPOSING NATURAL ELEMENTS		
LOSS DUE TO PASSING VESSELS		
SHORE LINE AND SHORE WORK		
WAITING FOR BOOSTER		
MINOR OPER. REPAIRS (explain in remarks)		
WAITING FOR ATTENDANT PLANT		
PREPARATION AND MAKING UP TOW		
TRANSFERRING PLANT BETWEEN WORKS		
LAY TIME OFF SHIFT AND SATURDAYS		
SUNDAYS AND HOLIDAYS		
FIRE DRILL		
MISCELLANEOUS (explain in remarks)		
TOTAL NON-EFFECTIVE WORKING TIME		
PCT. OF NON-EFFECTIVE RENTAL TIME %		
TOTAL EFFECTIVE AND NON-EFFECTIVE TIME (chargeable to cost of work)		
PCT. OF TOTAL TIME IN PERIOD %		
LOST TIME (not chargeable to cost of work)		
MAJOR REPAIRS AND ALTERATIONS		
CESSATION		
COLLISIONS		
MISCELLANEOUS (explain in remarks)		
TOTAL LOST TIME		
PERCENTAGE OF TOTAL TIME %		
TOTAL TIME IN PERIOD		

ENG FORM 4267 JAN 70 — REPLACES ENG FORM 28 (Costs), 1 MAR 53, AND ENG FORM 29 (Costs), 1 JAN 62, WHICH ARE OBSOLETE. (ER1125-2-304)

(Signature and Remarks required on reverse side.)

SUMMARY OF COSTS

ITEMS	COST
DIRECT PLANT OPERATING COSTS	
UNIFORM DAILY RATE BASIS *(To be completed when submitting Status and Completion reports.)*	
CHARGES: _____ DAYS AT $ _____ PER DAY *(Item 19, ENG Form 22 (Costs)— adjusted to exclude plant increment cost.)*	
►OR◄	
ACTUAL PLANT COSTS *(To be completed when submitting Annual report.)*	
PAYROLLS *(gross)*	$
SUBSISTENCE & QUARTERS OR PER DIEM & MILEAGE	$
FUEL _____ BARRELS AT $ _____ PER BARREL	$
WATER	$
LUBRICANTS	$
PLANT OWNERSHIP COSTS *(as computed below)*	$
INSURANCE	$
ATTENDANT PLANT	$
MISCELLANEOUS	$
SUBTOTAL—UNIFORM DAILY RATE OR ACTUAL COSTS	$
SUBTOTAL—PLANT UNIT COST $ PER CUBIC YARD.	
SHORE WORK	
SUBTOTAL—SHORE WORK COSTS	$
SUBTOTAL—SHORE WORK UNIT COSTS $ PER CUBIC YARD.	
OTHER COSTS	
SURVEYS	$
INSPECTION AND SUPERVISION	$
OVERHEAD	$
OTHER INDIRECT COSTS	$
SUBTOTAL—OTHER COSTS	$
SUBTOTAL—OTHER UNIT COST $ PER CUBIC YARD.	
GRAND TOTAL—ALL COSTS	$
GRAND TOTAL—ALL UNIT COSTS $ PER CUBIC YARD.	

OPERATING SUPPLIES

COMMODITIES	CONSUMED		INVENTORY	
	UNIT	QUANTITY	QUANTITY	VALUE
FUEL *(oil)*	BBLS			
LUBRICANT *(oil)*	GAL			
LUBRICANT *(grease)*	LBS			
WATER	GAL			
SUBSISTENCE SUPPLIES				
MISCELLANEOUS SUPPLIES				
TOTAL				$

ANNUAL REPORT DATA

(complete when submitting Annual report)

COST PER RENTAL MINUTE *(Based on total operating cost)*	$ _____ per min.
TOTAL COST OF PLANT *(End of F.Y. reporting period)*	$
BOOK VALUE *(End of F.Y. reporting period)*	$
BALANCE IN PLANT ACCOUNT *(End of F.Y. reporting period)*	$
PLANT OWNERSHIP COSTS *(Actual for F.Y. reporting period):*	
DEPRECIATION	$
REPAIRS *(Adjusted)*	$
CESSATION OF WORK	$
SMALL TOOLS, ETC.	$
TOTAL	$

REMARKS

SUBMITTED BY *(Name, title, and signature)*	RECOMMENDED BY *(Name, title, and signature)*	APPROVED BY *(Name, title, and signature)*

U.S. G.P.O. 1980-620-649/512

TRANSPORTATION AND PLACEMENT LOG
CONTRACT NUMBER
PROJECT NAME

DATE: _____

LOAD NUMBER: _____

INSPECTOR: _____

WEATHER CONDITIONS: _____ **WIND SPEED**: _____**VISIBILITY**: _____

TUG NAME: _____ **SCOW NAME**: _____

DESCRIPTION OF MATERIAL: _____

	Date	Time
LOADING STARTED:	_____	_____
LOADING COMPLETED:	_____	_____
SCOW DEPARTED DREDGING SITE:	_____	_____
SCOW ARRIVED DEWATERING SITE:	_____	_____
SCOW DEPARTED DEWATERING SITE:	_____	_____
SCOW ARRIVED PROCESSING SITE:	_____	_____
SCOW DEPARTED PROCESSING SITE:	_____	_____

COMMENTS: _____
_____
_____
_____
_____

_____
Inspector Signature/date

DAILY SITE SAFETY & HEALTH INSPECTION LOG

Project:

Date: _____

Dredges, Scows, and other Work Areas Checked:

_____
_____
_____
_____
_____

Names of All Employees in the Work area

_____ _____
_____ _____
_____ _____
_____ _____

Personal Protective Equipment and Work Equipment in Use

_____
_____
_____
_____
_____

Special Safety and Health Issues & Notes

_____
_____
_____
_____
_____
_____

_____ _____
Name of Safety Personnel Signature of Safety Personnel

STANDARD AND SPECIFICATIONS FOR SILT FENCE

Definition

A temporary barrier of geotextile fabric (filter cloth) used to intercept sediment laden runoff from small drainage areas of disturbed soil.

Purpose

The purpose of a silt fence is to reduce runoff velocity and effect deposition of transported sediment load. Limits imposed by ultraviolet stability of the fabric will dictate the maximum period the silt fence may be used.

Conditions Where Practice Applies

A silt fence may be used subject to the following conditions:

1. Maximum allowable slope lengths contributing runoff to a silt fence are:

Slope Steepness	Maximum Slope Length (Ft)
2:1	50
3:1	75
4:1	125
5:1	175
Flatter than 5:1	200

2. Maximum drainage area for overland flow to a silt fence shall not exceed 1/2 acre per 100 feet of fence; and
3. Erosion would occur in the form of sheet erosion; and
4. There is no concentration of water flowing to the barrier.

Design Criteria

Design computations are not required. All silt fences shall be placed as close to the area as possible, and the area below the fence must be undisturbed or stabilized.

A detail of the silt fence shall be shown on the plan, and contain the following minimum requirements:

1. The type, size, and spacing of fence posts.
2. The size of woven wire support fences.
3. The type of filter cloth used.
4. The method of anchoring the filter cloth.
5. The method of fastening the filter cloth to the fencing support.

Where ends of filter cloth come together, they shall be overlapped, folded and stapled to prevent sediment bypass. See Figure 5A.9 on page 5A.20 for details.

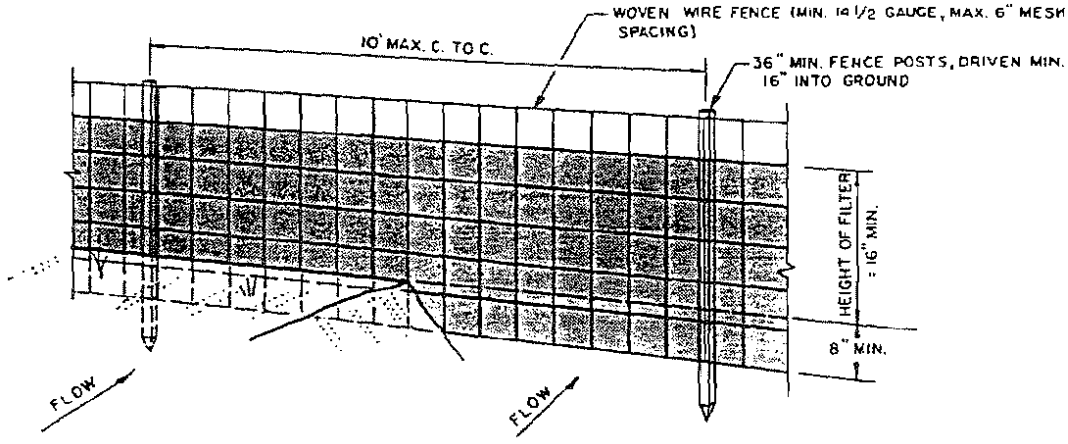
Criteria for Silt Fence Materials

1. Silt Fence Fabric: The fabric shall meet the following specifications unless otherwise approved by the appropriate erosion and sediment control plan approval authority. Such approval shall not constitute statewide acceptance. Statewide acceptability shall depend on in field and/or laboratory observations and evaluations.

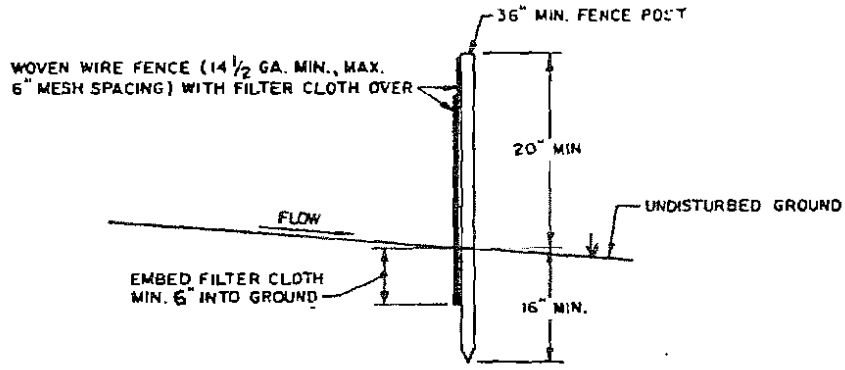
Fabric Properties	Minimum Acceptable Value	Test Method
Grab Tensile Strength (lbs)	90	ASTM D1682
Elongation at Failure (%)	50	ASTM D1682
Mullen Burst Strength (PSI)	190	ASTM D3786
Puncture Strength (lbs)	40	ASTM D751 (modified)
Slurry Flow Rate (gal/min/sf)	0.3	
Equivalent Opening Size	40-80	US Std Sieve CW-02215
Ultraviolet Radiation Stability (%)	90	ASTM G-26

2. Fence Posts (for fabricated units): The length shall be a minimum of 36 inches long. Wood posts will be of sound quality hardwood with a minimum cross sectional area of 3.0 square inches. Steel posts will be standard T and U section weighing not less than 1.00 pound per linear foot.
3. Wire Fence (for fabricated units): Wire fencing shall be a minimum 14-1/2 gage with a maximum 6 in. mesh opening, or as approved.
4. Prefabricated Units: Envirofence or approved equal may be used in lieu of the above method providing the unit is installed per details shown in Figure 5A.9.

Figure 5A.9
Silt Fence Details



PERSPECTIVE VIEW



SECTION

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE

POSTS: STEEL EITHER "T" OR "U" TYPE OR 2" HARDWOOD

FENCE: WOVEN WIRE, 14 1/2 GA. 6" MAX. MESH OPENING

FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE SYRACUSE, NEW YORK	SILT FENCE	STANDARD SYMBOL

Table 1. DGPS Coordinates

Core Name	Northings	Eastings
A	1428847.0	711024.3
B	1428942.2	711099.8
C	1429095.6	711155.8
D	1429257.8	711206.1

Table 2. Sample Identification and Compositing Scheme

Core Name	ASI ID #	Amended ID
A	20250716	Amended A 20250720
B	20250717	Amended B 20250721
C	20250718	Amended C 20250722
D	20250719	Amended D 20250723

Table 3. Grain Size Distribution, Percent Moisture & TOC

Sample ID	ASI #	Total % Gravel	Total % Sand	Total % Silt	Total % Clay	% Moisture	TOC ppm	% TOC of Dry Weight
A	20250716	1.1	42.8	42.8	13.3	44.15	22,998	2.30
B	20250717	0.6	20.7	62.4	16.3	50.56	46,029	4.60
C	20250718	2.5	33.8	50.1	13.6	45.77	23,338	2.33
D	20250719	3.3	51.9	35.0	9.8	40.70	16,457	1.65
D	20250719 dup	3.3	51.8	34.7	10.2	40.41		
D	20250719 trp	3.4	52.0	34.3	10.3	41.82		

Troy, NY Dredging Area
mg/kg

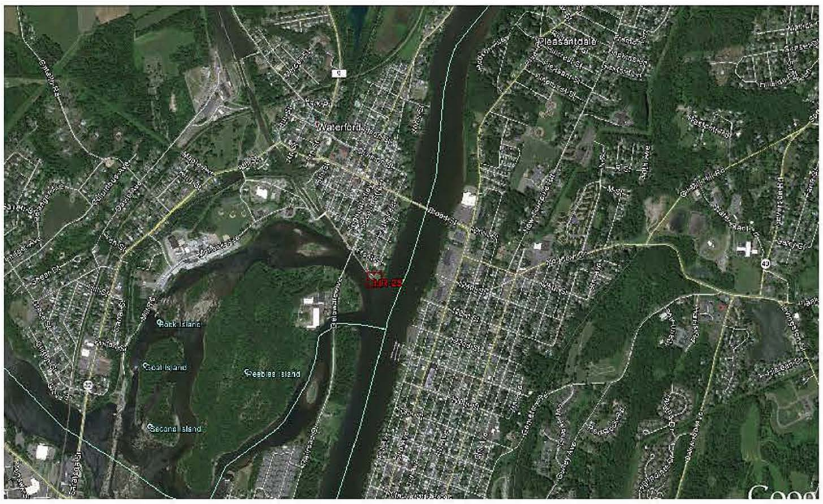
ASI ID	#20250716		#20250717		#20250718		#20250419	
Composite ID	COMP A	Q	COMP B	Q	COMP C	Q	COMP D	Q
Analyte	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
Benzene	0.00086	U	0.00097	U	0.00095	U	0.001	U
Toluene	0.00035	U	0.01		0.0021		0.00041	UF1
Xylenes(Total)	0.00026	U	0.0008	JB	0.00033	JB	0.00031	UF1
Total BTX	0.000735		0.011285		0.002905		0.00086	
Naphthalene	0.063		0.0083		0.0042	J	0.004	J
Acenaphthylene	0.0079		0.0098		0.015		0.0092	
Acenaphthene	0.046		0.0019	U	0.0036	J	0.0041	J
Fluorene	0.047		0.0092		0.0071		0.0059	
Phenanthrene	0.28		0.049		0.068		0.055	
Anthracene	0.043		0.013		0.018		0.019	
Fluoranthene	0.61		0.086		0.14		0.15	
Pyrene	0.42		0.086		0.12		0.11	
Benzo(a)anthracene	0.2		0.044		0.063		0.066	
Chrysene	0.2		0.048		0.063		0.069	
Benzo(b)fluoranthene	0.2		0.066		0.085		0.094	
Benzo(k)fluoranthene	0.063		0.02		0.033		0.03	
Benzo(a)pyrene	0.1		0.037		0.057		0.058	
Indeno(1,2,3-cd)pyrene	0.057		0.026		0.039		0.04	
Dibenzo(a,h)anthracene	0.02		0.009		0.013		0.013	
Benzo(ghi)perylene	0.071		0.033		0.047		0.05	
Total PAH	2.4279		0.54525		0.7759		0.7772	
Dieldrin	0.019	U	0.000021	U	0.0002	U	0.000018	UF1F2
4,4'-DDE	0.015	U	0.000017	U	0.00017	U	0.000015	U
4,4'-DDD	0.016	U	0.000017	U	0.00017	U	0.000043	Jp
4,4'-DDT	0.053	U	0.000059	U	0.0011	p	0.000052	U
DDT+DDD+DDE	0.0685	U	0.0000465	U	0.00127		0.0000765	
Chlordane	0.018	U	0.00002	U	0.000195	U	0.0000175	UF1F2
Mirex	0.054	U	0.00006	U	0.00059	U	0.000053	U
Aroclor-1016	0.0024	U	0.027	U	0.0027	U	0.00024	UF1
Aroclor-1221	0.0026	U	11		1.9		0.00026	U
Aroclor-1232	0.0018	U	0.02	U	0.002	U	0.00018	U
Aroclor-1242	0.8		8.6		1.1		0.2	
Aroclor-1248	0.0018	U	0.02	U	0.002	U	0.00018	U
Aroclor-1254	0.0022	U	0.025	U	0.0025	U	0.2	
Aroclor-1260	0.045		0.37		0.083		0.00021	U
Total PCB	0.85		20		3.1		0.4	
Arsenic	4.2		5.9		4.8		3.8	
Cadmium	1		18		3.9		0.58	
Copper	30		71		41		28	
Lead	39		230		78		34	
Mercury	0.16		2.3		0.65		0.34	F2F1
Dioxin (Toxic Equiv Total)	0.000011061		0.00007441		0.00004351		0.000007891	

Totals:
1) include estimated values, those reported with a J qualifier
2) If a concentration of a specific contaminant is reported as 'non-detect' or less than, and the method detection limit was not achieved, then the detection limit is used as an estimate of the maximum possible concentration.
3) If a concentration of a specific contaminant is reported as 'non-detect' or less than, and the detection limit achieved was at or below the method detection limit, then half the achieved detection limit is used as an estimate of the concentration.
4) Chlordane = sum of alpha and gamma chlordane

USACE Survey Monument Archival & Retrieval Tool Datasheet

Type: New

Designation: HR-25
Project: HUDSON RIVER NY (GAUGE 25)
Stamping: HR-25 (2016)
PID **NGS:** _____ **COE:** _____
State: New York
County: SARATOGA
District: New York
Nearest Town: WATERFORD
USGS Quad: TROY NORTH (2016)
T.R.S.: _____
Nearest Hwy/Mi: Front St / First St
Date Recovered: 08/23/2016
By: ROGERS SURVEYING, PLLC
Condition/Stability: Good A
Setting/Monument Type: USACE DISK
Owner: _____
GPS Suitable: (●) Yes ( ) No
Obstructions: ☐ N ☐ E ☐ S ☐ W
Magnetic: ( ) Yes (●) No



- Horizontal -

Datum: NAD83 (2011)
Lat: 42°47'07.88060" N
Lon: 073°40'39.12845" W
Local Accuracy: 5-cm
NSRS Accuracy: 5-cm
Survey/Computation Method: Static GPS Network
Date Observed: 08/23/2016

- Vertical -

Datum: NAVD88 (2012.00)
Elevation Ht: 22.4 Ft
Ellip Ht: -80.26
Local Accuracy: 5-cm
NSRS Accuracy: 0.25'
Survey/Computation Method: Static GPS Network
Date Observed: 08/23/2016 Geoid12A

Access:

- Tidal/Hydraulic Gage Relationships -

Owner:	Gage ID:	- Elevation -	- Datum -	Epoch:

Description/Comments: USACE DISK SET IN TOP OF CONCRETE BULKHEAD WALL, WEST OF BOAT RAMP AT THE CONFLUENCE OF THE ERIE CANAL AND THE HUDSON RIVER, ON THE NORTH SIDE OF THE ERIE CANAL AND ON THE WEST SIDE OF THE HUDSON RIVER, IN WATERFORD, NEW YORK. ACCESS TO BOAT RAMP IS FROM THE INTERSECTION OF FRONT ST AND FIRST ST.

Zone 1: _____ **Northing 1:** _____ USFT **Easting 1:** _____ USFT
Zone 2: _____ **Northing 2:** _____ USFT **Easting 2:** _____ USFT

- Horizon/Setup View -

- Close-Up View-

Required Fields In Red

Reset Form Submit

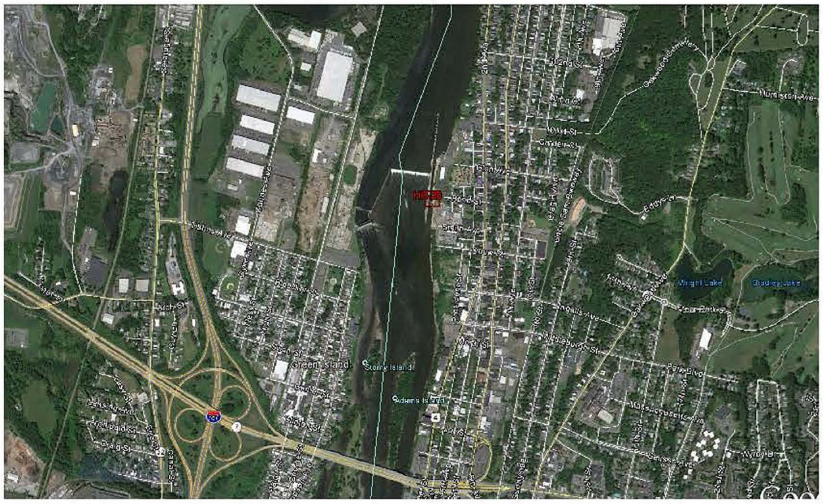
System Fields in Green

U-SMART ver 5.1
31 MAR 2014

USACE Survey Monument Archival & Retrieval Tool Datasheet

Type: New

Designation: HR-26
Project: HUDSON RIVER NY (GAUGE 26)
Stamping: LOCK 92
PID NGS: _____ **COE:** _____
State: New York
County: RENSSELAER
District: New York
Nearest Town: TROY
USGS Quad: TROY NORTH (2016)
T.R.S.: _____
Nearest Hwy/Mi: Bond St / Turner St
Date Recovered: 08/24/2016
By: ROGERS SURVEYING, PLLC
Condition/Stability: Good A
Setting/Monument Type: USACE DISK
Owner: _____
GPS Suitable: (•) Yes ( ) No
Obstructions: [ ] N [ ] E [ ] S [ ] W
Magnetic: ( ) Yes (•) No



- Horizontal -

Datum: NAD83 (2011)
Lat: 42°45'02.96601" N
Lon: 073°41'07.47649" W
Local Accuracy: 5-cm
NSRS Accuracy: 5-cm
Survey/Computation Method: Static GPS Network
Date Observed: 08/24/2016

- Vertical -

Datum: NAVD88 (2012.00)
Elevation Ht: 23.12 Ft
Ellip Ht: -79.61
Local Accuracy: 5-cm
NSRS Accuracy: 0.25'
Survey/Computation Method: Static GPS Network
Date Observed: 08/24/2016 Geoid12A

Access:

- Tidal/Hydraulic Gage Relationships -

Owner:	Gage ID:	- Elevation -	- Datum -	Epoch:

Description/Comments: USACE DISK SET IN CONCRETE WALK ADJACENT TO AND ON THE EAST SIDE OF THE TROY LOCK, APPROXIMATELY 40 FT NORTH OF THE SOUTH LOCK GATES, AND ON THE EAST SIDE OF THE HUDSON RIVER. ACCESS FROM THE INTERSECTION OF BOND ST AND TURNER ST, IN TROY, NEW YORK.

Zone 1: _____ **Northing 1:** _____ USFT **Easting 1:** _____ USFT
Zone 2: _____ **Northing 2:** _____ USFT **Easting 2:** _____ USFT

- Horizon/Setup View -

- Close-Up View-

Required Fields In Red

Reset Form Submit

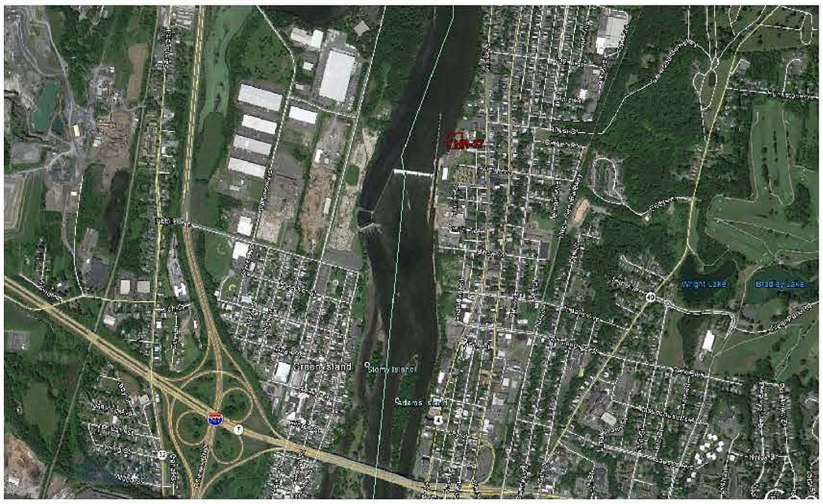
System Fields in Green

U-SMART ver 5.1
31 MAR 2014

USACE Survey Monument Archival & Retrieval Tool Datasheet

Type: New

Designation: HR-27
Project: HUDSON RIVER NY (GAUGE 27)
Stamping: HR 27 (2016)
PID **NGS:** _____ **COE:** _____
State: New York
County: RENSSELAER
District: New York
Nearest Town: TROY
USGS Quad: TROY NORTH (2016)
T.R.S.: _____
Nearest Hwy/Mi: Bond St / Turner St
Date Recovered: 08/25/2016
By: ROGERS SURVEYING, PLLC
Condition/Stability: Good A
Setting/Monument Type: USACE DISK
Owner: _____
GPS Suitable: (•) Yes ( ) No
Obstructions: [ ] N [ ] E [ ] S [ ] W
Magnetic: ( ) Yes (•) No



- Horizontal -

Datum: NAD83 (2011)
Lat: 42°45'11.04421" N
Lon: 073°41'03.42636" W
Local Accuracy: 5-cm
NSRS Accuracy: 5-cm
Survey/Computation Method: Static GPS Network
Date Observed: 08/25/2016

- Vertical -

Datum: NAVD88 (2012.00)
Elevation Ht: 23.15 Ft
Ellip Ht: -79.58
Local Accuracy: 5-cm
NSRS Accuracy: 0.25'
Survey/Computation Method: Static GPS Network
Date Observed: 08/25/2016 Geoid12A

Access:

- Tidal/Hydraulic Gage Relationships -

Owner:	Gage ID:	- Elevation -	- Datum -	Epoch:

Description/Comments: USACE DISK SET IN CONCRETE BULKHEAD NORTH OF ASPHALT PAVEMENT ON NORTH SIDE OF TROY LOCKS, APPROXIMATELY 400 FT NORTH OF THE NORTH LOCK GATES, AND ON THE EAST SIDE OF THE HUDSON RIVER. ACCESS FROM THE WEST END OF GLEN AVENUE, IN TROY, NEW YORK.

Zone 1: _____ **Northing 1:** _____ USFT **Easting 1:** _____ USFT
Zone 2: _____ **Northing 2:** _____ USFT **Easting 2:** _____ USFT

- Horizon/Setup View -

- Close-Up View-

Required Fields In Red

Reset Form Submit

System Fields in Green

U-SMART ver 5.1
31 MAR 2014

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
Maintenance Dredging of East Rockaway Inlet, NY

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAG # RAPH	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)		(q)	(r)
		00 73 00	SD-01 Preconstruction Submittals																
			Order of work	1.60															
			Accident prevention plan	1.60	G														
			Site Safety Layout Plan; G																
			Quality control plan	1.60	G														
			Letter appointing superintendent	1.60															
			List of subcontractors	1.60															
			Environmental protection plan	1.60	G														
			Progress schedule	1.60	G														
			Submittal register	1.60															
			List of proposed products	1.60	G														
			Work plan	1.60															
		01 11 00	SD-01 Preconstruction Submittals																
			Work Plan;G																
			Order of Work																
			Submittal Register																
			Progress Schedule;G																
			List of Subcontractors																
			Accident Hazard Analysis; G																
			Accident Prevention Plan; G																
			Site Safety Layout Plan; G																
			Quality Control Plan;G																
			Environmental Protection Plan; G																
			List of Proposed Products; G																
			Notice to Mariners;G																
			Letter Appointing Superintendent																

EXAMPLE ONLY

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
Maintenance Dredging of East Rockaway Inlet, NY

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAG # PARAPH	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY					MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 30 00	SD-01 Preconstruction Submittals															
			Project Schedule		G													
			SD-03 Product Data															
			Monthly Progress Report	1.4														
			Project Schedule Status Report	1.4														
		01 33 00	SD-01 Preconstruction Submittals															
			Submittal Register															
		01 35 26	SD-01 Preconstruction Submittals															
			Accident Prevention Plan (APP)	1.7	G	RO												
			Activity Hazard Analysis (AHA);															
			G, RO															
			Critical Lift Plan	1.7.2.3	G	RO												
			Proof of qualifications for Crane															
			Operators; G, RO															
			SD-06 Test Reports															
			Monthly Exposure Reports	1.4														
			Notifications and Reports	1.13														
			Accident Reports	1.13.2	G	RO												
			LHE Inspection Reports	1.13.3														
			SD-07 Certificates															
			Contractor Safety Self-Evaluation															
			Checklist															
			Crane Operators/Riggers	1.6.1.5														
			Standard Lift Plan	1.7.2.2	G	RO												
			Critical Lift Plan	1.7.2.3	G	RO												
			Naval Architecture Analysis	1.7.2.3	G	RO												

EXAMPLE ONLY

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
Maintenance Dredging of East Rockaway Inlet, NY

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAG # RAPH	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
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(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)		(q)	(r)
		01 35 26	Activity Hazard Analysis (AHA)	1.9															
			Confined Space Entry Permit	1.10.1															
			Hot Work Permit	1.10.1															
			Certificate of Compliance	1.13.4															
			Third Party Certification of																
			Barge-Mounted Mobile Cranes																
			License Certificates	1.15															
			Radiography Operation Planning	1.15.1	G	RO													
			Work Sheet																
			Machinery & Mechanized																
			Equipment Certification Form																
		01 45 00.00 20	SD-01 Preconstruction Submittals																
			Construction Quality Control (QC)	1.6.1	G														
			Plan																
		01 57 20.00 10	SD-01 Preconstruction Submittals																
			Environmental Protection Plan	1.7	G														
		35 20 23	SD-02 Shop Drawings																
			Submerged Pipeline	3.2.6.4															
			Soundings or Sweepings	3.3.1															

EXAMPLE ONLY

SECTION 00 90 02

WATER QUALITY AND NYS PARKS
PERMIT

02/26

PART 1 GENERAL

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

The following attachments have been provided for reference to the bidder for use in performing the contract requirements.

3.1.1 WATER QUALITY CERTIFICATE

The current Water Quality Certificate (9 pages) for the maintenance dredging of the Hudson River Federal Navigation Project is attached.

The contractor must comply with all conditions of the Water Quality Certification.

-- End of Section --

NEW YORK STATE | Department of Environmental Conservation

KATHY HOCHUL
Governor

AMANDA LEFTON
Commissioner

April 28, 2026

Devon Hinds, Project Manager
USACE, New York Division, Albany Field Office
1 Bond Street
Troy, New York 12180
Emailed to: devon.hinds@usace.army.mil

Re: Section 401 Water Quality Certification
DEC # 4-3817-00148
Facility: Troy Lock and Dam
East Side of Hudson River
City of Troy, Rensselaer County

Dear Devon Hinds:

The permit you applied for is enclosed, it is valid for only those activities authorized, is **effective on April 28, 2026, and will expire on April 28, 2028**. Please review General and Special conditions carefully. Work beyond the scope of the permit and the approved project plans may be considered a violation and subject to appropriate enforcement action.

Please be advised that the Uniform Procedures Regulations (6 NYCRR Part 621) provide that an applicant may request a public hearing if a permit is denied or contains conditions they deem unacceptable. Any such request must be made in writing within 30 calendar days of the permit issuance date and addressed to the Regional Permit Administrator at the letterhead address. A copy should also be sent to the Chief Administrative Law Judge at NYSDEC, 625 Broadway, 1st Floor, Albany, NY 12233-1550.

Also note that this permit does not eliminate the need to obtain any other federal, state, or local permits or approvals that may be required for this project. Please feel free to contact me by email at patrick.connally@dec.ny.gov or by phone at (518) 357-2455 if you have any questions or concerns.

Sincerely,

Patrick S. Connally

Patrick S. Connally
Deputy Regional Permit Administrator

Encl.: Permit

ecc: James Malcolm, NYSDEC R4 DOW
Theresa Swenson, NYSDEC R4 BOH
Jon Whitcomb, NYSDEC R4 DMM

PERMIT

Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
US DEPT OF THE ARMY
THE PENTAGON

WASHINGTON, DC 20310

Facility:
TROY LOCK & DAM BOAT RAMP
1 Bond St|E Side Of River, Just N Of Lock And Dam
Troy, NY 12180

Facility Location: in TROY in RENSSELAER COUNTY
Facility Principal Reference Point: NYTM-E: 607.626 NYTM-N: 4734.168
Latitude: 42°45'09.0" Longitude: 73°41'05.5"

Authorized Activity: A one-time maintenance dredge of approximtely 10,000 cubic yards of navigational dredge material (NDM) within the Class C Hudson River, adjacent to the Troy Federal Dam. A silt curtan will be used to isolate the work area from the rest of the Hudson River. All NDM will be taken to a temporary dewatering area on the parcel owned by the Army Corps of Engineers and located adjacent to the dredge location as indicated on the final plans referenced in Condition # 1 of this permit. Final disposal of all NDM must be at a site that is approved by the New York State Department of Environmental Conservation (DEC), prior to dredging.

Permit Authorizations

Water Quality Certification - Under Section 401 - Clean Water Act
Permit ID 4-3817-00148/00004
New Permit Effective Date: 4/28/2026 Expiration Date: 4/28/2028

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: PATRICK CONNALLY, Deputy Regional Permit Administrator
Address: NYSDEC Region 4 Headquarters
1130 N Westcott Rd
Schenectady, NY 12306

Authorized Signature: Patrick S. Connally Date 04/ 28 /2026

Distribution List

James Malcolm, NYSDEC R4 DOW
Theresa Swenson, NYSDEC R4 BOH
Jon Whitcomb, NYSDEC R4 DMM

Permit Components

NATURAL RESOURCE PERMIT CONDITIONS

WATER QUALITY CERTIFICATION SPECIFIC CONDITION

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Permit Attachments

Facility Location Map
Site Plan 4/27/2026

NATURAL RESOURCE PERMIT CONDITIONS - Apply to the Following Permits: WATER QUALITY CERTIFICATION

1. **Conformance With Plans** All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or applicant's agent as part of the permit application. Such approved plans consist of a 3-sheet plan set titled "Maintenance Dredging Hudson River," prepared by the US Army Corps of Engineers New York District, dated April 1, 2026, and received by DEC on April 27, 2026 (2026.04.27 Site Plan).

2. **Dewatering Plan** Prior to commencement of any in-water work, a dewatering plan must be submitted for approval by DEC Staff. Plans should be submitted electronically to:

James Malcolm, NYSDEC
1130 North Westcott Road
Schenectady, NY 12306
james.malcolm@dec.ny.gov

3. **Disposal Site Approval** Dredged material needs to be disposed of at an upland disposal site that is approved by DEC Staff prior to dredging. Final disposal plans shoulde include transportation route, transportation method, and proposed final disposal location and should be submtted electronically to:

Jonathan Whitcomb, NYSDEC
1130 North Westcott Road
Schenectady, NY 12306
jonathan.whitcomb@dec.ny.gov

4. **PCB Contaminated Areas** Dredging in areas that contain PCB concentrations equal to or greater than 1 milligram per kilogram (mg/kg) is prohibited under this permit, without written approval from NYSDEC. Proposed dredging in the vicinity of sediment analysis results showing PCBs ≥1 mg/kg will require a detailed description of the measures which will be employed to manage contaminants in a separately submitted DredgeManagement Plan.

5. **Operation in Water** Construction equipment including, but not limited to, excavators, dump trucks, and bulldozers are prohibited from operating in the water unless approved by the Department.

6. **Water Quality Monitoring** Monitoring activities shall be conducted down-current of dredging operations and at a location up-current and out of the influence of the dredging operations.

7. **Water Quality Standards (WQS)** WQS in Table 1 must be achieved 500 feet down current of the dredging operation. Where background concentrations of TSS exceed 100 mg/L, the limit is 100 mg/L above ambient. Background measurement shall be made prior to commencement of dredging.

Parameter	Limit	Units	Sample Frequency	Sample Type	Method
Turbidity (visual)	No increase that will cause a substantial visible contrast to natural conditions.	NA	Four times per day during active dredging.	Visual	NA
Total Suspended Solids (TSS)	100 mg/L above ambient None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages.	mg/L	One time within 72 hours of initiation of hydraulic dredging, and daily whenever turbidity is exceeded.	Grab	SM 2540D

Table 1

8. **Visual Monitoring of Turbidity** Visual monitoring of turbidity shall be conducted to determine if dredging causes a substantial visible contrast to natural conditions in the receiving waterbody and recorded at least four times per day.

9. **Initial Laboratory Analysis of Total Suspended Solids (TSS)** The initial laboratory analysis of TSS shall be conducted by an Environmental Laboratory Accreditation Program (ELAP) certified laboratory within 24-72 hours of the onset of dredging. If there is an exceedance of turbidity, TSS monitoring must be conducted daily until such time as turbidity returns to natural conditions.

10. Alternative Dredging Method If it becomes necessary to alter the dredging method (i.e., to mechanical dredging using an environmental bucket), USACE/their contractors shall:

1. Immediately notify NYSDEC;
2. Develop and submit a revised Dredge Plan; and
3. Comply with any additional monitoring required by NYSDEC.

11. Additional In-Water Monitoring Requirements NYSDEC reserves the right to modify and/or add to the monitoring parameters and/or frequency specified in Table 1 on a case-by-case basis whenever a new or revised dredge plan is submitted to NYSDEC for review. If there are water quality limiting substances in the dredged sediment or levels in the sediment at higher concentrations than Class A values, USACE may be required to monitor for equivalent parameters at the frequency deemed appropriate by the NYSDEC. The analytical laboratory quantitation levels for monitored parameters must be low enough to allow a meaningful evaluation of the concentration of the analytes. Methods must also be approved in 40 CFR 136 and performed by a laboratory with NYS ELAP certification for that method. USACE/their contractors may use a different method if the method is proposed to, and approved by, NYSDEC in writing.

Any additional monitoring requirements imposed due to the presence of water quality limiting substances must be achieved 500 feet down current of the dredging operation. Where background concentrations exceed WQS, the limit is 30% above background, with the exception of the TSS limit, which shall be 100 mg/L above background. Background measurements shall be made prior to commencement of dredging. Relief from additional in-water monitoring requirements can be afforded if USACE/their contractors demonstrate that there are no permit limit exceedances during the first two weeks of monitoring, and after written approval from the NYSDEC.

Any additional monitoring parameters will be based on the results of the most recent sediment sampling analysis (within the previous five years) for the specific mile points indicated. If sediment sampling and analysis has not been done for a given location within the past five years, an updated Sediment Sampling and Analysis Plan must be submitted and approved by NYSDEC, and sample analysis results must be submitted to NYSDEC for consideration.

12. In-Water Monitoring Limits If a permit limit or additional monitoring limit (Condition 24) is exceeded, the following steps shall be taken:

1. Immediately notify NYSDEC of the exceedance;
2. Implement immediate corrective actions to restore the in-water quality to acceptable levels (e.g., decreasing dredging speed);
3. Develop a Corrective Action Plan (CAP) and provide it to NYSDEC within twenty-four (24) hours of the exceedance; and
4. During implementation of corrective action, comply with any additional monitoring required by NYSDEC, including the turbidity monitoring required in the above condition, until NYSDEC approves resumption of routine monitoring (Table 1). Collection of additional samples may be required until NYSDEC approves resumption of routine monitoring.

13. Water Quality Monitoring Documentation USACE shall maintain and document the results of the visual monitoring, meter, and laboratory measurements. Documentation of any exceedances and any corrective actions shall be reported as part of the annual post-dredging report.

14. Discharge of Dredging Return Waters Any return waters discharged under this authorization are to be directly discharged into the receiving waters through the established outfall as soon as practicable without impacting compliance with water quality permit conditions. Any return waters an alternative dredging method, such as from mechanical dredging, are to be held and allowed appropriate time to settle prior to discharge from barges or scows, consistent with the condition below.

15. Appropriate Retention Time The retention time of dredge return waters shall ensure the return flow does not result in an increase in turbidity in the receiving waterbody that will cause a substantial visible contrast to natural conditions, consistent with the effluent limitations noted below.

16. Flocculant Use Requires NYSDEC Approval A flocculant may be added to enhance settling for return waters. If a flocculant is proposed to be used, the form "Water Treatment Chemical Usage Notification Requirements for SPDES Permittees" (WTC Form) must be submitted and approved by NYSDEC prior to its use. Additional information on submission and review of WTC Forms can be foundat: https://dec.ny.gov/regulatory/permits-licenses/wastewater-stormwater-water-withdrawal/spdes-permit-program/spdes-permitting-water-treatment-chemicals.

17. Discharge Monitoring Requirements Any discharge to surface water shall be monitored at the point of discharge to assess the effectiveness of retention time for prevention of solids and associated contaminant transport back into the receiving water. USACE/their contractors shall conduct monitoring once return water starts to flow as noted in Table 2. Real time turbidity results (meter or visual) shall be evaluated immediately by the USACE/their contractors. Initial laboratory analysis of TSS shall be conducted by an ELAP certified laboratory within 24-72 hours of the onset of return water discharge and subsequently once every two weeks thereafter as long as there are no exceedances of turbidity. If there is a turbidity exceedance, TSS monitoring must be done daily until such time as turbidity returns to natural conditions (see condition below). At a minimum, two samples must be analyzed for each discharge event.

Table 2: Routine Return Water Monitoring Requirements

Parameter	Limit	Units	Sample Frequency	Sample Type	Method
Turbidity (visual)	No increase that will cause a substantial visible contrast to natural conditions.	NA	Twice per day during active discharge.	Visual	NA
Turbidity (meter)	250	NTU	Twice per day during active discharge.	In-situ	Meter specific
Total	100 mg/L	mg/L	Within 72	Grab	SM 2540D

Suspended Solids (TSS)	above ambient None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for the best usages.		hours of start of discharge, then bi-weekly thereafter with no turbidity exceedance.		

18. Additional Discharge Monitoring Requirements NYSDEC reserves the right to modify and/or add to the monitoring parameters and/or frequency specified in Table 2 on a case-by-case basis whenever a new or revised dredge plan is submitted to NYSDEC for review. If there are water quality limiting substances in the dredged sediment or levels in the sediment at higher concentrations than Class A values, USACE may be required to monitor for these parameters at the frequency deemed appropriate by the NYSDEC. The analytical laboratory quantitation levels for monitored parameters must be low enough to allow a meaningful evaluation of the concentration of the analytes.Methods must also be approved in 40 CFR 136 and performed by a laboratory with NYS ELAP certification for that method. NYSCC may use a different method if the method is proposed to, and approved by, NYSDEC in writing.

Relief from additional discharge monitoring requirements can be afforded if the USACE demonstrates that there are no permit limit exceedances during the first two weeks of monitoring, and after written approval from the NYSDEC.

Any additional monitoring parameters will be based on the results of the most recent sediment sampling analysis (within the previous five years) for the specific mile points indicated. If sediment sampling and analysis has not been done for a given location within the past five years, an updated Sediment.

19. Exceedances of Return Flow Limits If the level of a monitored parameter in the UDS return flow exceeds the water quality standards listed above in Table 2, or as otherwise assigned by NYSDEC per Condition 40, the following steps shall be taken:

1. Implement immediate corrective actions to restore the discharge parameters to acceptable levels (e.g., increasing hold time or addition of flocculent to enhance settling).
2. During implementation of corrective action, comply with NYSDEC additionally requested monitoring or sampling, including as specified in Condition 39, until there is no longer a discharge of effluent from the site or until NYSDEC approves resumption of routine monitoring (Table 2).
3. If implementation of corrective actions does not reduce the turbidity and TSS to an acceptable level, discharge shall cease until a solution acceptable to NYSDEC and the USACE is agreed upon.

20. Precautions Against Contamination of Waters All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.

WATER QUALITY CERTIFICATION SPECIFIC CONDITIONS

1. Water Quality Certification The authorized project, as conditioned pursuant to the Certificate, complies with Section 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act, as amended and as implemented by the limitations, standards, and criteria of state statutory and regulatory requirements set forth in 6 NYCRR Section 608.9(a). The authorized project, as conditioned, will also comply with applicable New York State water quality standards, including but not limited to effluent limitations, best usages and thermal discharge criteria, as applicable, as set forth in 6 NYCRR Parts 701, 702, 703, and 704.

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. Facility Inspection by The Department The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

2. Relationship of this Permit to Other Department Orders and Determinations Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. Applications For Permit Renewals, Modifications or Transfers The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator
NYSDEC Region 4 Headquarters
1130 N Westcott Rd
Schenectady, NY12306

4. Submission of Renewal Application The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Water Quality Certification.

5. Permit Modifications, Suspensions and Revocations by the Department The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

a. materially false or inaccurate statements in the permit application or supporting papers;

b. failure by the permittee to comply with any terms or conditions of the permit;

c. exceeding the scope of the project as described in the permit application;

d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;

e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

6. Permit Transfer Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

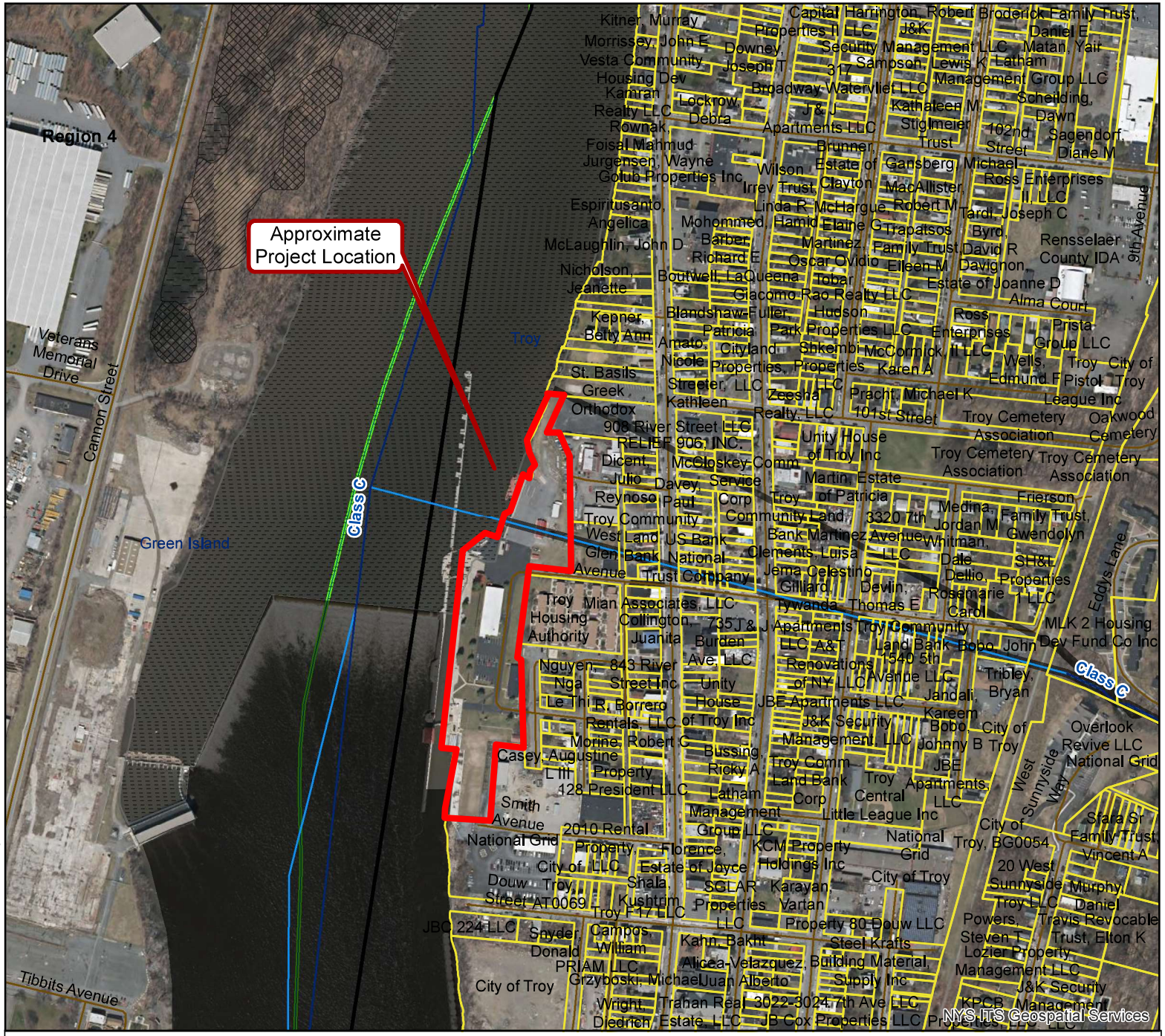
Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification
The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit
The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the

permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits
The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights
This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.



NYS RESOURCES AND PROJECT LOCATION MAP

DEC # 4-3817-00148
Facility: Troy Lock & Dam
16 Bond Street
City / Village of Troy
Rensselaer County

April 27, 2026

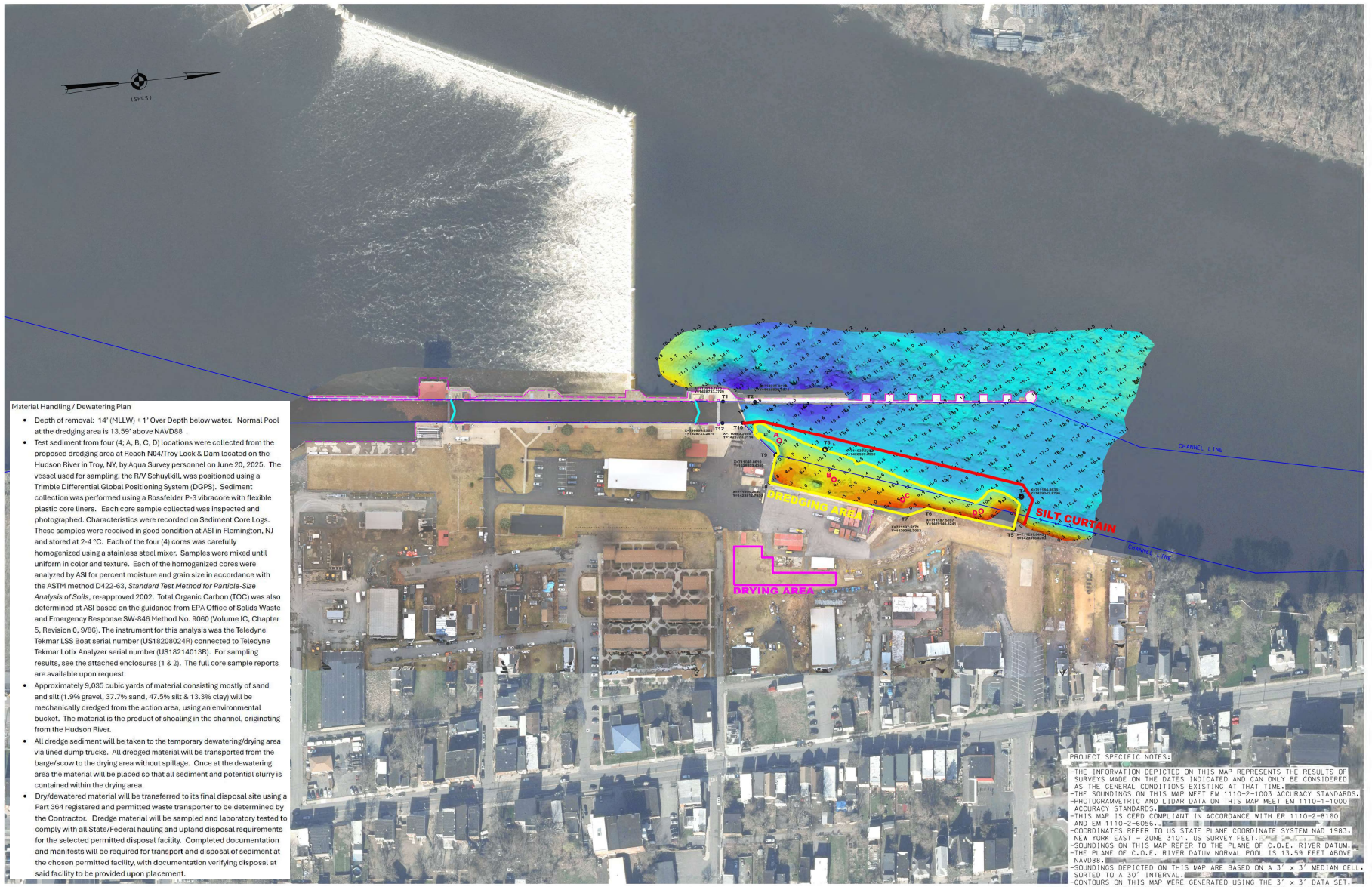
0 250 500 750 1,000 Feet

1 inch = 500 feet

Division of Environmental Permits Projection: NAD_1983_UTM_Zone_18N

Disclaimer: This map was prepared by the NYSDEC Division of Environmental Permits using the most current data available. It is deemed accurate but is not guaranteed. NYSDEC is not responsible for any inaccuracies in the data and does not necessarily endorse any interpretations or products derived from the data.

NEW YORK STATE | Department of Environmental Conservation



Material Handling / Dewatering Plan

- Depth of removal: 14' (MLLW) + 1' Over Depth below water. Normal Pool at the dredging area is 13.59' above NAVD88 .
- Test sediment from four (4; A, B, C, D) locations were collected from the proposed dredging area at Reach N04/Troy Lock & Dam located on the Hudson River in Troy, NY, by Aqua Survey personnel on June 20, 2025. The vessel used for sampling, the R/V Schuylkill, was positioned using a Trimble Differential Global Positioning System (DGPS). Sediment collection was performed using a Rossfelder P-3 vibracore with flexible plastic core liners. Each core sample collected was inspected and photographed. Characteristics were recorded on Sediment Core Logs. These samples were received in good condition at ASI in Flemington, NJ and stored at 2-4 °C. Each of the four (4) cores was carefully homogenized using a stainless steel mixer. Samples were mixed until uniform in color and texture. Each of the homogenized cores were analyzed by ASI for percent moisture and grain size in accordance with the ASTM method D422-63, *Standard Test Method for Particle-Size Analysis of Soils*, re-approved 2002. Total Organic Carbon (TOC) was also determined at ASI based on the guidance from EPA Office of Solids Waste and Emergency Response SW-846 Method No. 9060 (Volume IC, Chapter 5, Revision 0, 9/86). The instrument for this analysis was the Teledyne Tekmar LSS Boat serial number (US18208024R) connected to Teledyne Tekmar Lotix Analyzer serial number (US18214013R). For sampling results, see the attached enclosures (1 & 2). The full core sample reports are available upon request.
- Approximately 9,035 cubic yards of material consisting mostly of sand and silt (1.9% gravel, 37.7% sand, 47.5% silt & 13.3% clay) will be mechanically dredged from the action area, using an environmental bucket. The material is the product of shoaling in the channel, originating from the Hudson River.
- All dredge sediment will be taken to the temporary dewatering/drying area via lined dump trucks. All dredged material will be transported from the barge/scow to the drying area without spillage. Once at the dewatering area the material will be placed so that all sediment and potential slurry is contained within the drying area.
- Dry/dewatered material will be transferred to its final disposal site using a Part 364 registered and permitted waste transporter to be determined by the Contractor. Dredge material will be sampled and laboratory tested to comply with all State/Federal hauling and upland disposal requirements for the selected permitted disposal facility. Completed documentation and manifests will be required for transport and disposal of sediment at the chosen permitted facility, with documentation verifying disposal at said facility to be provided upon placement.

0 100' 200'

NSRS BENCHMARK	LOCAL CONTROL
BENCHMARK: Y 64 (PID:MZ0786)	BENCHMARK: HR-27
ELEVATION: 29.34' (NAVD 1988)	ELEVATION: 23.06' (NAVD 1988)

PROJECT SPECIFIC NOTES:

-THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS THE GENERAL CONDITIONS EXISTING AT THAT TIME.
-THE SOUNDINGS ON THIS MAP MEET EM 1110-2-1003 ACCURACY STANDARDS.
-PHOTOGRAMMETRIC AND LIDAR DATA ON THIS MAP MEET EM 1110-1-1000 ACCURACY STANDARDS.
-THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.
-COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983. NEW YORK EAST - ZONE 3101. US SURVEY FEET.
-SOUNDINGS ON THIS MAP REFER TO THE PLANE OF C.O.E. RIVER DATUM.
-THE PLANE OF C.O.E. RIVER DATUM NORMAL POOL IS 13.59 FEET ABOVE NAVD88.
-SOUNDINGS DEPICTED ON THIS MAP ARE BASED ON A 3' x 3' MEDIAN CELL. SORTED TO A 30' INTERVAL.
-CONTOURS ON THIS MAP WERE GENERATED USING THE 3' x 3' DATA SET.
-THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
-AERIAL IMAGERY PROVIDED BY USACE NY SURVEYS AND MAPPING BRANCH (2025)& DISCOVER GIS DATA NY (2024) AND IS FOR ORIENTATION PURPOSES ONLY.
-THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
-THIS SURVEY WAS PERFORMED USING REAL TIME KINEMATIC GPS FROM STATION "HR-27".

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

PR	CM,SG
MP	CM

DATES OF SURVEY: 25 MARCH 2025

REQ. NO./FILE NO.: 5531/N2

SCALE: ONE INCH = 100 FEET

FIELD BOOKS:

APPROVED: CARTOGRAPHER
APPROVED: D. HINDS
CIVIL ENGINEERING TECH
APPROVED: K/ IRWIN
CHIEF OF INLAND NAVIGATION SECTION
APPROVED: M. WHITE
CHIEF OF SURVEYS AND MAPPING BRANCH
DATE: 1 APRIL 2026

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
ALBANY FIELD OFFICE
CENAN-OP-A

MAINTENANCE DREDGING
HUDSON RIVER
FEDERAL NAVIGATION PROJECT
BATHYMETRIC SURVEY & WORK AREA

P-103

Table 1. DGPS Coordinates

Core Name	Northings	Eastings
A	1428847.0	711024.3
B	1428942.2	711099.8
C	1429095.6	711155.8
D	1429257.8	711206.1

Table 2. Sample Identification and Compositing Scheme

Core Name	ASI ID #	Amended ID
A	20250716	Amended A 20250720
B	20250717	Amended B 20250721
C	20250718	Amended C 20250722
D	20250719	Amended D 20250723

Table 3. Grain Size Distribution, Percent Moisture & TOC

Sample ID	ASI #	Total % Gravel	Total % Sand	Total % Silt	Total % Clay	% Moisture	TOC ppm	% TOC of Dry Weight
A	20250716	1.1	42.8	42.8	13.3	44.15	22,998	2.30
B	20250717	0.6	20.7	62.4	16.3	50.56	46,029	4.60
C	20250718	2.5	33.8	50.1	13.6	45.77	23,338	2.33
D	20250719	3.3	51.9	35.0	9.8	40.70	16,457	1.65
D	20250719 dup	3.3	51.8	34.7	10.2	40.41		
D	20250719 trp	3.4	52.0	34.3	10.3	41.82		

Enclosure 1
Troy Lock & Dam Dredging Area Sample Locations
Hudson River, NY

Troy, NY Dredging Area
mg/kg

ASI ID	#20250716		#20250717		#20250718		#20250419	
Composite ID	COMP A	Q	COMP B	Q	COMP C	Q	COMP D	Q
Analyte	Concentration	Q	Concentration	Q	Concentration	Q	Concentration	Q
Benzene	0.00086	U	0.00097	U	0.00095	U	0.001	U
Toluene	0.00035	U	0.01		0.0021		0.00041	UF1
Xylenes(Total)	0.00026	U	0.0008	JB	0.00033	JB	0.00031	UF1
Total BTX	0.000735		0.011285		0.002905		0.00086	
Naphthalene	0.063		0.0083		0.0042	J	0.004	J
Acenaphthylene	0.0079		0.0098		0.015		0.0092	
Acenaphthene	0.046		0.0019	U	0.0036	J	0.0041	J
Fluorene	0.047		0.0092		0.0071		0.0059	
Phenanthrene	0.28		0.049		0.068		0.055	
Anthracene	0.043		0.013		0.018		0.019	
Fluoranthene	0.61		0.086		0.14		0.15	
Pyrene	0.42		0.086		0.12		0.11	
Benzo(a)anthracene	0.2		0.044		0.063		0.066	
Chrysene	0.2		0.048		0.063		0.069	
Benzo(b)fluoranthene	0.2		0.066		0.085		0.094	
Benzo(k)fluoranthene	0.063		0.02		0.033		0.03	
Benzo(a)pyrene	0.1		0.037		0.057		0.058	
Indeno(1,2,3-cd)pyrene	0.057		0.026		0.039		0.04	
Dibenzo(a,h)anthracene	0.02		0.009		0.013		0.013	
Benzo(ghi)perylene	0.071		0.033		0.047		0.05	
Total PAH	2.4279		0.54525		0.7759		0.7772	
Dieldrin	0.019	U	0.000021	U	0.0002	U	0.000018	UF1F2
4,4'-DDE	0.015	U	0.000017	U	0.00017	U	0.000015	U
4,4'-DDD	0.016	U	0.000017	U	0.00017	U	0.000043	Jp
4,4'-DDT	0.053	U	0.000059	U	0.0011	p	0.000052	U
DDT+DDD+DDE	0.0685	U	0.0000465	U	0.00127		0.0000765	
Chlordane	0.018	U	0.00002	U	0.000195	U	0.0000175	UF1F2
Mirex	0.054	U	0.00006	U	0.00059	U	0.000053	U
Aroclor-1016	0.0024	U	0.027	U	0.0027	U	0.00024	UF1
Aroclor-1221	0.0026	U	11		1.9		0.00026	U
Aroclor-1232	0.0018	U	0.02	U	0.002	U	0.00018	U
Aroclor-1242	0.8		8.6		1.1		0.2	
Aroclor-1248	0.0018	U	0.02	U	0.002	U	0.00018	U
Aroclor-1254	0.0022	U	0.025	U	0.0025	U	0.2	
Aroclor-1260	0.045		0.37		0.083		0.00021	U
Total PCB	0.85		20		3.1		0.4	
Arsenic	4.2		5.9		4.8		3.8	
Cadmium	1		18		3.9		0.58	
Copper	30		71		41		28	
Lead	39		230		78		34	
Mercury	0.16		2.3		0.65		0.34	F2F1
Dioxin (Toxic Equiv Total)	0.000011061		0.00007441		0.00004351		0.000007891	

Totals:
1) include estimated values, those reported with a J qualifier
2) If a concentration of a specific contaminant is reported as 'non-detect' or less than, and the method detection limit was not achieved, then the detection limit is used as an estimate of the maximum possible concentration.
3) If a concentration of a specific contaminant is reported as 'non-detect' or less than, and the detection limit achieved was at or below the method detection limit, then half the achieved detection limit is used as an estimate of the concentration.
4) Chlordane = sum of alpha and gamma chlordane

Enclosure 2
Troy Lock & Dam Dredging Area Sample Locations
Hudson River, NY

SECTION 01 11 00

SUMMARY OF WORK
03/26

PART 1 GENERAL

1.1 FAR 52.211-10, COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK

a. The Contractor shall be required to (i) commence work under this contract within five (5) calendar days after the date the Contractor receives the Notice to Proceed, (ii) prosecute the work diligently, and (iii) complete the entire work ready for use, not later than **90** calendar days after the date the Contractor receives the notice to proceed. The time stated for completion shall include final cleanup ofthe premises. (FAR 52.212-3)

b. All work shall be in accordance with the drawings and specifications or instructions attached hereto and made a part thereof, or to be furnished hereafter by the Contracting Officer or Contracting Officer's Representative(COR) and subject, in every detail, to his supervision, direction, and instructions.

1.2 WORK COVERED BY THE CONTRACT DOCUMENTS

1.2.1 Project Description

The work to be performed under this project consists of providing all materials, plant, labor, equipment and services (except those furnished by the Government) to perform maintenance dredging in the area of the Hudson River Federal Navigation Project, with placement of the material at a NYS DEC approved commercial upland dredged material placement site. The Contractor will prosecute said work diligently; subject to the conditions in section 01 30 00 ADMINISTRATIVE REQUIREMENTS, paragraph 1.8.a "Weather." The Contractor will complete the entire work within 90 calendar days after receipt of notice to proceed. The time stated for completion shall include the final clean-up.

The Maintenance for this project consists of dredging approximately **9,035 CY** of material based on a survey done in March 2025. For more detail, see "ESTIMATED QUANTITIES" in Section 00 30 00 "ADMINISTRATIVE REQUIREMENTS" of these Specifications. The dredge material at the dredging area has been determined to be approximately **1.9% Gravel, 37.3% Sand, 47.5% Silt and 13.3% Clay.** This work is subject to availability of funds.

A summary of the Basic Work is shown on the tables below:

CLIN	BID SCHEDULE	TOTAL ESTIMATED QUANTITY
001	Mobilization & Demobilization	1 JOB
002	Dredging Work: (14' MLLW + 1' OD)	9,035 CY
003	Site Restoration	1 Job

Contract time for completion is 90 days, based on a minimum average production rate of **151** cubic yards (CY) per day for dredging, transportation, and placement at a NYSDEC approved disposal site. Should the total quantity of material exceed the estimated quantities within the Solicitation Contract Form, additional time will be allowed at the rate of one (1) calendar day for each 112 cubic yards in excess of the established limit. However, this shall not relieve the Contractor from the requirement to complete all in-water dredging work within the period noted above. The time state for completion shall include final clean up. The contractor must bid on all items of the bid schedules.

CLIN 002 (Dredging Work) requires dredging to the plane of -14 feet MLLW plus 1 foot allowable over depth, with subsequent handling, transportation, processing and placement of the dredged material at an approved commercial upland disposal site.

CLIN 003 (Site Restoration) requires repairing and restoring all areas within project action area disturbed by contractor activities. All federal property used by the contractor will be restored to pre-work conditions.

Sampling and testing was conducted by the Government in 2025, and the grain size test results are included in the specifications in Section 00 90 01 as Attachment I. The complete sampling and testing results are available upon request.

The current New York State Department of Environmental Conservation (NYSDEC) Water Quality Certificate (WQC) permit for Hudson River, NY maintenance dredging is included in Section 00 90 02. The contractor must comply with all conditions of the NYSDEC WQC permit.

The work is anticipated to be performed within the approximate time period of Q2 2026 through Q3 2026.

1.3 PERFORMANCE OF WORK BY THE CONTRACTOR

The Contractor shall perform on the site, and with its own organization and equipment, work equivalent to at least forty (40) percent of the

total amount of work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract if, during performance of the work, the Contractor requests a reduction and the Contracting Officer and/or his Representative determines that the reduction would be to the advantage of the Government. (FAR 52.236-01)

1.4 DATUM AND BENCH MARKS

Soundings and Elevations shown in the contract drawings are in US Survey Feet and refer to Mean Lower Low Water (MLLW). The following benchmark information should be referenced for defining local datum and required project depth.

LOCAL Benchmark: "HR-25", USACE Disk
Coordinates Refer to US State Plane Coordinate System NAD 1983
x: 712894.832, y: 1440863.065
New York East – Zone 3101
Elevation: 22.4' (NAVD88)

LOCAL Benchmark: "HR-26", USACE Disk
Coordinates Refer to US State Plane Coordinate System NAD 1983.
x: 710903.206, y: 1428197.434
New York East - Zone 3101
Elevation: 23.1' (NAVD88)

LOCAL Benchmark: "HR-27", USACE Disk
Coordinates Refer to US State Plane Coordinate System NAD 1983.
x: 711197.460, y: 1429018.107
New York East – Zone 3101
Elevation: 23.2' (NAVD88)

All controls need to be verified.

The contractor may contact the New York District Survey Section at (201) 333-0284 for assistance in establishing the location of the bench marks and the tide gages.

1.5 MISPLACED MATERIAL

Should the Contractor during the progress of the work, lose, dump, throw overboard, sink, or misplace any material, plant, machinery, or appliance, which in the opinion of the Contracting Officer and/or his Representative may be dangerous to or obstruct navigation, the Contractor shall recover and remove the same with the utmost dispatch.

The Contractor shall give immediate notice, with description and location of such obstructions, to the Contracting Officer and/or his Representative or inspector, and when required shall mark or buoy such obstruction until the same are removed. Should he refuse, neglect, or delay compliance with the above requirements, such obstructions may be removed by the Contracting Officer and/or his Representative, and the cost of such removal may be deducted from any money due or to become due to the Contractor or may be recovered under his bond. The liability of the Contractor for the removal of a vessel wrecked or sunk without fault or negligence shall be limited to that provided in Sections 15, 19, and 20 of the Rivers and Harbors Act of March 3, 1899 (33USC. 410 et seq.) (DOD FARS SUPPL. 52.236-7006).

1.6 DFARS 236.204, DISCLOSURE OF THE MAGNITUDE OF CONSTRUCTION PROJECTS

The entire work (Mob/Demob and Basic Work) is estimated to cost approximately $1,000,000.00 to $5,000,000.00.

1.7 AUTHORIZED CONSTRUCTION AREA AND TRESPASSING

Do not inflict damage upon land and properties outside the authorized construction area by unwarranted entry upon, passage through, damage to,or disposal of, material on such land or property. The Contractor may make a separate agreement with any other party, regarding the use of, or right to, land or facilities outside the contract area. If such an agreement is made, it must be in writing and a copy shall be provided to the Contracting Officer. The Contractor must hold and save the Government, its officers, and agents free from liability arising from trespassing or damage occasioned by his operations.

1.8 EXISTING WORK

In addition to FAR 52.236-9 Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements:

a. Remove or alter existing work in such a manner as to prevent injury or damage to any portions of the existing work which remain.

b. Repair or replace portions of existing work which have been altered during construction operations to match existing or adjoining work,as approved by the Contracting Officer. At the completion of operations, existing work must be in a condition equal to or better than that which existed before new work started.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

-- End of Section --

SECTION 01 20 00 TECHNICAL SPECIFICATIONS

02/26

1. **WORK COVERED BY CONTRACT PRICE:** The work consists of furnishing all plant, labor, materials, and equipment, and performing all work in strict accordance with the specifications and drawings for the dredging of the Hudson River Federal Navigation Channel project at Troy, New York; with the transport and placement of material at a NYSDEC approved disposal site. Removal and placement consist of dredging a total of approximately **9,035** cubic yards of material from the dredging area above the grade of fourteen (14) feet below MLLW, including a vertically applied one (1) foot of allowable over depth, as shown on the contract drawings. Ninety (90) calendar days have been allowed for completion of the contract.

2. **Mobilization and Demobilization**

2.1 Mobilization shall include the costs for all activities required to initiate actual dredging operations, such as the transfer of dredge(s) and attendant plant and equipment to site, and/or other incidentals directly applicable to such transfer. Demobilization shall include general preparation and transfer of dredge(s), attendant plant, and equipment from the site to its home base, and cleanup of dredging and dewatering areas. All costs connected with the mobilization and demobilization of all the Contractor's dredging plant and other equipment shall be included in the Contractor's "JOB" price for Contract Line-Item Number (CLIN) 0001, Mobilization & Demobilization. Sixty percent (60%) of the "JOB" price will be paid to the Contractor upon completion of their mobilization to the work site. The remaining forty percent (40%) will be paid to the Contractor upon completion of their demobilization work. The cost for work other than mobilization and demobilization of the Contractor's dredging plant and marine equipment shall not be included in this item.

2.2 In the event the Contracting Officer considers that the amount in this item that represents mobilization (60%) does not bear a reasonable relation to the cost of the work in this contract, the Contracting Officer may require the Contractor to justify this portion of the bid. Failure to justify such price to the satisfaction of the Contracting Officer will result in the payment of actual mobilization costs, as determined by the Contracting Officer at the completion of mobilization, and payment of the remainder of this item in the final payment under this contract. The determination of the Contracting Officer is not subject to appeal.

2.3 Dredging. The contract price per cubic yard for "Dredging" shall include all costs associated with removal of material from the dredging area. Dredging does not include removal of ledge rock, large boulders, large rock fragments, wrecks, snags and piles which cannot be removed or buried below project depth without blasting. Should ledge rock or other material which cannot be removed without blasting be encountered, the Contractor shall remove all overlying material which in the judgment of the Contracting Officer and/or his representative can be removed, and report the location. Nothing in this paragraph shall be construed as

prohibiting the removal of excepted material by special means at prices agreed upon and approved in accordance with Contract Clause entitled: "DIFFERING SITE CONDITIONS" (FAR 52.236-2).

2.4 Transport & Placement. The contract per ton for "Transport & Placement" shall include all costs associated with the preparation, transport, processing and final placement of material at a Contractor selected NYSDEC approved commercial upland placement site.

3. CHARACTER OF MATERIALS

3.1 Results of grain size analyses performed on composite samples collected in June 2019 from the area to be dredged are as follows:

	GRAIN SIZE IN PERCENTAGE (%)			
Dredging Area	GRAVEL	SAND	SILT	CLAY
Troy Lock & Dam	1.9	37.3	47.5	13.3

This data is to be used as a preliminary reference only. See Section 00 90 01, Attachment J for detailed sediment physical and chemistry data reports.

3.2 To review the complete report(s) of sediment analyses, all bidders should contact the U.S. Army Corps of Engineers New York District, Albany Field Office, at 518-273-0870.

3.3 Material to be removed to gain the depths within the limits called for in these specifications and drawings is material that has shoaled in the dredging area since it was last dredged:

Dredging Area	Last Maintenance Dredging
Troy Lock & Dam	2012

4. SITE CONDITIONS. Bidders are expected to examine all work sites, including the dredging area and the dredge material placement area, and decide for themselves the conditions affecting their operations prior to submitting their bids. Records of previous dredging operations are available at the U.S. Army Corps of Engineers, New York District, Albany Field Office, 1 Bond Street, Troy, NY 12180. See Contract Clause entitled:

"SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK" (FAR 52- 236-3).

A onetime pre-bid site visit sponsored by the Government will be scheduled during the bidding period

5. PERMITS. No local governmental sedimentation or erosion control permits are required for this work except as required in accordance with Contract Clause entitled: "PERMITS AND RESPONSIBILITIES" (FAR 52.236-7).

6. CLAMSHELL BUCKET. Any applicable restrictions on the type of bucket

allowed for this dredging project are detailed in the NYSDEC Water Quality Certification permit. The Contractor shall utilize best management practices to ensure that turbidity is minimized in the water.

7. Dredging

7.1 General. The maintenance material to be removed for the restoration of the project depth within the limits called for in the specifications and drawings, is the shoaling that has occurred since the Federal Navigation Channel was last dredged to its full constructed dimensions. The existing channel has previously been dredged at a required depth of 14 feet MLLW plus 1 foot of allowable over depth. It is believed that the material to be removed will consist principally of sand, silt clay, mud, shell, loose stone, debris, trash, and combinations thereof. Minor variationsin the subsurface materials are to be expected and, if encountered, shall not be considered as being materially different within the purview of the Contract Clause DIFFERING SITE CONDITIONS. See section 35 20 23 and 35 20 23.23 for further dredging requirements.

7.2 Bidder Verification. Bidders are expected to examine the site(s) of the work and decide for themselves the character of the materials. Records of previous dredging operations are available at the US Army Corps of Engineers, New York District, Albany Field Office, 1 Bond Street, Troy, NY,12180.

7.3 Site Conditions. Bidders are expected to examine the site of the work and decide for themselves as to the conditions affecting their operations. See contract clause entitled:
"Site Investigation and Conditions Affecting the Work" (FAR 52.236-3).

7.4 Character of Materials. In addition to shoal materials and undisturbed materials, inorganic and organic debris is expected. This debris could include, but is not limited to; tools and equipment, wood and metal implements and fragments, concrete masses, riprap, cables, aquatic trash and benthic debris from land-based activities, and other debris associated with maritime activities. During past maintenance, contractors have encountered substantial quantities of wood debris and stumps throughout the Channel. This has caused downtime to handle debris within scows. Since this is the first maintenance dredging in Troy, NY since 2012, bidders should expect to experience similar conditions during performance of this contract. In addition, core sample results indicate the presence of noticeable organic tree material as the depth increases. The debris encountered is a condition of the dredging area and no extra payment will be made for downtime due to debris removal. The Contractor will be required to remove all inorganic and organic debris above the required dredging limits.

7.5 Debris Disposal. All debris and proposed disposal area locations will be reported in the daily log of operation.

7.6 Sedimentation Permits. No local governmental sedimentation or erosion control permits are required for this work except that as required

in accordance with contract clause entitled: "Permits and Responsibilities" (FAR 52-236-7). The Contractor is advised of the need to satisfy conditions of the New York State Water Quality Certification (Section 00 90 02).

7.7 Submittals. Submittals shall conform to the requirements of Section 01 33 00.00. The Contractor shall submit for approval, by the Contracting Officer and/or his representative, all information required in the Submittal Register.

7.8 Unapproved Placement Sites. Any material that is deposited elsewhere other than in places designated or approved by the Contracting Officer shall not be paid for by the Government, and the Contractor shall be required to remove such material and place it where directed, at the Contractor's expense.

7.9 Within Contract Limits or Adjacent Areas. Any material pushed, deposited, or moved into deep areas within the contract limits or areas adjacent thereto by operations under the contract, whether intentional or otherwise, shall be removed to the original depths existing before dredging or a deduction from the pay quantity of material removed shall be made for the quantity of such material as may be allowed to remain in the areas. All costs for removal and placement of such material shall be solely at the Contractor's expense.

7.10 Monitoring and Control of Dredging Operations.

7.10.1 General. In order to improve the environmental performance of the dredging operations, the Contractor shall monitor and control the dredging operations inclusive of excavation, water quality dewatering, transport and placement, in all areas affected by the performance of work as prescribed in these specifications. The Contractor's Quality Control Plan shall identify monitoring requirements and best management practices, including measures which will be taken to control conditions in the dredging areas, to ensure that the Contractor's operations meet the requirements identified in these specifications and the NYS Water Quality Certification permit:

- Contractors will monitor for plumes daily while in-water work is in progress. If a plume is observed outside of the silt curtain, water column samples shall be collected within the observed plume and consultation with DEC shall occur to determine whether additional best management practices for dredging need to be implemented. Daily monitoring records will be maintained to record the results of all monitoring and other operational notes including, but not limited to, daily start and finish times of off-loading of the ship and start finish times of discharge at the dredging area if applicable. Turbidity will be managed using an environmental bucket, operational controls (controlling the speed of the bucket ascension/descension), and the deployment of turbidity/silt curtains.
- If two consecutive monitoring results for suspended solids exceeds 200 mg/l suspended solids limit or the

250 NTU turbidity limit or the 0.2 ug/l per aroclor PCB limit, in-water work will pause, and the relevant equipment (environmental bucket, silt curtain, dredge controls) will be inspected for damage and/or defects. Upon resuming in-water work, if plumes continue to be observed then dredging will halt and USACE will consult with NYSDEC before resuming work.

- All analytical results shall be transmitted by fax or email to the NYSDEC Region 4 Regional Permit Administrator (r4dep@dec.ny.gov) within 48 hours of sample collection. Any exceedances of the 200 mg/l limit for suspended solids or the 250 NTU limit for turbidity will be highlighted; including a description of the exceedance, its cause, correlations to other parameters reported for that day and time, and the corrective actions that were taken.

8. Limit of Dredging. The areas to be dredged is the area of the channel within the acceptance sections indicated on the drawings and specified in Section 35 20 23, Dredging entitled: "Final Examination and Acceptance", as defined by dredging prism indicated in paragraphs "Over depth and Side Slopes" and "Measurement and Payment."

9. New York State Water Quality Certification. The Contractor shall comply with all requirements identified in the NYS Water Quality Certification, including all special conditions. A copy of the Water Quality Certificate is included in Section 00 90 02.

10. Sampling and Testing. The Contractor shall be responsible for all sampling and testing, including reporting for all required samples and tests, as prescribed by these specifications.

11. Laboratory Services. Sample analysis shall be undertaken at a laboratory with NYS Department of Health approval to perform environmental analysis.

11.1 Records of Testing. Records of testing results shall be submitted to the Contracting Officer and to the NYS Department of Environmental Conservation Region that issued the Water Quality Certification, in accordance with these specifications. Any corrective measures, if needed,shall also be submitted to each of the above, and included in the Contractor's daily Quality Control Reports.

12. Silt Curtain. Silt curtains will be constructed around the shoal to dredge and sized to extend to the river bottom. The Contractor will select the appropriate curtain type with specifications based on current and depth at the dredging area. The Contractor will work with the NYSDEC on the appropriate anchor spacings, barrier lengths, and current velocity to determine cable load, anchor load and sag. See sheet P-104 of contract plans for notes.

13. **Placement Site Approval.** Dredged material will be disposed of at an authorized New York State Part 360 permitted disposal site (or equivalently permitted site outside of New York State if applicable) that is approved by NYSDEC prior to the start of in-water work. A copy of the solid waste permit and/or any other applicable documentation must be provided to NYSDEC prior to transport and receipt of material at the selected disposal site.

14. **Dewatering & Transportation.** The Contractor will submit a detailed dewatering plan that adheres to all NYSDEC requirements and as approved by USACE prior to the start of in-water work; see sheet P-104 of contract plans for notes on sediment stockpile area. All dewatering activities must be conducted on land owned or controlled by USACE, unless a separate Part 360 authorization for an off-site dewatering location is obtained prior to receipt of material. Once sufficiently dry, the dredged material may need to be tested for waste characterization as per the requirements of the chosen upland disposal site. All transport of material must be done by a permitted New York State part 364 waste transporter.

    14.1 Dewatering Plan. If the Contractor chooses to dewater dredge material prior to transport and final placement, a detailed dewatering plan is required prior to the start of in-water. This plan will be subject to NYSDEC and USACE approval.

15. **Site Restoration.** The Contractor will be solely responsible for all work required for the final clean-up, repair and restoration of the work area, and other associated features utilized for this contract, to their pre-contract condition.

    15.1 Removal of Contractor Equipment, Plant and Materials. The Contractor shall remove all equipment, plant and materials installed by the Contractor for use in their handling, potential dewatering and transporting operations. These items shall be completely removed from the site; and the Contractor shall repair and stabilize all areas affected by their removal, as approved by the Contracting Officer. Any equipment, plant or material that the Contractor proposes to leave in place temporarily, if approved by the Contracting Officer, shall be fully secured from access and non-hazardous to normal usage.

    15.2 Turf. The Contractor shall establish permanent turf for the restoration of areas affected by their operation as identified by the Contracting Officer. The Contractor’s permanent turf plan is subject to approval by the Contracting Officer.

    15.3 Final Inspection of Work Area. As soon as it is practicable following completion of the Contractor’s final clean-up operations, a joint inspection of the work site shall be made by representatives of the Contractor and the Contracting Officer. The

Contractor shall have ready for acceptance all work required under para. 15.

SECTION 01 20 00.00 20

PRICE AND PAYMENT PROCEDURES
02/26

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EP-1110-1-8	(2014) Construction Equipment Ownershipand Operating Expense Schedule

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals; G

1.3 CONTRACT MODIFICATIONS

In conjunction with the Contract Clause "DFARS 252.236-7000, Modification Proposals-Price Breakdown," and where actual ownership and operating costs of construction equipment cannot be determined from Contractor accounting records, equipment use rates shall be based upon the applicable provisions of the EP-1110-1-8.

1.4 PAYMENTS TO THE CONTRACTOR

Payments will be made on submission of itemized requests by the Contractor which comply with the requirements of this section, and will be subject to reduction for overpayments or increase for underpayments made on previous payments to the Contractor.

1.4.1 Obligation of Government Payments

The obligation of the Government to make payments required under the provisions of this contract will, at the discretion of the Contracting Officer, be subject to reductions and/or suspensions permitted under the FAR and agency regulations including the following in accordance with "FAR32.503-6:

a. Reasonable deductions due to defects in material or workmanship;

b. Claims which the Government may have against the Contractor under or

inconnection with this contract;

c. Unless otherwise adjusted, repayment to the Government upon demand for over payments made to the Contractor; and

d. Failure to provide up to date record drawings not current as stated in Contract Clause "FAC 5252.236-9310, Record Drawings.

1.5 SHOALING

If, before the contract is completed, shoaling occurs in the finished channel because of the natural lowering of the side slopes, re-dredging at the contract price, within the limit of available funds, may be done if agreeable to both the Contractor and the Contracting Officer and/or their Representative.

1.6 CONTINUITY OF WORK

No payment will be made for work done in any area designated by the Contracting Officer and/or their Representative until the full depth required under the contract is secured in the whole of such area, unless prevented by ledge rock; nor will payment be made for excavation in any area not adjacent to and in prolongation of areas where full depth has been secured except by decision of the Contracting Officer or Contracting Officer's Representative. Should any such nonadjacent area be excavated to full depth during the operations carried on under the contract, payment for all work therein may be deferred until the required depth has been made in the area intervening. The Contractor may be required to suspend dredging at any time when for any reason the gauges or ranges cannot be seen or properly followed.

PART 2 PRODUCTS

2.1 QUANTITY SURVEYS

a. Quantity surveys shall be conducted, and the data derived from these surveys shall be used in computing the quantities of work performed and the actual construction completed and in place.

b. The Government shall conduct the before-dredge and after-dredge surveys and make the computations based on them. The Contractor shall conduct the survey for any periods for which progress payments are requested and shall make the computations based on these surveys. These surveys conducted by the Contractor shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement in a specific instance.

c. Promptly upon completing a survey, the Contractor shall furnish the originals of all field notes and all other records relating to the survey or to the layout of the work to the Contracting Officer and/or their Representative, who shall use them as necessary to determine the amount of progress payments. Raw data, edited survey data with all supporting files and documentation, and all data generated during such work shall be furnished by the Contractor to the Contracting Officer and/or their Representative. The Contractor shall retain copies of all such material furnished to the Contracting Officer and/or their Representative (FAR 52.236-16). The Government will not commence work

on the after-dredge survey until the Contractor has furnished the originals of all field notes, all other records relating to the Contractor’s final survey or to the layout of the work, and all data generated during such work, to the Contracting Officer and/or their Representative.

d. Contractor's participation in surveys: In accordance with agency policy guidance, the preferred methods of performance of all hydrographic quantity surveys shall be (in descending order):

(1) The Government will perform quantity surveys by using qualified in-house crews, if available.

(2) The Government will provide quantity surveys by contracting directly with qualified independent hydrographic survey contractors.

(3) The Government will permit, only in exceptional circumstances, the use of dredging contractor's surveys if the Contracting Officer and/or their Representative determine that such surveys are adequate and reasonable for payment purposes anda Government inspector, qualified in hydrographic surveying, is present during the collection of the survey data. Raw data, edited survey data with all supporting files and documentation, and all data generated during such work shall be furnished by the Contractor to the Contracting Officer and/or their Representative.

If it is determined by the Contracting Officer that it is impractical for Government personnel to perform the before-dredge and after-dredge surveys and the Government wishes the Contractor's surveys to be used,the following will be required from the Contractor:

(1) Acceptance of all monumentation and transponder locations.

(2) Witness by a Corps of Engineers representative of all calibration procedures such as vertical and horizontal control.

(3) Corps of Engineers observation of raw data collection.

(4) Submittal of both unedited as well as edited versions of survey maps.

(5) Subsequent acceptance of edited survey map after determination by Corps survey personnel that editing was conducted in accordance with U.S. Army Corps of Engineers specifications and guidelines. (FAR 52.236-16 - ALTERNATE I, APR 1984)

e. The Contractor is obligated to participate in all stages of data collection during the performance of Before and After Dredge Surveys. The Contractor will be required to fill out an attendance log during such participation. Any disagreements with the data collection process,and / or any data generated during such work shall be brought to the attention of the Contracting Officer or their representative within five (5) business days of the data collection process. The Contracting Officer or their representative will then determine the necessary corrective measures, if any. Failure to notify the

Contracting Officer or their representative within 5 business days of the data collection process, or failure to be present during the survey data collection disqualifies the Contractor from any such related claims.

f. Any survey related disagreement(s) as it pertains to this contract must be submitted in writing to the Contracting Officer or their representative within 5 business days of occurrence of such survey related event. Failure to notify the Contracting Officer or their representative within 5 business days of such survey related event disqualifies the Contractor from any such related claims.

PART 3 EXECUTION

Not Used.

-- End of Section --

SECTION 01 22 00.00 10

MEASUREMENT AND PAYMENT
02/26

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall besubmitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

1.2 JOB PAYMENT ITEMS

Payment items for the work of this contract for which contract job payments will be made are listed in the BIDDING SCHEDULE and described below. All costs for items of work, which are not specifically mentioned to be included in a particular job or unit price payment item, shall be included in the listed job item most closely associated with the work involved. The job price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for which separate payment is not otherwise provided.

1.2.1 Mobilization and Demobilization

1.2.1.1 Payment

Payment will be made for costs associated with mobilization and demobilization, as defined in Special Clause PAYMENT FOR MOBILIZATION AND DEMOBILIZATION.

Mobilization shall include all costs for operations accomplished prior to commencement of actual dredging operations, such as transfer of dredge and attendant plant and equipment to site, initial installations of pipe and other incidentals in advance of the actual dredging. Demobilization shall include general preparation for transfer of plant to home base, removal of pipelines, placement site stabilization, and transfer of plant to its homebase. The cost of work other than mobilization and demobilization of the Contractor's dredging plant and equipment shall not be included in this item. For payment for Mobilization and Demobilization see contract clause Section 00 72 00 Contract Clauses.

All costs connected with the mobilization and demobilization of all of the Contractor’s dredging plant and equipment will be paid for at the contract lump sum price for this item. 60 percent of the lump sum price will be paid to the Contractor upon completion of his mobilization to the work site. The remaining forty percent 40 percent will be included in the final payment for work under this contract.

In the event the Contracting Officer and/or his Representative considers that the amount in this item 60 percent, which represents mobilization, does not bear a reasonable relation to the cost of the work in this contract, the Contracting Officer and/or his Representative may require the Contractor to justify this portion of the bid. Failure to justify such price to the satisfaction of the Contracting Officer and/or his Representative will result in payment of actual mobilization costs as determined by the Contracting Officer and/or his Representative, at the completion of mobilization and payment of the remainder of this item in the final payment under this contract. The determination of the Contracting Officer and/or his Representative is not subject to appeal.

1.2.2 Site Restoration

Payment will be made for costs associated with restoring the work area to its pre-construction condition.

1.2.2.1 Payment

Payment will be made for costs associated with the clean-up and restoration of federal lands used or disturbed by the Contractor. A lumpsum payment will be made upon final acceptance of work by the Contracting Officer of all site work and deliverables, if applicable.

1.3 UNIT PRICE PAYMENT ITEMS

Payment items for the work of this contract on which the contract unit price payments will be made are listed in the BIDDING SCHEDULE and described below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items.

1.3.1 Dredging

1.3.1.1 Payment

Payment will be made for costs associated with dredging of the project, which includes performing required dredging, handling, placement, transportation and other operations incidental to disposition of dredged material.

1.3.1.2 Measurement

The total amount of material removed and paid for under the contract will be measured by the cubic yard dredged. Measurement of the number of cubic yards dredged will be made by computing the volume between the bottom surface shown by soundings of the last survey made before dredging and the bottom surface shown by soundings of the survey made as soon as practicable after the entire work specified has been completed. The volume for measurement shall include the material within the limits of the over depth and side slopes described in SECTION 35 20 23, Paragraph 3.2.7 Layout of Work, 3.2.7.1 Over depth Dredging, and 3.2.7.2 Side Slopes.

The soundings maps and or drawings accurately represent the channel conditions existing in March 2025. (HRFNC Reach 04 dredging area, Troy, NY). The soundings shown on the contract drawings were taken with an electronic depth recorder and/or multi-beam surveying system with a transducer frequency of 200-400 KHz. Soundings after dredging will be

made by using a multi-beam surveying system of the same frequency. After-dredging surveys will be completed generally within five days of completion of the project. Determination of quantities to be paid in the area specified after having been made once, will not be reopened, except on evidence of collusion, fraud or obvious error. Computations for payment purposes will generally be made by the Corps of Engineers utilizing the Triangulated Irregular Network (TIN) method.

Shoaling in the areas to be dredged on this project does not occur at a rapid rate from existing depths. However, the unit price for dredging based on the above method of computation of the quantity for which paymentis to be made shall include the Contractor evaluation of shoaling, changes in the regime of the waterway, or changes caused by the Contractor's operations that may occur during the period between the survey before dredging and the survey for acceptance of work.

Scows and Hopper Dredges: Where scows and hopper dredges are used in performance of work and where the Contractor maintains load measuring devices on such scows or hopper dredges, copies of all recorded measurements made in connection with the work shall be furnished to the Contracting Officer and/or his/her representative. If as the work progresses the Contractor determines that a significant difference exists between the recorded bin or scow quantities and the survey quantities computed from the check surveys described above, he shall immediately notify the Contracting Officer and/or their representative of any such discrepancies. Such notification shall include a description of the Contractor's methods of measuring scow or bin quantities, certification of measuring techniques, documentation of material sampling and methods used to convert bin or scow measurements to in-place density.

It is emphasized that bin or scow measurements shall not be used as basis for partial or final payments.

14-day partial payments will be based on approximate quantities determined by soundings or sweepings taken behind the dredge by the Contractor. The Contractor soundings are to be used for partial payments only and will not form a basis for the acceptance of the work.

The Contractor must inform the Government, in writing, within three calendar days of completing the work.

The total quantity of excavated material for which payment will be made will be the theoretical quantity between the ground surface as determined by a survey and the grade and slope of the theoretical cross sections indicated. No allowance will be made for the removal of any material outside the required slope lines unless authorized.

When the Government perform surveys using multibeam, the data will be binned using the median soundings for contours and volumes. The maximum bin size will not exceed 3'x3'.

In the event that unforeseen obstructions or hard material is discovered, shoals in these areas will be assessed using the minimum sounding within the bin. This method will not be used for computation.

1.3.1.3 Unit of Measure

Unit of measure: cubic yard (CY).

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

-- End of Section --

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS
02/26

PART 1 GENERAL

1.1 SUMMARY

The requirements of these sections apply to, and are component parts of, each section of the project specifications.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation, submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following inaccordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Pre-Construction Submittals, G

Preconstruction Submittals shall be submitted to the Contracting Officeror Contracting Officer Representative at least seven (7) days prior to the preconstruction conference. Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following:

Certification of Insurance; G

Surety Bond; G

List Of Proposed Subcontractors; G

Order of Work; G The Contractor's order of work for dredging and performing other work, including disposal area plan.

Work To Be Performed By The Contractor; G,

Subcontracting Plan; G

Progress Schedule; G

Submittal Register; G

Letter Appointing Superintendent; G

Activity Hazard Analysis; G See Section 01 35 26, GOVERNMENTAL SAFETY REQUIREMENTS

Accident Prevention Plan; G See Section 01 35 26, GOVERNMENTAL SAFETY REQUIREMENTS

Work Plan / Dewatering Plan; G See Section 01 20 26, TECHNICAL SPECIFICATIONS: 14.1 DEWATERING PLAN.

Quality Control (QC) plan, G See Section 01 45 00.00 20

Environmental Protection Plan; G

Notice to Mariners; G

SD-03 Product Data G

Monthly Progress Report

Project Schedule Status

Report

The Contractor shall submit an updated Monthly Progress Report at the first meeting of each month, including a Project Schedule Status Report and if no meeting is in the agenda, these items shall be submitted to the Contracting Officer Representative when requested.

SD-11 Closeout

Submittals As-Built

Drawings; G

1.3 PRECONSTRUCTION CONFERENCE

Work shall not commence prior to the conference.

After award of contract, a pre-construction conference will be held at such time and location as determined by the Contracting Officer for purposes of discussing and developing mutual understanding between the Contracting Officer or his authorized representative and the Contractor's Representatives regarding the terms, conditions, and requirements of the contract. Members of the conference from the Government will include the quality assurance staff, the Contracting Officer or his authorized representative, and construction staff. Members from the Contractor shall include the site superintendent, project safety officer, and the quality control staff. The discussion will include, and may not be limited to, thefollowing:

-Contractor Supervisory and Quality Control staff
-Correspondence Procedures
-Accident Prevention Plan
-Pollution Control Plan
-Quality Control
-Project Scheduling and Payment Procedures
-Other subjects that may be of interest to the contracting parties
-Schedule of Weekly Meeting

1.4 CONTRACTOR IDENTIFIED OFFLOADING, PROCESSING, AND DISPOSAL SITECOMPLIANCE

(not used)

1.5 PROJECT MEETINGS

The Contractor and/or Contractor Representatives shall attend Weekly Project Meetings scheduled by the Government in accordance with Section 01 32 01.00 10 PROJECT SCHEDULE. The Contractor's Superintendent shall be in attendance at these scheduled project meetings.

A Monthly Progress Report shall include a Project Schedule Status Report per requirement of Section 01 32 01.00 10 PROJECT SCHEDULE.

1.6 SUBMITTAL OF WORK TO BE PERFORMED BY THE CONTRACTOR

Provide the Contracting Officer, within five (5) days after award, items of work to be performed by contractor's employees and the estimated cost of those items. For the purposes of this contract, the percentage of work that must be performed by the Contractor is stated in Section 00 72 00 Contract Clauses, FAR Clause 52.236-01

1.7 LIQUIDATED DAMAGES-CONSTRUCTION

a. If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of $2,015.00 for each calendar day of delay until the work is completed or accepted.

b. If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

1.8 PHYSICAL CONDITIONS

The information and data furnished or referred to below are not intended as representation or warranties but are furnished for information only. It is expressly understood that the Government will not be responsible for the accuracy thereof or for any deduction, interpretation or conclusion drawn by the Contractor.

a. WEATHER CONDITIONS. The site of the work is not exposed to severe wind and wave action and the Contractor's operations are not likely to be affected by ordinary storms. Real-time data are available on the World Wide Web at 9http://www.ncdc.noaa.gov/index.shtml.

(1) Fog. An examination of the records of the Unedited Local Climatological Data of the National Oceanic and Atmospheric Administration's (NOAA) Climatic Data Center at Albany International Airport, New York, discloses an average of 15 days per year on which dense fog (visibility of 1/4 mile or less) occurs in the Albany area.

Visibility data are available on the Internet at https://www.ncei.noaa.gov/

(2) Winds. Wind conditions in Troy, New York, based on the records of the National Climatic Data Center's Local Climatological Data for Albany International Airport, are as follows:

Wind Conditions for Albany International Airport, AVERAGE WIND SPEED (February 2025 – February 2026), PEAK WIND GUST (1987 – present).

MONTH	AVERAGE WIND SPEED (MPH)	PEAK WIND GUST (MPH)
JANUARY	10	27
FEBRUARY	11	28
MARCH	11	27
APRIL	11	26
MAY	9	24
JUNE	9	24
JULY	8	23
AUGUST	8	23
SEPTEMBER	8	24
OCTOBER	9	24
NOVEMBER	10	26
DECEMBER	9	26

(3) Weather conditions exceeding in severity the fog conditions described above or average wind speeds exceeding 40 mph, or wave heights exceeding 3 feet will be considered unusually severe if delays are caused thereby to operations formore than 50% of the day under this contract.

(4) ICE, FLOOD AND FRESHET CONDITIONS. During the period of 1 December thru 15 April, the Hudson River Estuary may be closed by ice. Icing that occurs during this period will not be considered unusually severe weather.

It should be noted that dredging operations may be affected to some extent by current conditions. Normal Navigation Pool height of the Hudson River south of the Troy Federal Dam is generally 31 ft, with a 20 ft normal winter pool. Irregular pool fluctuations may occur due to wind and atmospheric pressure.

b. BRIDGE AND UTILITY CROSSINGS.

UTILITY CROSSINGS:

A search of Regulatory Branch records produced no confirmed results of electric or gas pipelines within the proposed dredging area for the FY25 Maintenance Dredging at the Troy Lock and Dam. However, the Niagara Mohawk Power Corp. proposed to complete a project potentially within 0.13 miles of the dredging area under the file number NAN-1987-871275. No information could be found regarding the nature or extent of the project, or whether the project was actually completed, in the Regulatory Branch records. Please note

that this search does not account for the presence of utility line projects that may have been constructed without notifying the U.S. Army Corps of Engineers Regulatory Branch such as those covered under non-reporting nationwide permits or those installed without Department of the Army authorization. If any pipelines and/or structures crossing the area are discovered, an amendment will be made to the contract notifying all potential bidders.

Should the Contractor locate an unidentified utility within the designated dredge areas he shall immediately cease all dredging operations in the immediate vicinity and notify the Contracting Officer in writing of the utility's presence and location. The Contracting Office will be responsible for the disposition of dredging operations in that area. The Contractor shall not anchor or resume dredging operations in the restricted area of any such utility until ordered to do so by the Contracting Officer.

The Contractor shall take all necessary precautions to prevent damage to these structures. The Contractor is required to coordinate with the owners, if such action is necessary, to mark the structures or move the cables in order to avoid interference with dredging operations. Copies of all permits are available upon request. Please allow sufficient lead time.

BRIDGES:

The contractor shall exercise the utmost caution when dredging in the vicinity of any bridge, pier, abutment, or bulkhead to prevent the collapse, undermining or damage to these structures. In no case shall the contractor moor any plant to or tie any line, cable, chain or anchor line around any part of a bridge structure, pier, abutment or bulkhead connected therewith.

c. LOCATION. The location of the work to be done under these specifications is at the Troy Lock & Dam, Troy, New York. The dredging area is located in Rensselaer County, New York.

d. CHANNEL AND TRANSPORTATION FACILITIES. Hudson River, NY: Based on plans and specifications survey performed in March 2025, a controlling depth of at least 3.8 feet below normal pool (normal pool height is 13.59 ft above NAVD88) is available in the Hudson River Federal Navigation Channel. Railroads and first class highways serve the locality / project vicinity.

e. CHANNEL TRAFFIC. Vessel traffic in the Hudson River Federal Navigation Channel area consists of bulk and general cargo freighters, tankers, container ships, tows of scows and barges, and miscellaneous small craft vessels. Millions of tons of bulk cargo, including petroleum products, are transported via the Hudson River Federal Navigation Channel. The entire Federal Navigation Channel shall remain open to commercial and noncommercial vessel traffic. As a result; vessel traffic will cause some delay to the dredging required in these drawings and specifications.

f. OBSTRUCTION OF CHANNEL. The Government will not undertake to keep the area free from vessels or other obstructions except to the extent of such regulations, if any, as may be prescribed by the

Secretary of the Army in accordance with the provisions of section 7 of the Rivers and Harbors Act in such manner as to obstruct navigation as little as possible, and in case the contractor's plant so obstructs the channel as to make difficult or endanger the passage of vessels, said plant shall be promptly moved on the approach of any vessel to such an extent as may be necessary to afford a practicable passage. Upon the completion of the work the Contractor shall promptly remove his plant, including ranges, buoys, piles and other marks placed by him under the contract in navigable waters or on shore.

g. BRIDGE-TO-BRIDGE RADIO-TELEPHONE EQUIPMENT. In order that radio-telephone communication may be made with passing vessels, all dredges engaged in work under the contract shall be equipped with and operate bridge-to-bridge radio-telephone equipment on VHF Channel 13(156.65 MHz with low power output having a communication range of approximately ten (10) miles). The Federal Communication Commission has approved the frequency.

1.9 ESTIMATED QUANTITIES

The total estimated quantities of material necessary to be removed from the specified limits to complete the work described in these specifications are computed from the plans and specifications survey performed in the Troy, NY area in March 2025.

Distribution of volumes is summarized below:

Hudson River New York Federal Navigation Project

WORK AREA	REQUIRED DREDGING DEPTH (FT.) COE Mean Low Water	CHANNEL TO GRADE (CY)	CHANNEL OVERDEPTH 1 FOOT (CY)	SLOPE TO GRADE (CY)	SLOPE OVERDEPTH 1 Foot (CY)	ESTIMATED TOTAL (CY)
Reach N04 Dredging Area	-14	7,700	1,335	NA	NA	9,035

Total Estimated Quantity Available: 9,035 CY

The Government will survey the project prior to starting work.

Above estimated quantities were computed from the data shown on the contract drawings. The quantities that may be removed and paid for will be computed by the Triangulated Irregular Network (TIN) method or average end area method as indicated in the Technical Specifications, Section 01 22 00.00 10, entitled "MEASUREMENT AND PAYMENT."

1.10 VARIATION IN ESTIMATED QUANTITIES

Where the quantity of a pay item in this contract is an estimated

quantity and where the actual quantity of material within the required dredging prism varies more than fifteen percent (15%) above or below the stated estimated quantity within the required dredging prism, an equitable adjustment in the contract unit price will be made upon the demand of either party. The equitable adjustment will be based upon any increase or decrease in costs due solely to the variations above one-hundred fifteen percent (115%) or below eighty-five percent (85%) of the estimated quantity. An adjustment in the contract unit price will also apply to that part of the actual quantity of allowable over depth material above one-hundred fifteen percent (115%) or below eighty-five percent (85%) of the estimated quantity. (UAI 52.211-5001 Variation in Estimated Quantities MAR 1995)

1.11 FINAL EXAMINATION AND ACCEPTANCE

a. As soon as practicable after the completion of the entire work, as in the opinion of the Contracting Officer and/or his Representative, will not be subject to damage by further operation under the contract, such work will be thoroughly examined at the cost and expense of the Government by sounding or by sweeping, or both, as determined by the Contracting Officer and/or his Representative. Only after the contractor has submitted a complete survey of the entire contract area(s), and submitted mapping and all data acquired to create such map, will the government perform its survey. Raw data, edited survey data with all supporting files and documentation, and all data generated during such work shall be furnished by the Contractor to the Contracting Officer and/or his Representative. Should any shoals, lumps, or other lack of contract depth be disclosed by this examination, the Contractor will be required to remove same by dredging at the contract rate for dredging or by other method approved by the Contracting Officer, but if the bottom is soft and the shoal areas are small and form no material obstruction to navigation, the removal of such shoals may be waived by the discretion of the Contracting Officer and/or his Representative. The Contractor or his authorized representative willbe notified when soundings and/or sweepings are to be made, and will be required to accompany the survey party. When the entire contract area(s) is found to be in a satisfactory condition, it will be accepted as final. Should more than two soundings or sweeping operations by the Government over an area be necessary by reason of work for the removal of shoals disclosed at a prior sounding or sweeping operations, this work will be charged against the Contractor. The rate for each day in which the Government plant is engaged in such sounding or sweeping operations and/or is en-route to or from the site or held, for the Contractor's convenience, at or near the site for these operations shall be deducted from the contractor’s progress or final payment.

b. Final acceptance of the entire work and the deductions or corrections of deductions made thereon will not be reopened after having once been made, except on evidence of collusion, fraud, or obvious error, and the acceptance of the entire work shall not change the time of payment of the retained percentages of the whole or any part of the work.

c. The entire area within the contract limits will be surveyed for final examination and acceptance. This contract has no partial acceptance areas.

d. All hydrographic survey data is to be collected in accordance with the Army Corps of Engineers manual EM-1110-2-1003.

e. Any survey related disagreement(s) as it pertains to this contract must be submitted in writing to the Contracting Officer or his Representative within 5 business days of occurrence of such survey relatedevent. Failure to notify the Contracting Officer or his representative within 5 business days of such survey related event disqualifies the Contractor from any such related claims.

1.12 CERF IMPLEMENTATION

(NOT USED)

1.13 THE SEAGOING BARGE ACT (46 USC 395 ET SEQ)

The Seagoing Barge Act applies to this project. In the event the Apparent Low Bidder contemplates using plant that requires U.S. Coast Guard certification to comply with this Act, the Apparent Low Bidder shall within five (5) calendar days after bid opening submit a copy of said certificate to the Contracting Officer and/or his Representative. Failure to produce the certificate within the required time shall subject the bidder to a determination of non-responsibility.

1.14 PRICING OF ADJUSTMENTS

When costs are a factor in any determination of a contract price adjustment pursuant to the Changes clause or any other clause of this contract, such costs shall be in accordance with Part 31 of the Federal Acquisition Regulation and the DOD FAR Supplement in effect on the date of this contract (DOD FAR SUPP 52.243.7001) costs shall be in accordance with Part 31 of the Federal Acquisition Regulation.

1.15 BID GUARANTEE

a. The offeror (bidder) shall furnish a separate bid bond, or United States bonds, Treasury notes or other public debt obligation of the United States, in the proper amount, by the time set for opening of bids. Failure to do so may be cause for rejection of the bid. The Contracting Officer and/or his Representative will return bid guarantees, other than bid bonds, (1) to unsuccessful bidders as soon as practicable after the opening of bids, and (2) to the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.

b. If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or give a bond(s) as required by the solicitation within the time specified, the Contracting Officer and/or his Representative may terminate the contract for default.

c. Unless otherwise specified in the bid, the bidder will (1) allow the number of days as indicated in paragraph 13D of Standard Form 1442 for acceptance of its bid and (2) give bond within 5 days after receipt of the forms by the bidder.

d. In the event the contract is terminated for default, the bidder

is liable for any cost of acquiring the work that exceeds the amount of its bid. The bid bond, or bonds or notes of the United States, is available to offset the difference.

1.16 EQUAL OPPORTUNITY PREAWARD CLEARANCE OF SUBCONTRACTORS

Notwithstanding the clause of this contract entitled "Subcontracts," the Contractor shall not enter into a first-tier subcontract for an estimated or actual amount of $1 million or more without obtaining in writing from the Contracting Officer and/or his Representative a clearance that the proposed subcontractor is in compliance with the equal opportunity requirements and therefore is eligible for award.

1.17 SPECIAL PROHIBITION ON EMPLOYMENT

a. Definitions: "Arising out of a contract with the Department of Defense," as used in this clause, means any act in connection with (1) attempting to obtain, (2) obtaining, or (3) performing a contract or subcontract of any agency, department or component of the Department of Defense.

b. "Convictions of fraud or any other felony," as used in this clause, means any conviction for fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of nol contendere, for which sentence has been imposed.

c. Section 941, Title IX, Pub. L. 99-500 (10 U.S.C. 2408) prohibits a person who is convicted of fraud or any other felony arising out of a contract with the Department of Defense from working in a managementor supervisory capacity on any defense contract, or serving on the board of directors of any defense contractor, for a period, as determined by the Secretary of Defense, of not less than one (1) year from the date of conviction. Defense contractors are subject to a criminal penalty of not more than $500,000 if they are convicted of knowingly employing a person under a prohibition or allowing such person to serve on their board of directors.

d. The Contractor agrees not to knowingly employ any person, convicted of fraud or any other felony arising out of a contract with the Department of Defense contract or subcontract or allow such persons to serve on its board of directors from the date the Contractor learns of the conviction until one (1) year has expired from the date of conviction. However, if the person has also been debarred pursuant to FAR subpart 9.4, the above prohibition shall extend for the period of debarment, but in no event shall the prohibition be less than (1) year from the date of conviction.

e. If the Contractor knowingly employs a convicted person in a management or supervisory capacity on any defense contract or subcontract or knowingly allows such person to serve on its board of directors within the prohibited period, the Government may consider, in addition to the criminal penalties contained in Section 941 of Pub. L. 99-500, other available remedies, such as suspension or debarment and may direct the cancellation of this contract at

no cost to the Government, or terminate this contract for default.

f. The Contractor agrees to include the substance of this clause, including this paragraph (e), appropriately modified to reflect the identity and relationship of the parties, in all subcontracts exceeding $25,000.

1.18 SUPERINTENDENCE OF SUBCONTRACTS

a. The Contractor shall be required to furnish the following, in addition to the superintendence required by the Contract Clauses entitled: "Superintendence by the Contractor."

(1) If more than 50% and less than 70% of the value of the contract work is subcontracted, one superintendent shall be provided at the site and on the Contractor's payroll to be responsible for coordinating, directing, inspecting and expediting the subcontract work.

(2) If 70% or more of the value of the work is subcontracted, the Contractor shall be required to furnish two such superintendents to be responsible for coordinating, directing, inspecting and expediting the subcontract work.

b. If the Contracting Officer, at any time after 50% of the subcontracted work has been completed, finds that satisfactory progress is being made, he may waive all or part of the above requirement for additional superintendence subject to the right of the Contracting Officer to reinstate such requirement if at any time during the progress of the remaining work he finds that satisfactory progress is not being made. (DOD FAR Supplement 52.236-7008)

1.19 PROCEDURES FOR SUBMISSION & CONTRACT PAYMENTS

In addition to the requirements contained in the Contract Clause entitled "Payments Under Fixed-Price Construction Contracts" and to implement the requirements of the Prompt Payment Act Amendments of 1988, P.L. 100-496, the following shall apply to all payments made under this contract:

a. At the time of submission of the progress chart, the contractor shall submit for approval by the Contracting Officer or his authorized representative a breakdown of the contract work which shall be to the degree of detail required by the Contracting Officer or his representative to effect reasonable progress payments. The Contracting Officer or his representative shall review this breakdown within 30 calendar days after receipt and either advise the contractor that it is approved or disapproved, and if disapproved the reasons for disapproval. Only after the breakdown is approved shall any payment invoice be accepted from the contractor and any payment made to him. The Contracting Officer can determine it is in the best interest of the Government to make payment without an approved breakdown, however, in no case shall more than 10% of the contract amount be paid unless the breakdown is approved.

b. The contractor shall submit his request for payment by submission of a proper invoice to the office or person(s) designated in paragraph "c". For purposes of payment a "proper invoice" is defined as the following:

(1) An estimate of the work completed in accordance with the approved breakdown indicating the percentage of work of each item and the associated costs.

(2) A properly completed ENG Form 93 and 93a (where required).

(3) All contractual submissions indicated elsewhere in this contract to be submitted with payment, such as updated progress schedules, updated submittal registers, etc.

The following certification executed by a responsible official of the organization authorized to bind the firm. A "responsible official" would be either a corporate officer, partner, or owner, in the case of a sole proprietorship:

I hereby certify, to the best of my knowledge and belief, that: The amounts requested are only for performance in accordance with the specifications, terms and conditions of the contract;

(1) Payments to subcontractors and suppliers have been made from previous payments received under the contract and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract requirements and the requirements of Chapter 39 of Title 31, United States Code; and

(2) This request for progress payments does not include any amounts, which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract.

(3) All required prime and subcontractor payrolls have beensubmitted.

_____

(Name)

_____

(Title)

_____

(Date)

c. The Government shall designate the office or person(s) who shall first receive the invoice submissions and the Contractor shall be notified at the preconstruction conference. In addition, the contractor shall at the same time submit one copy of the detailed breakdown and the ENG Form 93 and 93a Form to the Project Engineer.

d. The Government representative shall return any request for payment, which is deemed defective within 7 days of receipt and shall

specify the defects. Telephone calls with MFR or E-mail notification of the contractor about the defective invoice shall be considered sufficient notice to the contractor. If the defect concerns a disagreement as to the amount of work performed and or the amount of the payment being submitted, the Government and the Contractor's representative should meet to resolve the differences and reach agreement. Upon agreement, the contractor shall submit a new breakdown and ENG Form 93 (and 93a) and any other submissions requiring correction. These will be incorporated with the previous submittal and will then constitute a proper invoice.

e. If agreement cannot be reached, the Government shall determine the proper amount per Contract Clause entitled: "Payments Under Fixed-Price Construction Contracts" and process the payment accordingly. In this event, "a proper invoice" for Prompt Payment Act purposes will not have been submitted to the Government.

f. The Government shall pay the contractor in accordance with the following time frames:

(1) Progress Payments. From the date a "Proper invoice" is received, in accordance with subparagraphs "b" and "d" of this clause, the Government will issue a check within 14 calendar days.

(2) Reduction in Retaining Payment. If during the course of the contract, a reduction in retainage payment is required, the Government shall issue a check within 30 calendar days after the approval of the release to the Contractor by the Contracting Officer or his authorized representative.

(3) Final Payment. A final payment request shall not be considered valid until the Contractor has fulfilled all contract requirements including all administrative items, payrolls, warranties, etc. and has submitted a release of claims. When the Contractor has fulfilled all contract requirements and a "proper invoice" has been submitted, the Government shall issue a check within 30 days from the date of acceptance of the project by the Contracting Officer.

1.20 SUBMISSION OF CLAIMS

The following shall be submitted to the Contracting Officer at the following address: U.S. Army Corps of Engineers, New York District, 26 Federal Plaza, New York, New York 10278-0090:

a. Claims referencing or mentioning the Contact Disputes Act of 1978.

b. Requests for a written decision by the Contracting Officer.

c. Claims certified in accordance with the Contract Disputes Act of1978.

No other Government representative is authorized to accept such requests. A copy shall also be provided to the Authorized Representative of the Contracting Officer.

The Contractor shall also provide the Contracting Officer with a copy of any requests for additional time, money or interpretation of

contract requirements which were provided to the Authorized Representative of the Contracting Officer and which have not been resolved after 90 days.

1.21 OPERATOR QUALIFICATIONS FOR FLOATING CRANES & FLOATING DERRICKS

All floating cranes and floating derricks may be only operated by qualified operators. Operators shall be designated as qualified by a source which qualifies crane and derrick operators (e.g. an independent testing and qualifying company, a union, a governmental agency, a qualified consultant(can be an in-house resource)). Qualification shall be written (or oral) and practical operating examination unless the operator is licensed by a state or city licensing agency for the particular type of crane or derrick. Proof of qualification of crane and derrick operators shall be provided to the Contracting Officer's representative prior to the start of work.

1.22 EQUIPMENT OWNERSHIP & OPERATING EXPENSE SCHEDULE

a. Allowable costs for construction of marine plant and equipment is sound workable condition owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual cost data when the Government can determine both ownership and operating costs for each piece of equipment or equipment groups of similar serial and series from the contractor's accounting records. When both ownership and operating costs cannot be determined from the contractor's accounting records, equipment costs shall be based upon the applicable provision of EP 1110-1-8, "Construction Equipment Ownership and Operating Expense Schedule," Region I. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the Contracting Officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or arate may be developed using the formula provided in the schedule. For forward pricing, the schedule effect at the time of negotiations shall apply. For retrospective pricing, the schedule in effect at the time the work was performed shall apply.

b. Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36 substantiated by certified copies of paid invoices. Rates for equipment rented from an organization under common control, lease-purchase or sale-lease back arrangements will be determined using the schedule except that rental costs leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated leases are allowable. Costs for major repairs and overhaul are unallowable.

c. When actual equipment costs are proposed and the total amount of the pricing action is over $25,000, cost or pricing data shall be submitted on Standard Form 1411, "Contract Pricing Proposal Cover Sheet." By submitting cost or pricing data, the contractor grants to the contracting officer or an authorizing representative the right to examine those books, records, documents and other supporting data that will permit evaluation of the proposed equipment costs. After

price agreement the contractor shall certify that the equipment costs or pricing data submitted are accurate, complete and current. (UAI 31.105-101 Equipment Ownership & Operating Expense Schedule MAR 1995)

1.23 WAGE RATES

The attached schedule of wage rates contains rates applicable to all work under this contract (see Section 00 90 00).

1.24 LABOR-ADDITIONAL REQUIREMENTS

Fringe benefits statement: The method of payment of applicable fringe benefits will be indicated on DD Form 879, Statement of Compliance, and attached to each weekly payroll.

1.25 NOTICE TO MARINERS

The Contractor shall, prior to commencement of work, notify the 1st Coast Guard District, Aids to Navigation Officer, of his proposed operations including location and duration of operations and request that the information be published in the "Notice to Mariners." This notification must be in sufficient time so that it appears in the Notice at least 30 days prior to the commencement of the dredging operation.

1.26 ENVIRONMENTAL LITIGATION

a. If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Contracting Officer and/or his Representative, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor or a Subcontractor at any tier not required by the terms of this contract. If it is determined that the order is not due in any part to acts or omissions of the Contractoror a Subcontractor at any tier other than as required by the terms of this contract, such suspension, delay, or interruption shall be considered as if ordered by the Contracting Officer and/or his Representative in the administration of this contract under the terms of Section I, contract clause entitled "SUSPENSION OF WORK." The period of such suspension, delay or interruption shall be considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided inthat clause, subject to all the provisions thereof.

b. The term "environmental litigation," as used herein, means a lawsuit alleging that the work will have an adverse effect on the environment or that the Government has not duly considered, either substantively or procedurally, the effect of the work on the environment.

1.27 PATENTS

All potential bidders need to be aware of the following patents, which maybe related to performance of this contract.

Patent 6,293,731
Patent 5,007,590
Patent 5,028,010
Patent 5,353,998
Patent 5,542,614
Patent 5,794,862
Patent 5,931,605
Patent 6,017,169

The foregoing patents, and any others which may be applicable to activities performed under this contract, are neither required nor prohibited. However, if you use the methods or technology described in these or other patents, please factor license costs into your bid. The successful bidder needs to obtain the proper license(s) if he wishes to use the methods, processes, or technology described in any applicable patents.

1.28 VERIFICATION OF SMALL BUSINESS UTILIZATION

a. This clause is applicable to small business concerns whose contracts exceed $1,000,000.

b. In accordance with the clause at FAR 52.219-8, entitled Utilization of Small Business Concerns, in effect on the date of this contract, the Contracting Officer may survey the extent of small and small disadvantaged business utilization under this contract. The Contractor may be required to report to the Contracting Officer statistical data on the number and dollar amounts of subcontracting awards with small businesses and small disadvantaged businesses.

c. As appropriate, the Contracting Officer may require one or more follow-up reports to the initial report.

d. The Contractor agrees to insert this clause in any subcontract that may exceed $1,000,000, including this subparagraph (d).

1.29 CONTRACT INFORMATION RELEASE

This constitutes notification that, pursuant to CECW-OD Memo, 5 February 1996, "Release of Information - Dredging Projects", plant operation reports, including Engineer Form 27/27A, Report of Operations - Hopper Dredges and Engineer Form 4267, Daily Report of Operations - Pipeline, Dipper or Bucket Dredges, are public information and shall be provided upon proper FOIA request for active and completed contract information.

1.30 ALTERATIONS IN CONTRACT

Portions of the contract are altered as follows:

a. The following clause is incorporated as part of the contract: "By entering into this contract the Contractor certifies that neither it, nor any person or firm who has an interest in the Contractor's firm, is a person, or firm ineligible in accordance with FAR subpart"9.4" (DEAN-PRP EFAR Acquisition Letter 85-1 dated 11 Sept 85)

b. Add the following sentence to paragraph "b" of Contract Clause 49: Insurance - Work on a Government Installation:"Insurance coverage shall be as specified in 28.307 ofthe Federal Acquisition Regulation".

1.31 CONTRACTOR SUPPLY AND USE OF ELECTRONIC SOFTWARE FOR PROCESSINGDAVIS-BACON ACT CERTIFIED LABOR PAYROLLS

The Contractor is encouraged to use a commercially-available electronic system to process and submit certified payrolls electronically to the Government. The requirements for preparing, processing and providing certified labor payrolls are established by the Davis-Bacon Act as stated in FAR 52.222-8, PAYROLLS AND BASIC RECORDS and FAR 52.222-13, COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS. If the contractor elects to use an electronic Davis-Bacon payroll processing system, then the contractor shall be responsible for obtaining and providing for all access, licenses, and other services required to provide for receipt, processing, certifying, electronically transmitting to the Government, and storing weekly payrolls and other data required for the Contractor to comply with Davis-Bacon and related Act regulations. When the contractor uses an electronic Davis-Bacon payroll system, the electronic payroll service shall be used by the contractor to prepare, process, and maintain the relevant payrolls and basic records during all work under this construction contract and the electronic payroll service shall be capable of preserving these payrolls and related basic records for the required 3 years after contract completion. If the contractor chooses to use an electronic Davis-Bacon payroll system, then the Contractor shall obtain and provide electronic system access to the Government, as required to comply with the Davis-Bacon and related Act regulations over the duration of this construction contract. The access shall include electronic review access by the Government contract administration office to the electronic payroll processing system used by the contractor. The Contractor's provision and use of an electronic payroll processing system shall meet the following basic functional criteria: commercially available; compliant with appropriate Davis Bacon Act payroll provisions in the FAR; able to accommodate the required numbers of employees and subcontractors planned to be employed under the contract; capable of producing an Excel spreadsheet compatible electronic output of weekly payroll records (format at http://www.rmssupport.com/guides.aspx for export in an Excel spreadsheet to be imported into the Contractor's Quality Control System (QCS) version of Resident Management System (RMS), that in turn shall export payroll data to the Government's Resident Management System (RMS); demonstrated security of data and data entry rights; ability to produce contractor-certified electronic versions of weekly payroll data; ability to identify erroneous entries and track the data/time of all versions of the certified Davis Bacon payrolls submitted to the Government over the life of the contract; capable of generating a durable record copy, that is, a CD orDVD and PDF file record of data from the system database at end of the contract closeout. This durable record copy of data from the electronic Davis-Bacon payroll processing system shall be provided to the Government during contract closeout. All contractor-incurred costs related to the Contractor's provision and use of an electronic payroll processing service shall be included in the Contractor's price for the overall work under the contract. The costs for Davis-Bacon Act compliance using electronic payroll processing services shall not be a separately bid/proposed or reimbursed item under this contract.

1.24 FUEL USAGE

The Contractor shall furnish the Contracting Officer and/or his Representative a report, to be received on or before the last day of the calendar month, listing the totals of fuels consumed by the dredging plant,supporting vessels, and other construction equipment. The report shall list the quantities of different fuels separately. The report shall cover the period from the 25th of the preceding month to the 25th of the current month.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

-- End of Section --

SECTION 01 32 01.00 10

PROJECT SCHEDULE
02/26

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation, submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following inaccordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Pre-Construction Submittals G,

Progress Schedule; G

1.2 QUALIFICATIONS

Designate an authorized representative to be responsible for the preparation of the schedule and all required updating (activity status) and preparation of reports. The authorized representative shall be experienced in scheduling projects similar in nature to this project and shall be experienced in the use of the scheduling software that meets the requirements of this specification.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Prepare for approval a Project Schedule, as specified herein, pursuant to the Contract Clause, SCHEDULE FOR CONSTRUCTION CONTRACTS. Show in the schedule the sequence in which the Contractor proposes to perform the work and dates on which the Contractor contemplates starting and completing all schedule activities. The scheduling of the entire project, including the design and construction sequences, is required. The scheduling of is the responsibility of the Contractor. Contractor management personnel shall actively participate in its development. Working on the project shall also contribute in developing and maintaining an accurate Project Schedule. Provide a schedule that is a forward planning as well as a project monitoring tool.

3.1.1 SCHEDULING AND DETERMINATION OF PROGRESS

In accordance with the contract provisions, the Contractor shall, within five (5) days after receipt of Notice to Proceed by him or as otherwise determined by the Contracting Officer and/or his Representative, submit for approval a practicable Progress Schedule. The progress schedule shall be in the form of a chart graphically indicating the sequence

proposed to accomplish each work feature of operation (Eng. Form 2454 or an acceptable equivalent -e.g., computer-generated from a commercially available project management software package). The chart shall be prepared to show the starting and completion dates of all work features on a linear horizontal time scale beginning with date of the receipt of the Notice to Proceed and indicating calendar days to completion. Each activity in construction shall be represented by an arrow. The head to tail arrangement of arrows shall flow from left to right. Each arrow representing an activity shall be annotated to show the activity description and duration. Contractor shall indicate on the chart the important work features or operations that are critical to the timely overall completion of the project. Key dates for such important work features and portions of work features are milestone dates and shall be so indicated on the chart. This schedule will be the medium through which the timeliness of the Contractor's construction effort is appraised. When changes are authorized that result in contract time extensions, the Contractor shall submit a modified chart for approval by the Contracting Officer and/or his Representative. The terms of Section 00 72 00, Contract Clause entitled: SCHEDULES FOR CONSTRUCTION CONTRACTS, with reference to overtime, extra shifts, etc., may be invoked when the Contractor fails to start or complete work features or portions of same by the time indicated by the milestone dates on the approved progress chart, or when it is apparent to the Contracting Officer from the Contractor's actual progress that these dates will not bemet. Neither on the chart nor on the periodic charts which the Contractor is required to prepare and submit, as described in paragraph, SCHEDULES FOR CONSTRUCTION CONTRACTS of the Contract Clauses, shall the actual progress to be entered include or reflect any materials which may be on the site, but are not yet installed or incorporated in the work. For payment purposes only, an allowance will be made by the Contracting Officer and/or his Representative of up to 100 percent of the invoiced cost of materials or equipment delivered to the site but not incorporated into the construction, pursuant to Section 00 72 00, Contract Clause entitled: "PAYMENT UNDER FIXED-PRICE CONSTRUCTION CONTRACTS." The making of such an allowance will be contingent upon a determination by the Contracting Officer and/or his Representative that the Contractor's compliance with the quality control requirements of the contract is more than satisfactory.

When the contractor submits his progress schedule, he will include in the submission a progress curve reflecting the intended schedule for completing the work. The progress curve (S-Curve) will be plotted to reflect Cumulative Progress (Percent) based on placement along the Y-axis and Time along the X-axis. The progress curve will be furnished at the same time the progress schedule is submitted for approval and updated monthly by the Contractor.

3.1.2 Approved Project Schedule

Use the approved Project Schedule to measure the progress of the work and to aid in evaluating time extensions. Make the schedule cost loaded and activity coded. The schedule will provide the basis for all progress payments. If the Contractor fails to submit any schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

3.1.3 Schedule Status Reports

Provide a Schedule Status Report on at least a monthly basis. If, in the opinion of the Contracting Officer, the Contractor falls behind the approved schedule, take steps necessary to improve its progress including those that may be required by the Contracting Officer, without additional cost to the Government. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.

3.1.4 Default Terms

Failure of the Contractor to comply with the requirements of the Contracting Officer shall be grounds for a determination, by the Contracting Officer, that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of the contract.

3.2 BASIS FOR PAYMENT AND COST LOADING

Use the schedule as the basis for determining contract earnings during each update period and therefore the amount of each progress payment. Lack of an approved schedule update, or qualified scheduling personnel, will result in the inability of the Contracting Officer to evaluate contract earned value for the purposes of payment. Failure of the Contractor to provide all required information will result in the disapproval of the preliminary, initial and subsequent schedule updates. In the event schedule revisions are directed by the Contracting Officer and those revisions have not been included in subsequent revisions or updates, the Contracting Officer may hold retainage up to the maximum allowed by contract, each payment period, until such revisions to the Project Schedule have been made. Activity cost loading shall be reasonable, as determined by the Contracting Officer. The aggregate value of all activities coded to a contract CLIN shall equal the value of the CLIN on the Schedule.

3.3 PROJECT SCHEDULE DETAILED REQUIREMENTS

The computer software system utilized to produce and update the Project Schedule shall be capable of meeting all requirements of this specification. Comply with PRIMAVERA P6 - USACE MANDATORY REQUIREMENTS. Failure of the Contractor to meet the requirements of this specification will result in the disapproval of the schedule.

3.3.1 Critical Path Method

Use the Critical Path Method (CPM) of network calculation to generate the Project Schedule. Prepare the Project Schedule using the Precedence Diagram Method (PDM).

3.3.2 Level of Detail Required

Develop the Project Schedule to an appropriate level of detail. Failure

to develop the Project Schedule to an appropriate level of detail, as determined by the Contracting Officer, will result in its disapproval. The Contracting Officer will consider, but is not limited to, the following characteristics and requirements to determine appropriate level of detail:

3.3.2.1 Activity Durations

Reasonable activity durations are those that allow the progress of ongoing activities to be accurately determined between update periods. Less than 2 percent of all non-procurement activities shall have Original Durations (OD) greater than 20 workdays or 30 calendar days. Procurement activitiesare defined herein.

3.3.2.2 Procurement Activities

The schedule must include activities associated with the submittal, approval, procurement, fabrication and delivery of long lead materials, equipment, fabricated assemblies, and supplies. Long lead procurement activities are those with an anticipated procurement sequence of over 90 calendar days. A typical procurement sequence includes the string of activities: submit, approve, procure, fabricate, and deliver.

3.3.2.3 Contract Changes/Requests for Equitable Adjustment Coding (MODF)

Assign Activity code to any activity or sequence of activities added to the schedule as a result of a Contract Modification, when approved by the Contracting Officer, with a Contract Changes/REA Code. Key all Code values to the Government's modification numbering system. Any activity or sequence of activities added to the schedule as a result of alleged constructive changes made by the Government may be added to a copy of the current schedule, subject to the approval of the Contracting Officer. Assign Activity codes for these activities with a Contract Changes/REA Code. Key the code values to the Contractor's numbering system. Approval to add these activities does not necessarily mean the Government accepts responsibility and, therefore, liability for such activities and any associated impacts to the schedule, but rather the Government recognizes such activities are appropriately added to the schedule for the purposes of maintaining a realistic and meaningful schedule. Such activities shall not be Responsibility Coded to the Government unless approved. An activity shall not have more than one Contract Changes/REA Code.

3.3.2.4 Contract Line Item (CLIN) Coding (BIDI)

Code all activities to the CLIN on the Contract Line Item Schedule to which the activity belongs. An activity shall not contain more than one CLIN Item Code. CLIN Item code all activities, even when an activity is not cost loaded.

3.3.2.5 Phase of Work Coding (PHAS)

Assign Phase of Work Code to all activities based upon the phase of work in which the activity occurs. Code fast track phases proposed by the Contractor to allow filtering and organizing the schedule by fast track design and construction packages. If the contract specifies construction phasing with separately defined performance periods, identify a Construction Phase Code to allow filtering and organizing the

schedule accordingly. Each activity shall be identified with a single project phase and have only one Phase of Work code.

3.3.2.6 Category of Work Coding (CATW)

Assign Category of Work Code to all Activities based upon the category of work to which the activity belongs. Category of Work Code must include, but is not limited to: approvals, Acceptance, Procurement, Fabrication, Delivery, Weather Sensitive Installation, Non-Weather Sensitive Installation, Start-Up, Test and Turnover. Assign a Category of Work Codeto each activity. Each activity shall have only one Category of Work Code.

3.3.2.7 Definable Features of Work Coding (FOW1, FOW2, FOW3)

Assign a Definable Feature of Work Code to appropriate activities based on the definable feature of work to which the activity belongs. Definable Feature of Work is defined in Specification Section 01 45 00.00 10 QUALITY CONTROL. An activity shall not have more than one Definable Feature of Work Code. Not all activities are required to be Definable Feature of Work Coded.

3.3.3 Scheduled Project Completion and Activity Calendars

The schedule interval shall extend from NTP date to the required contract completion date. The contract completion activity (End Project) shall finish based on the required contract duration in the accepted contract proposal, as adjusted for any approved contract time extensions. The first scheduled work period shall be the day after NTP is received by the Contractor. Schedule activities on a calendar to which the activity logically belongs. Activities may be assigned to a 7 day calendar when the contract assigns calendar day durations for the activity such as a Government Acceptance activity. If the Contractor intends to perform physical work less than seven days per week, schedule the associated activities on a calendar with non-work periods identified including weekends and holidays. Assign the Category of Work Code - Weather Sensitive Installation to those activities that are weather sensitive. Original durations must account for anticipated normal adverse weather. The Government will interpret all work periods not identified as non-workperiods on each calendar as meaning the Contractor intends to perform workduring those periods.

3.3.3.1 Project Start Date

The schedule shall start no earlier than the date on which the NTP was acknowledged. Include as the first activity in the project schedule an activity called "Start Project" (or NTP). The "Start Project" activity shall have an "ES" constraint date equal to the date that the NTP was acknowledged, and a zero day duration.

3.3.3.2 Schedule Constraints and Open Ended Logic

Constrain completion of the last activity in the schedule by the contract completion date. Schedule calculations shall result in a negative float when the calculated early finish date of the last activity is later than the contract completion date. Include as the last activity in the project schedule an activity called "End Project". The "End Project" activity shall have an "LF" constraint date equal to the contract completion date for the project, and with a zero day

duration or by using the "project must finish by" date in the scheduling software. The schedule shall have no constrained dates other than those specified in the contract. The use of artificial float constraints such as "zero fee float" or "zero total float" are typically prohibited. There shall only be 2 open ended activities: Start Project (or NTP) with no predecessor logic and End Project with no successor logic. Early Project Completion

In the event the Preliminary or Initial project schedule calculates an early completion date of the last activity prior to the contract completion date, identify those activities that it intends to accelerate and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. The last activity shall have a late finish constraint equal to the contract completion date and the schedule will calculate positive float. The Government will not approve an early completion schedule with zero float on the longest path. The Government is under no obligation to accelerate activities for which it is responsible to support a proposed early contract completion.

3.3.4 Interim Completion Dates

Constrain contractually specified interim completion dates to show negative float when the calculated early finish date of the last activity in that phase is later than the specified interim completion date.

3.3.4.1 Start Phase

Include as the first activity for a project phase an activity called "Start Phase X" where "X" refers to the phase of work. The "Start Phase X" activity shall have an "ES" constraint date equal to the date on which the NTP was acknowledged, and a zero day duration.

3.3.4.2 End Phase

Include as the last activity for a project phase an activity called "End Phase X" where "X" refers to the phase of work. The "End Phase X" activity shall have an "LF" constraint date equal to the specified completion date for that phase and a zero day duration.

3.3.4.3 Phase "X" Hammock

Include a hammock type activity for each project phase called "Phase X" where "X" refers to the phase of work. The "Phase X" hammock activity shall be logically tied to the earliest and latest activities in the phase.

3.3.5 Default Progress Data Disallowed

Do not automatically update Actual Start and Finish dates with default mechanisms that may be included in the scheduling software. Activity Actual Start (AS) and Actual Finish (AF) dates assigned during the updating process shall match those dates provided from Contractor Quality Control Reports. Failure of the Contractor to document the AS and AF dates on the Daily Quality Control report for every in-progress or completed activity, and failure to ensure that the data contained on the Daily Quality Control reports is the sole basis for schedule updating shall result in the disapproval of the Contractor's updated schedule and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. Updating of the percent complete and the remaining

duration of any activity shall be independent functions. Disable program features which calculate one of these parameters from the other.

3.3.6 Out-of-Sequence Progress

Activities that have progressed before all preceding logic has been satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case basis subject to approval by the Contracting Officer. Propose logic corrections to eliminate all out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule. Correct out of sequence progress that continues for more than two update cycles by logic revision, as approved by the Contracting Officer.

3.3.7 Negative Lags and Start to Finish Relationships

Lag durations contained in the project schedule shall not have a negative value. Do not use Start to Finish (SF) relationships.

3.3.8 Calculation Mode

Schedule calculations shall retain the logic between predecessors and successors even when the successor activity starts and the predecessor activity has not finished. Software features that in effect sever the tie between predecessor and successor activities when the successor has started and the predecessor logic is not satisfied ("progress override") will not be allowed.

3.3.9 Milestones

The schedule must include milestone activities for each significant project event including but not limited to: milestone activities for each fast track design package released for construction; design complete; foundation/substructure construction complete; superstructure construction complete; building dry-in or enclosure complete to allow the initiation of finish activities; permanent power complete; and building systems commissioning complete.

3.4 PROJECT SCHEDULE SUBMISSIONS

Provide the submissions as described below. The data CD, reports, and network diagrams required for each submission are contained in paragraph SUBMISSION REQUIREMENTS.

3.4.1 Preliminary Project Schedule Submission

Submit the Preliminary Project Schedule, defining the Contractor's planned operations for the first 90 calendar days for approval within 5 calendar days after the NTP is acknowledged. The approved Preliminary Project Schedule will be used for payment purposes not to exceed 90 calendar days after NTP. Completely cost load the Preliminary Project Schedule to balance the contract award CLINS shown on the Price Schedule. Detail it for the first 90 calendar days. It may be summary in nature for the remaining performance period. It must be early start and late finish constrained and logically tied as previously specified. The Preliminary Project Schedule forms the basis for the Initial Project Schedule specified herein and must include all of the required Plan and Program preparations, submissions and approvals identified in the

contract (for example, Quality Control Plan, Safety Plan, and Environmental Protection Plan) as well as design activities, the planned submissions of all early design packages, permitting activities, design review conference activities and other non-construction activities intended to occur within the first 90 calendar days. Schedule any construction activities planned for the first 90 calendar days after NTP. Constrain planned construction activities by Government acceptance of the associated design package(s) and all other specified Program and Plan approvals. Activity code any activities that are summary in nature after the first 90 calendar days with Responsibility Code (RESP) and Feature of Work code (FOW1, FOW2, FOW3).

3.4.2 Initial Project Schedule Submission

Submit the Initial Project Schedule for approval within 5 calendar days after NTP. The schedule shall demonstrate a reasonable and realistic sequence of activities which represent all work through the entire contract performance period. The Initial Schedule shall be at a reasonable level ofdetail as determined by the Contracting Officer.

3.4.3 Periodic Schedule Updates

Based on the result of the meeting, specified in PERIODIC SCHEDULE UPDATE MEETINGS, submit periodic schedule updates. These submissions will enable the Contracting Officer to assess Contractor's progress. If the Contractor fails or refuses to furnish the information and project schedule data, which in the judgment of the Contracting Officer or authorized representative is necessary for verifying the Contractor's progress, the Contractor shall be deemed not to have provided an estimate upon which progress payment may be made.

3.5 SUBMISSION REQUIREMENTS

Submit the following items for the Preliminary Schedule, Initial Schedule, and every Periodic Schedule Update throughout the life of the project:

3.5.1 Schedule Reports

The format, filtering, organizing and sorting for each schedule report shall be as directed by the Contracting Officer. Typically reports shall contain: Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float, Actual Start Date, Actual Finish Date, and percent Complete. The following lists typical reports that will be requested. One or all of these reports may be requested for each schedule submission.

3.5.1.1 Activity Report

A list of all activities sorted according to activity number.

3.5.1.2 Logic Report

A list of detailed predecessor and successor activities for every activity in ascending order by activity number.

3.5.1.3 Total Float Report

A list of all incomplete activities sorted in ascending order of total float. List activities which have the same amount of total float in ascending order of Early Start Dates. Do not show completed activities on this report.

3.5.1.4 Earnings Report by CLIN

A compilation of the Contractor's Total Earnings on the project from the NTP to the data date. This report shall reflect the earnings of specific activities based on the agreements made in the schedule update meeting defined herein. Provided that the Contractor has furnished a complete schedule update, this report shall serve as the basis of determining progress payments. Group activities by CLIN item number and sort by activity number. This report shall: sum all activities coded to a particular CLIN and provide a CLIN item percent earned value; and complete and sum CLIN items to provide a total project percent complete. The printed report shall contain, for each activity: the Activity Number, Activity Description, Original Budgeted Amount, Total Quantity, Quantity to Date, Percent Complete (based on cost), and Earnings to Date.

3.6 PERIODIC SCHEDULE UPDATE MEETINGS

Conduct periodic schedule update meetings for the purposes of reviewing the Contractor's proposed out of sequence corrections, determining causes for delay, correcting logic, maintaining schedule accuracy and determining earned value. Meetings shall occur at least monthly within five days of the proposed schedule data date and after the Contractor has updated the schedule with Government concurrence respecting actual start dates, actual finish dates, remaining durations and percent complete for each activity itintends to status. Provide a computer with the scheduling software loadedand a projector during the meeting which allows all meeting participants to view the proposed schedule update during the meeting. The meeting and resultant approvable schedule update shall be a condition precedent to a formal submission of the update as described in SUBMISSION REQUIREMENTS and to the submission of an invoice for payment. The meeting will be a working interactive exchange which will allow the Government and the Contractor the opportunity to review the updated schedule on a real time and interactive basis. The Contractor's authorized scheduling representative will organize, sort, filter and schedule the update as requested by the Government. The meeting will last no longer than 8 hours. A rough draft of the proposed activity logic corrections and narrative report shall be provided to the Government 48 hours in advance of the meeting. The Contractor's Project Manager and Authorized Scheduler shall attend the meeting with the Authorized Representative of the Contracting Officer.

3.6.1 Update Submission Following Progress Meeting

Submit a complete update of the project schedule containing all approved progress, revisions, and adjustments, pursuant to paragraph SUBMISSION REQUIREMENTS not later than 4 working days after the periodic schedule update meeting, reflecting only those changes made during the previous update meeting.

3.6.2 Status of Activities

Update information, including Actual Start Dates (AS), Actual Finish Dates(AF), Remaining Durations (RD), and Percent Complete shall be subject to the approval of the Government prior to the meeting. As a minimum, address the following items on an activity by activity basis during each progress meeting.

3.6.2.1 Start and Finish Dates

Accurately show the status of the AS and/or AF dates for each activity currently in-progress or completed since the last update. The Government may allow an AF date to be assigned with the percent complete less than 100 percent to account for the value of work remaining but not restraining successor activities. Only assign AS dates when actual progress occurs onan activity.

3.6.2.2 Remaining Duration

Update the estimated RD for all incomplete activities independent of Percent Complete. Remaining Durations may exceed the activity OD or may exceed the activity's prior update RD if the Government considers the current OD or RD to be understated based on current progress, insufficient work crews actually manning the job, unrealistic OD or deficiencies that must be corrected that restrain successor activities.

3.6.2.3 Percent Complete

Update the percent complete for each activity started, based on the realistic assessment of earned value. Activities which are complete but for remaining minor punch list work and which do not restrain the initiation of successor activities may be declared 100 percent complete. To allow for proper schedule management, cost load the correction of punch list from Government pre-final inspection activity(ies) not less than 1 percent of the total contract value, which activity(ies) may be declared 100 percent complete upon completion and correction of all punch list work identified during Government pre-final inspection(s).

3.6.2.4 Logic Changes

Specifically identify and discuss all logic changes pertaining to NTP on change orders, change orders to be incorporated into the schedule, Contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, and other changes that have been made pursuant to contract provisions. The Government will only approve logic revisions for the purpose of keeping the schedule valid in terms of its usefulness in calculating a realistic completion date, correcting erroneous logic ties, and accurately sequencing the work.

3.6.2.5 Other Changes

Other changes required due to delays in completion of any activity or group of activities include: 1) delays beyond the Contractor's control, such asstrikes and unusual weather. 2) delays encountered due to submittals, Government Activities, deliveries or work stoppages which make re-planning the work necessary. 3) Changes required to correct a schedule that does not represent the actual or planned prosecution and progress of the work.

3.7 REQUESTS FOR TIME EXTENSIONS

a. Time extensions for contract changes will depend upon the extent, if any, by which the changes cause delay in completion of the various elements of construction. The change order granting the time extension may provide that the contract completion date will be extended only for those specific elements related to the changed work and that the remaining contract completion dates for all other portions of the work will not be altered. The change order also may provide an equitable readjustment of liquidated damages under the new completion schedule.

3.7.1 Time Extension for Unusually Severe Weather

If a time extension is requested due to adverse weather conditions, the Contractor must chronologically list each day that was lost due to adverse weather conditions with his daily reports. The Contracting Officer or his Representative will examine whether the contractor is entitled to a time extension. The adverse weather days must prevent work for 50% or more of the contractor’s work day and delay work critical to the timely completion of the project. The Contracting Officer or his Representative will convertany delays meeting the above requirements to calendar days and issue a modification in accordance with Contract Clause “CHANGES.”

a. This provision specifies the procedure for determination of time extensions for unusually severe weather in accordance with the Contract Clause entitled "Default (Fixed-Price Construction)".

The listing below defines the monthly anticipated adverse weather for the contract period and is based upon NOAA or similar data for the geographic location of the project.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY WORK DAYS BASED ON 5 WORK DAY WEEK STATION LOCATION: VARIOUS BASES, NY											
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
(31)	(28)	(31)	(7)	(8)	(5)	(6)	(6)	(4)	(5)	(6)	(15)

b. The above schedule of anticipated adverse weather will constitute the base line for monthly (or portion thereof) weather time evaluations. Upon acknowledgment of the notice to proceed and continuing throughout the contract on a monthly basis, actual adverse weather days will be recorded on a calendar day basis (include weekends and holidays) and compared to the monthly anticipated adverse weather in subparagraph a. above. For purposes of the sub- paragraph b., the term actual adverse weather days shall include days impacted by actual adverse weather for 50% or more of the Contractor's work day.

c. The number of actual adverse weather days shall be calculated chronologically from the first to the last day in each month. Once the number of actual adverse weather days anticipated in subparagraph a. above have been incurred, the Contracting Officer will examine any subsequently occurring adverse weather days to determine whether a contractor is entitled to a time extension. These subsequently occurring adverse weather days must prevent work for 50 percent or more of the Contractor's work day and delay work critical to the timely completion of the project. The Contracting Officer will convert any delays meeting

the above requirement to calendar days and issue a modification in accordance with the general provision entitled "Termination for Default - Damages for Delay - Time Extensions".

d. The Contractor's schedule must reflect the above anticipated adverse weather delays on all weather dependent activities.

3.7.2 Justification of Delay

The project schedule shall clearly display that the Contractor has used, in full, all the float time available for the work involved with this request. The Contracting Officer's determination as to the number of allowable days of contract extension shall be based upon the project schedule updates in effect for the time period in question, and other factual information. Actual delays that are found to be caused by the Contractor's own actions, which result in a calculated schedule delay, will not be a cause for an extension to the performance period, completion date, or any interim milestone date.

3.7.3 Submission Requirements

In the event the Contractor believes it is entitled to an extension of the contract performance period, completion date, or any interim milestone date, furnish the following for a determination by the Contracting Officer: justification, project schedule data, and supporting evidence as the Contracting Officer may deem necessary. Submission of proof of excusable delay, based on revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is a condition precedent to any approvals by the Government. In response to each Request For Proposal issued by the Government, submit a schedule impact analysis demonstrating whether or not the change contemplated by the Government impacts the critical path.

Submit a justification for each request for a change in the contract completion date of less than 2 weeks based upon the most recent schedule update at the time of the NTP or constructive direction issued for the change. Such a request shall be in accordance with the requirements of other appropriate Contract Clauses and shall include, as a minimum:

a. A list of affected activities, with their associated project schedule activity number.

b. A brief explanation of the causes of the change.

c. An analysis of the overall impact of the changes proposed.

d. A sub-network of the affected area.

Identify activities impacted in each justification for change by a unique activity code contained in the required data file.

3.7.4 Additional Submission Requirements

The Contracting Officer may request an interim update with revised activities for any requested time extension of over 2 weeks. Provide this disk within 4 days of the Contracting Officer's request.

3.8 DIRECTED CHANGES

If the NTP is issued for changes prior to settlement of price and/or time, submit proposed schedule revisions to the Contracting Officer within 2 weeks of the NTP being issued. The Contracting Officer will approve proposed revisions to the schedule prior to inclusion of those changes within the project schedule. If the Contractor fails to submit the proposed revisions, the Contracting Officer may furnish the Contractor with suggested revisions to the project schedule. Include these revisions in the project schedule until revisions are submitted, and final changes and impacts have been negotiated. If the Contractor has any objections to there visions furnished by the Contracting Officer, advise the Contracting Officer within 2 weeks of receipt of the revisions. Regardless of the objections, continue to update the schedule with the Contracting Officer's revisions until a mutual agreement in the revisions is reached. If the Contractor fails to submit alternative revisions within 2 weeks of receiptof the Contracting Officer's proposed revisions, the Contractor will be deemed to have concurred with the Contracting Officer's proposed revisions. The proposed revisions will then be the basis for an equitable adjustment for performance of the work.

3.9 WEEKLY PROGRESS MEETINGS

a. Meet weekly with the Government (or as otherwise mutually agreed to) between the meetings described in paragraph PERIODIC SCHEDULE UPDATE MEETINGS for the purpose of jointly reviewing the actual progress of the project as compared to the as planned progress and to review planned activities for the upcoming two weeks. The then current and approved schedule update shall be used for the purposes of this meeting and for the production and review of reports. The Contractor's Project Manager and the Authorized Representative of the Contracting Officer shall attend. The weekly progress meeting will address the status of Requests For Information (RFI's), and Requests For Proposal (RFP's) andSubmittals.

b. Provide a bar chart produced by the scheduling software, organized by Total Float and Sorted by Early Start Date, and a two week "look-ahead" schedule by filtering all schedule activities to show only current ongoing activities and activities schedule to start during the upcoming two weeks, organized by Work Area Code (AREA) and sorted by Early Start Date.

c. The Government and the Contractor shall jointly review the reports. If it appears that activities on the longest path(s) which are currently driving the calculated completion date (driving activities), are not progressing satisfactorily and therefore could jeopardize timely project completion, corrective action must be taken immediately. Corrective action includes but is not limited to: increasing the number of work crews; increasing the number of work shifts; increasing the number of hours worked per shift; and determining if Government responsibility coded activities require Government corrective action.

3.10 OWNERSHIP OF FLOAT

Float available in the schedule, at any time, shall not be considered for the exclusive use of either the Government or the Contractor.

3.11 TRANSFER OF SCHEDULE DATA INTO RMS/QCS(Not Applicable)

-- End of Section --

SECTION 01 33 00

SUBMITTAL PROCEDURES
02/26

PART 1 GENERAL

1.1 SUMMARY

The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections.

Units of weights and measures used on all submittals are to be the same as those used in the contract drawings.

Each submittal is to be complete and in sufficient detail to allow ready determination of compliance with contract requirements.

Contractor's Quality Control (CQC) System Manager and the Designer of Record, if applicable, to check and approve all items prior to submittal and stamp, sign, and date indicating action taken. Proposed deviations from the contract requirements are to be clearly identified. Include within submittals items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals.

Submittals requiring Government approval are to be scheduled and made prior to the acquisition of the material or equipment covered thereby. Pick up and dispose of samples not incorporated into the work in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

1.2 DEFINITIONS

1.2.1 Submittals

Contract Clauses "FAR 52.236-5, Material and Workmanship", paragraph (b) and "FAR 52.236-21, Specifications and Drawings for Construction", paragraphs (d), (e) and (f) apply to ALL submittals.

1.2.2 Submittal Descriptions (SD)

Submittals requirements are specified in the technical sections. Submittals are identified by Submittal Description (SD) numbers and titles as follows:

SD-01 Preconstruction Submittals

Submittals, which are required prior to the start of construction (work) and for each next major phase of the construction on a multi-phase contract. Preconstruction submittal includes schedules, tabular list of data, or tabular list including location, features, or other pertinent information regarding products, materials, equipment, or components to be used in the work.

Preconstruction Submittals shall be submitted to the Contracting Officer or Contracting Officer Representative at least seven (7) days prior to the preconstruction conference. Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following:

Certification of Insurance; G
Surety Bond; G
List Of Proposed Subcontractors; G
Order of Work; G The Contractor's order of work for dredging and performing other work, including disposal area plan.
Work To Be Performed By The Contractor; G,
Subcontracting Plan; G
Progress Schedule; G
Submittal Register; G
Letter Appointing Superintendent; G
Activity Hazard Analysis; G See Section 01 35 26, GOVERNMENTAL SAFETY REQUIREMENTS
Accident Prevention Plan; G See Section 01 35 26, GOVERNMENTAL SAFETY REQUIREMENTS
Work Plan / Dewatering Plan; G
Quality Control (QC) plan, G See Section 01 45 00.00 20
Environmental Protection Plan; G
Notice to Mariners; G

SD-02 Shop Drawings

Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work.

Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the Contractor for integrating the product or system into the project.

Drawings prepared by or for the Contractor to show how multiple systems and interdisciplinary work will be coordinated.

SD-06 Test Reports

Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. (Testing must have been within three years of date of contract award for the project.)

Report which includes findings of a test required to be performed by the Contractor on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports.
Daily logs and checklists.

Final acceptance test and operational test procedure.

SD-07 Certificates

Statements printed on the manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material at testing that product, system or material meets specification requirements. Must be dated after award of project contract and clearly name the project.

Document required of Contractor, or of a manufacturer, supplier, installer or Subcontractor through Contractor, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel qualifications.

Confined space entry permits.

Text of posted operating instructions.

SD-11 Closeout Submittals

Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

Special requirements necessary to properly close out a construction contract. For example, Record Drawings and as-built drawings. Also, submittal requirements necessary to properly close out a major phase ofconstruction on a multi-phase contract.

Interim "DD Form 1354" with cost breakout for all assets 30 days prior to facility turnover.

1.2.3 Approving Authority

Office or designated person authorized to approve submittal.

1.2.4 Work

As used in this section, on- and off-site construction required by contract documents, including labor necessary to produce submittals, except those SD-01 Pre-Construction Submittals noted above construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES.

SD-01 Preconstruction Submittals
Order of work;
Accident prevention plan; G
Quality control plan; G
Letter appointing superintendent;

List of subcontractors;
Environmental protection plan; G
Progress schedule; G
Submittal register;
List of proposed products; G
Work plan / Dewatering Plan; G

1.4 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.4.1 Government Approved (G)

Government approval is required of extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer.

Within the terms of the contract clause entitled "Specifications and Drawings for Construction they are considered to be shop drawings".

1.4.2 For Information Only

All submittals not requiring government approval will be for information only. They are not considered to be "Shop Drawings" within the terms of the contract clause referred above.

1.5 PREPARATION

1.5.1 Transmittal Form

Use the ENG Form 4025 transmittal form for submitting both Government-approved and information-only submittals. Submit in accordance with the instructions on the reverse side of the form. These forms are included in the RMS CM software that the Contractor is required to use for this contract. Properly complete this form by filling out all the heading blank spaces and identifying each item submitted. Exercise special care to ensure proper listing of the specification paragraph and sheet number of the contract drawings pertinent to the data submitted for each item.

1.5.2 Submittal Format

When the submittal includes a document that is to be used in the project, or is to become part of the project record, other than as a submittal, do not apply the Contractor's approval stamp to the document itself, but to a separate sheet accompanying the document.

Provide data in the unit of measure used in the contract documents.

1.5.3 Electronic File Format

Provide submittals in electronic format, with the exception of material samples required for SD-04 Samples items. In addition to the electronic submittal, provide three hard copies of the submittals, when requested. Compile the submittal file as a single, complete document, to include the Transmittal Form described within. Name the electronic submittal file specifically according to its contents, and coordinate the file naming convention with the Contracting Officer. Electronic files must be of sufficient quality that all information is legible. Use PDF as the

electronic format, unless otherwise specified or directed by the Contracting Officer. Generate PDF files from original documents with bookmarks so that the text included in the PDF file is searchable and can be copied. If documents are scanned, optical character resolution (OCR) routines are required. Index and bookmark files exceeding 30 pages to allow efficient navigation of the file. When required, the electronic file must include a valid electronic signature or a scan of a signature.

E-mail electronic submittal documents smaller than 10MB to an e-mail address as directed by the Contracting Officer. Provide electronic documents over 10 MB on an optical disc or through an electronic file sharing system such as the AMRDEC SAFE Web Application located at the following website: https://safe.amrdec.army.mil/safe/.

1.6 QUANTITY OF SUBMITTALS

1.6.1 Number of SD-01 Preconstruction Submittal Copies

Unless otherwise specified, submit electronically and 2 sets of administrative submittals.

1.7 INFORMATION ONLY SUBMITTALS

Submittals without a "G" designation must be certified by the QC manager and submitted to the Contracting Officer for information-only. Approval of the Contracting Officer is not required on information only submittals. The Contracting Officer will mark "receipt acknowledged" on submittals for information and will return only the transmittal cover sheet to the Contractor. Normally, submittals for information only will not be returned. However, the Government reserves the right to return unsatisfactory submittals and require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

1.8 SUBMITTAL REGISTER

In Section 00 09 01 Attachment L is an example of the "SUBMITTAL REGISTER (ENG Form 4288)", showing items of equipment and materials for which submittals are required by the project specifications; this list may not be all inclusive and additional submittals may be required. The Contractor is responsible for providing a complete submittal register as a pre-construction requirement and shall maintain a submittal a register for the project.

1.9 APPROVED SUBMITTALS

The Contracting Officer approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for dimensions, the design of adequate connections and

details, and the satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials and equipment will be considered unless accompanied by an explanation of why substitution is necessary.

1.10 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the contract clause "Changes" shall be given promptly to the Contracting officer.

1.11 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

1.12 GENERAL

The Contractor shall make submittals as required by the project specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used onall submittals shall be the same as those used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) System Manager and each item shall be stamped, signedand dated by the CQC System Manager indicating action taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricators drawings, descriptive literature including (but not limited to)catalog cuts, diagrams, operating charts, or curves; test reports, test cylinders, samples, O&M manuals (including par list); certifications, warranties, and other such required submittals. Submittals requiring Government approvals shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with product manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

1.13 SUBMITTAL REGISTER

In Section 00 90 01 Attachment L is an example of the "SUBMITTAL REGISTER (ENG Form 4288)", showing items of equipment and materials for which submittals are required by the project specifications; this list may not be all inclusive and additional submittals may be required. The Contractor is responsible for providing a complete submittal register as a pre-construction requirement and shall maintain a submittal a register for the project.

1.14 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings

shall be so scheduled. Adequate time (a minimum of 7 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extension will be allowed for time lost in late submittals. An additional 7 calendar days shall be allowed and shown on the register for review and approval.

1.15 TRANSMITTAL FORM (ENG FORM 4025)

ENG Form 4025 shall be used as cover for submitting both Government approved and for information only submittals in accordance with the instructions on the reverse of the form. Contractor will not consolidate submittal items from different specifications sections under a single submittal form. For more information about Contractor use of ENG Form 4025,see Department of the Army Regulation No. 415-1-10.

1.16 SUBMITTAL PROCEDURES

Submittals shall be made as follow

1.16.1 Procedures

Not Used.

1.16.2 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in witting the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

1.17 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register".

1.18 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. 2 copies of the submittal will be retained by the Contracting Officer and 1 copy of the submittal will be returned to the Contractor.

1.19 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. However, the Government reserves the right to require the Contractor to re-submit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the Plans and Specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming materials incorporated in the work; and does not relieve the contract of the requirement to furnish samples for testing by the Government laboratory orfor check testing by the Government on those instances where the technical specifications so prescribe.

1.20 STAMPS

Certification Stamp: Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall have a similar format to the following sample:

CONTRACTOR
(Firm Name)
_____Approved
_____Approved with corrections as noted on submittal data and/or attached sheets(s)
SIGNATURE:_____
TITLE:_____
DATE:_____

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

-- End of Section --

SECTION 01 35 26

GOVERNMENTAL SAFETY REQUIREMENTS
05/25

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN SOCIETY OF SAFETY ENGINEERS (ASSE/SAFE)

ASSE/SAFE A10.32	(2012) Fall Protection
ASSE/SAFE A10.34	(2001; R 2012) Protection of the Public onor Adjacent to Construction Sites
ASSE/SAFE Z359.1	(2007) Safety Requirements for PersonalFall Arrest Systems, Subsystems and Components

ASME INTERNATIONAL (ASME)

ASME B30.22	(2010) Articulating Boom Cranes
ASME B30.3	(2012) Tower Cranes
ASME B30.5	(2011) Mobile and Locomotive Cranes
ASME B30.8	(2010) Floating Cranes and Floating Derri cks

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 10	(2013) Standard for Portable Fire Extinguishers

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2014) Safety and Health Requirements Manual

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29	CFR	1910	Occupational Safety and Health Standards
29	CFR	1910.146	Permit-required Confined Spaces

29	CFR	1926	Safety and Health Regulations for Construction
29	CFR	1926.1400	Cranes & Derricks in Construction
29	CFR	1926.16	Rules of Construction
29	CFR	1926.500	Fall Protection

1.2 DEFINITIONS

b. High Visibility Accident. Any mishap which may generate publicity Or high visibility.

c. Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even through provided by a physician or registered personnel.

e. Record Injuries or Illnesses. Any work-related injury or illness that results in:

(1) Death, regardless of the time between the injury and death, or the length of the illness;

(2) Days away from work (any time lost after day of injury/illness onset);

(3) Restricted work;

(4) Transfer to another job;

(5) Medical treatment beyond first aid;

(6) Loss of consciousness; or

(7) A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (1) through (6) above.

f. "USACE" property and equipment specified in USACE EM 385-1-1 should be interpreted as Government property and equipment.

g. Weight Handling Equipment (WHE) Accident. A WHE accident occurs when any one or more of the eight elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in personnel injury or death; material or equipment damage; dropped load; derailment; two-blocking; overload; or collision, including unplanned contact between the load, crane, or other objects. A dropped load, derailment, two-blocking, overload and collision are considered accidents even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components (e.g., dropped boom, dropped load, roll over, etc.) Any mishap meeting the criteria described above shall be documented in both the Contractor Significant

Incident Report (CSIR) submitted within five days both as provided by the Contracting Officer.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following inaccordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Accident Prevention Plan (APP); G, RO

Activity Hazard Analysis (AHA); G, RO

Crane Critical Lift Plan; G, RO

Proof of qualification for Crane Operators; G, RO

SD-06 Test Reports

Notifications and Reports

Submit reports as their incidence occurs, in accordance with the requirements of the paragraph, "Reports."

Accident Reports

Crane Reports

SD-07 Certificates

Confined Space Entry Permit

Certificate of Compliance

1.4 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this contract, comply with the most recent edition of USACE EM 385-1-1, and the appropriate federal, state, and local laws and regulations. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements govern.

1.5 SITE QUALIFICATIONS, DUTIES AND MEETINGS

1.5.1 Personnel Qualifications

1.5.1.1 Site Safety and Health Officer (SSHO)

The SSHO must meet the requirements of EM 385-1-1 section 1 and ensure that the requirements of 29 CFR 1926.16 are met for the project. Provide a Safety oversight team that includes a minimum of one (1)

person at each project site to function as the Site Safety and Health Officer (SSHO). The SSHO or an equally-qualified Designated Representative/alternate shall be at the work site at all times to implement and administer the Contractor'ssafety program and government-accepted Accident Prevention Plan. The SSHO's training, experience, and qualifications shall be as required by EM 385-1-1 paragraph 01.A.17, entitled SITE SAFETY AND HEALTH OFFICER (SSHO), and all associated sub-paragraphs.

A Competent Person shall be provided for all of the hazards identified in the Contractor's Safety and Health Program in accordance with the accepted Accident Prevention Plan, and shall be on-site at all times when the work that presents the hazards associated with their professional expertise is being performed. Provide the credentials of the Competent Persons(s) to the Contracting Officer for acceptance in consultation with the Safety Office.

1.5.1.1.1 Contractor Quality Control (QC) Person:

The Contractor Quality Control Person cannot be the SSHO on this project, even though the QC has safety inspection responsibilities as part of the QC duties.

1.5.1.2 USACE Dredging Contract Requirements

1.5.1.2.1 SSHO Staffing for USACE Dredging Contracts

a. Dredging contracts may include several project sites; this contract will require a minimum of one full-time SSHO assigned per project site. SSHO may be collateral duty in specific conditions listed below.

b. Example of one dredging project site is reflected in each of the following:

(1) a mechanical dredge, tug(s) and scow(s), scow route, and material placement site; or

(2) a hydraulic pipeline dredge, attendant plant, and material placement site; or,

(3) a hopper dredge (include land-based material placement site – if applicable.)

c. Individual dredging project sites with work force less than 8 employees, the SSHO may be a collateral duty, with the same responsibilities of a full time SSHO.

d. Hopper dredges with USCG-Documented crews may designate an officer as a collateral-duty SSHO instead of having a full-time SSHO if the officer meets the SSHO training and experience requirements.

1.5.1.2.2 SSHO Requirements for Dredging

a. In addition to requirements stated elsewhere in this specification, the SSHO shall be present at the project site, located so they have full mobility and reasonable access to all major work operations, for at least one shift in each 24 hour period when work is being done. The SSHO, or Alternate SSHO, shall be available during all

shifts for immediate verbal consultation and notification, either by phone or radio. The SSHO shall be a full-time, dedicated position, except as noted above. The SSHO shall report to a senior project (or corporate) official.

b. The SSHO shall inspect all work areas and operations during initial set-up and at least monthly observe and provide personal oversight on each shift during dredging operations for projects with many work sites, more often for those with less work sites.

c. For projects with multiple shifts or when SSHO is temporarily off-site, an Alternate SSHO will be assigned to insure SSHO coverage for the project at all times work activities are conducted. The Alternate SSHO must meet the same requirements and assume the responsibilities of theproject SSHO. The Alternate SSHO position may be a collateral duty.

d. If the SSHO is off-site for a period longer than 24 hours, a qualified replacement SSHO shall be provided and shall fulfill the same roles and responsibilities as the primary/initial SSHO.

1.5.1.2.3 Designated Representative (DR) Requirements for Dredging

a. Designated Representatives (DR) are collateral duty safety personnel, with safety duties in addition to their full-time occupation, and support and supplement the SSHO efforts in managing, implementing andenforcing the Contractor's Safety and Health Program. DRs shall be individual(s) with work oversight responsibilities, such as masters, mates, fill foremen, and superintendents. DRs should not be positions requiring continuous mechanical or equipment operations, such as equipment operators.

b. A DR shall be appointed for all remote work locations more than 45 minutes' travel time from the SSHO's duty location, typically including dredged material placement sites, towing and scow operations, and other operations.

c. The DRs will perform safety program tasks as designated by the SSHO and report safety findings to the SSHO/Alternate SSHO. The SSHO shall document results of safety findings and provide information for inclusion in the CQC reports to the Government Representative.

1.5.1.2.4 Safety Personnel Training Requirements for Dredging

a. The SSHO, Alternate SSHO, and Designated Representatives for dredging contracts shall take either the OSHA 30-hour Construction Safety Course or an equivalent 30 hours of formal safety and health training covering the subjects of the OSHA 30-hour Course (see EM 385-1-1 Appendix A, paragraph 4.b) applicable to dredging work and given by qualified instructors.

b. The SSHOs shall also have taken 24 hours of formal classroom or online safety and health related coursework in the past four (4) years. Hours spent as an instructor in such courses will be considered the same as attending them, but each course only gets credit once (ie. Instructinga 1-hour asbestos awareness course 5 times in the past 4 years provides one hour credit for training).

c. The SSHO, Alternate SSHO, and Designated Representatives shall have a minimum of three years' continuous experience within the past 5 years in supervising/ managing dredging, marine or land-based construction, work managing safety programs or processes, or conducting hazard analyses and developing controls in activities or environments with similar hazards. This is in lieu of the construction experience required by paragraph 01.A.17.b, EM 385-1-1.

1.5.1.3 Crane Operators

Meet the crane operators requirements in USACE EM 385-1-1, Section 16 and Appendix I. In addition, for mobile cranes with Original Equipment Manufacturer (OEM) rated capacitates of 50,000 pounds or greater, designate crane operators as qualified by a source that qualifies crane operators (i.e., union, a government agency, or an organization that tests andqualifies crane operators). Provide proof of current qualification.

1.5.2 Personnel Duties

1.5.2.1 Site Safety and Health Officer

(SSHO)The SSHO shall:

a. Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. Attach safety inspection logs to the Contractors' daily quality control report.

b. Conduct mishap investigations and complete required reports. Maintain the OSHA Form 300 and Daily Production reports for prime and sub-contractors.

c. Maintain applicable safety reference material on the job site.

d. Attend the pre-construction conference, pre-work meetings including preparatory inspection meeting, and periodic in-progress meetings.

e. Implement and enforce accepted APPS and AHAs.

f. Maintain a safety and health deficiency tracking system that monitors outstanding deficiencies until resolution. Post a list of unresolved safety and health deficiencies on the safety bulletin board.

g. Ensure sub-contractor compliance with safety and health requirements.

h. Maintain a list of hazardous chemicals on site and their material safety data sheets.

Failure to perform the above duties will result in dismissal of the superintendent, QC Manager, and/or SSHO, and a project work stoppage. The project work stoppage will remain in effect pending approval of a suitable replacement.

1.5.3 Meetings

1.5.3.1 Preconstruction Conference

a. Contractor representatives who have a responsibility or significant role in accident prevention on the project shall attend the preconstruction conference. This includes the project superintendent,site safety and health officer, quality control supervisor, or any other assigned safety and health professionals who participated in the development of the APP (including the Activity Hazard Analyses (AHAs)and special plans, program and procedures associated with it).

b. Discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated AHAs that will be developed and implemented during the performance of the contract. This list of proposed AHAs will be reviewed at the conference and an agreement will be reached between the Contractor and the Contracting Officer's representative as to which phases will require an analysis. In addition, establish a schedule for the preparation, submittal, review, and acceptance of AHAs to preclude project delays.

c. Deficiencies in the submitted APP will be brought to the attention of the Contractor at the preconstruction conference, and the Contractor shall revise the plan to correct deficiencies and re-submit it for acceptance. Do not begin work until there is an accepted APP.

d. The functions of a Preconstruction conference may take place at thePost-Award Kickoff meeting for Design Build Contracts.

1.6 ACCIDENT PREVENTION PLAN (APP)

Use a qualified person to prepare the written site-specific APP. Prepare the APP in accordance with the format and requirements of USACE EM 385-1-1 and as supplemented herein. Cover all paragraph and subparagraph elements in USACE EM 385-1-1, Appendix A, "Minimum Basic Outline for Accident Prevention Plan". Specific requirements for some of the APP elements are described below. The APP shall be job-specific and address any unusual orunique aspects of the project or activity for which it is written. The APP shall interface with the Contractor's overall safety and health program. Include any portions of the Contractor's overall safety and health program referenced in the APP in the applicable APP element and made site-specific. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The APP shall be signed by the person and firm (senior person) preparing the APP, the Contractor, the on-site superintendent, the designated site safety and health officer, the Contractor Quality control Manager, and any designated CSP or CIH.

Submit the APP to the Contracting Officer 15 calendar days prior to the date of the preconstruction conference for acceptance. Work cannot

proceed without an accepted APP.

Once accepted by the Contracting Officer, the APP and attachments will be enforced as part of the contract. Disregarding the provisions of this contract or the accepted APP will be cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified.

Once work begins, changes to the accepted APP shall be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSHO and quality control manager. Should any severe hazard exposure, i.e. imminent danger, become evident, stop work in the area, secure the area, and develop a plan to remove the exposure and control the hazard. Notify the Contracting Officer within 24 hours of discovery. Eliminate/remove the hazard. In the interim, take all necessary action to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public (as defined by ASSE/SAFE A10.34,) and the environment.

Copies of the accepted plan will be maintained at the Contracting Officer's office and at the job site. Continuously review and amend the APP, as necessary, throughout the life of the contract. Incorporate unusual or high-hazard activities not identified in the original APP as they are discovered.

1.6.1 Dredging and Dredge Related Marine Work

The Contractor shall comply with the provisions of EM 385-1-1 dated 30 November 2014. If the Contractor is a currently accepted participant in the Dredging Contractors of America (DCA)/ Unites States Army Corps of Engineers (USACE) Dredging Safety Management Program (DSMP), as determinedby the DCA/USACE Joint Committee, and holds a current valid Certificate of Compliance for both the Contractor Program and the Dredge(s) to be used toperform the work required under this contract, the Contractor may, in lieu of the submission of an Accident Prevention Plan (APP),

a. Make available for review, upon request, the Contractor's current Safety Management System (SMS) documentation,

b. Submit to the Contracting Officer the current valid Company Certificate of Compliance for its SMS,

c. Submit the current dredge(s) Certificate of Compliance based on third party audit, and submit for review and acceptance, site-specific addenda to the SMS as specified in the solicitation."

1.6.2 EM 385-1-1 Contents

In addition to the requirements outlined in Appendix A of USACE EM 385-1-1,the following is required:

a. Confined Space Entry Plan.
Develop a confined and/or enclosed space entry plan in accordance with USACE EM 385-1-1, applicable OSHA standards 29 CFR 1910, 29 CFR 1915, and 29 CFR 1926, OSHA Directive CPL 2.100, and any other Federal, State

and local regulatory requirements identified in this contract. Identify the qualified person's name and qualifications, training and experience. Delineate the qualified person's authority to direct work stoppage in the event of hazardous conditions. Include procedure for rescue by Contractor personnel and the coordination with emergency responders. (If there is no confined space work, include a statement that no confined spacework exists and none will be created).

b. Crane Critical Lift Plan.
Prepare and sign weight handling critical lift plans for lifts over 75 percent of the capacity of the crane or hoist (or lifts over 50 percent of the capacity of a barge mounted mobile crane's hoists) at any radius of lift; lifts involving more than one crane or hoist; lifts of personnel; and lifts involving non-routine rigging or operation, sensitive equipment, or unusual safety risks. Submit 15 calendar days prior to on-site work and include the requirements of USACE EM 385-1-1, paragraph 16.H. and the following:

(1) For lifts of personnel, demonstrate compliance with the requirements of 29 CFR 1926.1400.

(2) For barge mounted mobile cranes, barge stability calculations identifying barge list and trim based on anticipated loading; and load charts based on calculated list and trim. The amount of list and trim shall be within the crane manufacturer's requirements.

1.7 ACTIVITY HAZARD ANALYSIS (AHA)

The Activity Hazard Analysis (AHA) format shall be in accordance with USACE EM 385-1-1, Section 1. Submit the AHA for review at least 5 calendar days prior to the start of each phase. Format subsequent AHAs as amendments to the APP. The analysis should be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls.

The AHA list will be reviewed periodically (at least monthly) at the Contractor supervisory safety meeting and updated as necessary when procedures, scheduling, or hazards change.

Develop the activity hazard analyses using the project schedule as the basis for the activities performed. Any activities listed on the project schedule will require an AHA. The AHAs will be developed by the Contractor, supplier or subcontractor and provided to the prime contractor for submittal to the Contracting Officer.

1.8 DISPLAY OF SAFETY INFORMATION

Within 5 calendar day(s) after commencement of work, erect a safety bulletin board at the job site. Include and maintain information on safety bulletin board as required by EM 385-1-1, section 01.A.06. Additional items required to be posted include:

a. Confined space entry permit.

b. Hot work permit.

1.9 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in the article "References." Maintain applicable equipment manufacturer's manuals.

1.10 EMERGENCY MEDICAL TREATMENT

Contractors will arrange for their own emergency medical treatment. Government has no responsibility to provide emergency medical treatment.

1.11 NOTIFICATIONS and REPORTS

1.11.1 Accident Notification

Notify the Contracting Officer as soon as practical, but no more than four hours after any accident meeting the definition of Accordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than $2,000, or any weight handling equipment accident. Within notification include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted.

1.11.2 Accident Reports

a. Conduct an accident investigation for recordable injuries and illnesses, for Medical Treatment defined in paragraph DEFINITIONS, property damage accidents resulting in at least $2,000 in damages, to establish the root cause(s) of the accident. Complete the USACE Accident Report Form 3394, and provide the report to the Contracting Officer within 3 calendar day(s) of the accident. Any mishap meeting the criteria described above will be investigated and reported as stipulated in this Specification, paragraph 1.11.1 above.

b. Conduct an accident investigation for any weight handling equipment accident (including rigging gear accidents) to establish the root cause(s) of the accident, complete the WHE Accident Report (Crane and Rigging Gear) form and provide the report to the Contracting Officerwithin 30 calendar days of the accident. Do not proceed with crane operations until cause is determined and corrective actions have been implemented to the satisfaction of the contracting officer. The Contracting Officer will provide a blank copy of the accident report form.

1.11.3 Crane Reports

Submit crane inspection reports required in accordance with USACE EM 385-1-1,Appendix I and as specified herein with Daily Reports of Inspections.

1.11.4 Certificate of Compliance

Provide a Certificate of Compliance for each crane entering an activity under this contract (see Contracting Officer for a blank certificate).

State within the certificate that the crane and rigging gear meet applicable OSHA regulations (with the Contractor citing which OSHA regulations are applicable, e.g., cranes used in construction, demolition, or maintenance comply with 29 CFR 1926 and USACE EM 385-1-1 Section 16 and Appendix I. Certify on the Certificate of Compliance that the crane operator(s) is qualified and trained in the operation of the crane to be used. For cranes at DOD activities in foreign countries, certify that the crane and rigging gear conform to the appropriate host country safety standards. Also certify that all of its crane operators working on the DOD activity have been trained in the proper use of all safety devices (e.g., anti-two block devices). Post certifications on the crane.

1.12 SEVERE STORM PLAN

In the event of a severe storm warning, the Contractor must:

a. Secure outside equipment and materials and place materials that could be damaged in protected areas.

b. Check surrounding area, including roof, for loose material, equipment, debris, and other objects that could be blown away or against existing facilities.

c. Ensure that temporary erosion controls are adequate.

1.13 CONFINED SPACE ENTRY REQUIREMENTS.

Contractors entering and working in confined spaces while performing general industry work are required to follow the requirements of OSHA 29 CFR 1926 and comply with the requirements in Section 34 of EM 385-1-1,OSHA 29 CFR 1910, and OSHA 29 CFR 1910.146.

PART 2 PRODUCTS

2.1 CONFINED SPACE SIGNAGE

Provide permanent signs integral to or securely attached to access covers for new permit-required confined spaces. Signs wording:

"DANGER-PERMIT-REQUIRED CONFINED SPACE - DO NOT ENTER" in bold letters a minimum of one (1) inch in height and constructed to be clearly legible with all paint removed. The signal word "DANGER" shall be red and readable from 5 feet.

PART 3 EXECUTION

3.1 CONSTRUCTION AND OTHER WORK

3.1.1 Hazardous Material Exclusions

Notwithstanding any other hazardous material used in this contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation (with the exception of radioactive material and devices used in accordance with USACE EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment

with radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocynates, lead-based paint are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials. Low mercury lamps used within fluorescent lighting fixtures are allowed as an exception without further Contracting Officer approval. Notify the Radiation Safety Officer (RSO) prior to excepted items of radioactive material and devices being brought on base.

3.1.2 Unforeseen Hazardous Material

The design should have identified materials such as PCB, lead paint, and friable and non-friable asbestos and other OSHA regulated chemicals (i.e. 29 CFR Part 1910.1000). If material, not indicated, that may be hazardous to human health upon disturbance during construction operations is encountered, stop that portion of work and notify the Contracting Officer immediately. Within 14 calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification pursuant to "FAR 52.243-4, Changes" and "FAR 52.236-2, Differing Site Conditions."

3.2 CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT)

Ensure that each employee is familiar with and complies with these procedures and USACE EM 385-1-1, Section 12, Control of Hazardous Energy.

3.3 FALL HAZARD PROTECTION AND PREVENTION PROGRAM

Establish a fall protection and prevention program, for the protection of all employees exposed to fall hazards. Within the program include company policy, identify responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection, storage, care and maintenance of fall protection equipment and rescue and evacuation procedures in accordance with ASSE/SAFE Z359.1.

3.3.1 Training

Institute a fall protection training program. As part of the Fall Hazard Protection and Prevention Program, provide training for each employee who might be exposed to fall hazards. Provide training by a competent person for fall protection in accordance with USACE EM 385-1-1, Section 21.B.

3.3.2 Fall Protection Equipment and Systems

Enforce use of the fall protection equipment and systems designated for each specific work activity in the Fall Protection and Prevention Plan and/or AHA at all times when an employee is exposed to a fall hazard. Protect employees from fall hazards as specified in EM 385-1-1, Section 21. In addition to the required fall protection systems, safety skiff, personal floatation devices, life rings etc., are required when working above or next to water in accordance with USACE EM 385-1-1, Paragraphs 21.N through 21.N.04. Personal fall arrest systems are required when working from an articulating or extendible boom, swing stages, or suspended

platform. In addition, personal fall arrest systems are required when operating other equipment such as scissor lifts if the work platform is capable of being positioned outside the wheelbase. The need for tying-off in such equipment is to prevent ejection of the employee from the equipment during raising, lowering, or travel. Fall protection must comply with 29 CFR 1926.500, Subpart M, USACE EM 385-1-1 and ASSE/SAFE A10.32.

3.3.2.1 Personal Fall Arrest Equipment

Personal fall arrest equipment, systems, subsystems, and components shall meet ASSE/SAFE Z359.1. Only a full-body harness with a shock-absorbing lanyard or self-retracting lanyard is an acceptable personal fall arrest body support device. Body belts may only be used as a positioning device system (for uses such as steel reinforcing assembly and in addition to an approved fall arrest system). Harnesses shall have a fall arrest attachment affixed to the body support (usually a Dorsal D-ring) and specifically designated for attachment to the rest of the system. Only locking snap hooks and carabineers shall be used. Webbing, straps, and ropes shall be made of synthetic fiber. The maximum free fall distance when using fall arrest equipment shall not exceed 6 feet. The total fall distance and any swinging of the worker (pendulum-like motion) that can occur during a fall shall always be taken into consideration when attachinga person to a fall arrest system.

3.3.3 Existing Anchorage

Certified (or re-certified) by a qualified person for fall protection existing anchorages, to be used for attachment personal fall arrest equipment in accordance with ASSE/SAFE Z359.1. Existing horizontal life line anchorages must be certified (or re-certified) by a registered professional engineer with experience in designing horizontal lifeline systems.

3.3.4 Horizontal Lifelines

Design, install, certify and use under the supervision of a qualified person horizontal lifelines for fall protection as part of a complete fall arrest system which maintains a safety factor of 2 (29 CFR 1926.500).

3.3.5 Guardrails and Safety Nets

Design, install and use guardrails and safety nets in accordance with EM 385-1-1 and 29 CFR 1926 Subpart M.

3.3.6 Rescue and Evacuation Procedures

When personal fall arrest systems are used, ensure that the mishap victim can self-rescue or can be rescued promptly should a fall occur. Prepare a Rescue and Evacuation Plan and include a detailed discussion of the following: methods of rescue; methods of self-rescue; equipment used; training requirement; specialized training for the rescuers; procedures for requesting rescue and medical assistance; and transportation routes to a medical facility. Include the Rescue and Evacuation Plan within the Activity Hazard Analysis (AHA) for the phase of work, in the Fall Protection and Prevention (FP&P) Plan, and the

Accident Prevention Plan (APP).

3.4 EQUIPMENT

3.4.1 Material Handling Equipment

a. Material handling equipment such as forklifts shall not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions.

b. The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions.

c. Operators of forklifts or power industrial trucks shall be licensed in accordance with OSHA.

3.4.2 Weight Handling Equipment

a. Equip cranes and derricks as specified in EM 385-1-1, section 16.

b. Comply with the crane manufacturer's specifications and limitations for erection and operation of cranes and hoists in support of the work. Perform erection under the supervision of a designated person (as outlined in ASME B30.5). Perform all testing in accordance with the manufacturer's recommended procedures.8/

c. Comply with ASME B30.5 for mobile and locomotive cranes, ASME B30.22 for articulating boom cranes, ASME B30.3 for construction tower cranes,and ASME B30.8 for floating cranes and floating derricks.

d. Under no circumstance shall a Contractor make a lift at or above 90% of the crane rated capacity in any configuration.

e. When operating in the vicinity of overhead transmission lines, operators and riggers shall be alert to this special hazard and follow the requirements of USACE EM 385-1-1 section 11 and ASME B30.5 or ASME B30.22 as applicable.

f. Do not crane suspend personnel work platforms (baskets) unless the Contractor proves that using any other access to the work location would provide a greater hazard to the workers or is impossible. Do not lift personnel with a line hoist or friction crane.

g. Inspect, maintain and recharge portable fire extinguishers as specified in NFPA 10, Standard for Portable Fire Extinguishers.

h. All employees must keep clear of loads about to be lifted and or suspended loads.

i. Use cribbing when performing lifts on outriggers.

j. The crane hook/block must be positioned directly over the load. Sideloading of the crane is prohibited.

k. A physical barricade must be positioned to prevent personnel from entering the counter weight swing (swing tail) area of the crane.

l. Certifications records which include the date of inspection, signature of the person performing the inspection and the serial number or other identifier of the crane that was inspected shall always be available for review by Contracting Officer Personnel.

m. Written reports listing the load test procedures used along with any repairs or alterations performed on the crane shall be available for review by Contracting Officer Personnel.

n. Certify that all crane operators have been trained in proper use of all safety devices (e.g. anti-two block devices).

o. Take steps to ensure that wind speeds does not contribute to loss of control of the load during lifting operations. Prior to conducting lifting operations set a maximum wind speed at which the crane can be safely operated based on the equipment being used, the load being lifted, experience of the operators and riggers, and hazards on the work site. This maximum wind speed determination shall be included aspart of the activity hazard analysis plan for that operation.

3.4.3 Equipment and Mechanized Equipment

a. Proof of qualifications for operator shall be kept on the project site for review.

b. Manufacturer's specifications or owner's manual for the equipment shall be on-site and reviewed for additional safety precautions or requirements that are sometimes not identified by OSHA or EM 385-1-1. Incorporate such additional safety precautions or requirements into the AHA's.

3.5 EXCAVATIONS

Soil classification must be performed by a competent person in accordance with 29 CFR 1926 and EM 385-1-1.

3.5.1 Utility Locations

All underground utilities in the work area must be positively identified by a third party, independent, private utility locating company in addition to any station locating service and coordinated with the station utility department.

3.5.2 Utility Location Verification

Physically verify underground utility locations by hand digging using wood or fiberglass handled tools when adjacent construction work is expected to come within three feet of the underground system. Digging within 2 feet of a known utility must not be performed by means of mechanical equipment; hand digging shall be used. If construction is parallel to an existing utility, expose the utility by hand-digging every 30.5 m (100 feet), if parallel within 1.5 m (5 feet) of the excavation.

-- End of Section --

SECTION 01 42 00

SOURCES FOR REFERENCE PUBLICATIONS
02/26

PART 1 GENERAL

1.1 REFERENCES

Various publications are referenced in other sections of the specificationsto establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the standards producing organization (e.g. ASTM B564 Standard Specification for Nickel Alloy Forgings). However, when the standards producing organization has not assigned a number to a document, an identifying number has been assigned for reference purposes.

1.2 ORDERING INFORMATION

The addresses of the standards publishing organizations whose documents are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the standards producing organization should be ordered from the source by title rather than by number.

AMERICAN SOCIETY OF SAFETY ENGINEERS (ASSE/SAFE)
1800 East Oakton Street
Des Plaines, IL 60018-
2187Ph: 847-699-2929
Fax: 847-768-3434
E-mail:
customerservice@asse.org
Internet:http://www.asse.org

ASME INTERNATIONAL (ASME)
Three Park Avenue, M/S
10ENew York, NY 10016-
5990
Ph: 800-854-7179 or 800-843-2763
Fax: 212-591-7674
E-mail: infocentral@asme.org
Internet:http://www.asme.org

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
1 Batterymarch Park
Quincy, MA 02169-
7471
Ph: 617-770-3000 or 800-344-3555
Fax: 617-770-0700
E-mail: webmaster@nfpa.org
Internet:
http://www.nfpa.org

U.S. ARMY CORPS OF ENGINEERS
(USACE)Order CRD-C DOCUMENTS from:
U.S. Army Engineer Waterways Experiment Station
ATTN: Technical Report Distribution Section, Services

Branch, TIC
3909 Halls Ferry Road
Vicksburg, MS 39180-
6199
E-mail: MTC-
INFO@erdc.usace.army.milInternet:
http://gsl.erdc.usace.army.mil/SL/MTC/handbook/handbook.htm

Order Other Documents from:
USACE Publications
DepotAttn: CEHEC-IM-PD
2803 52nd Avenue
Hyattsville, MD 20781-1102
Ph: 301-394-0081
Fax: 301-394-0084
E-mail: pubs-army@usace.army.mil
Internet:
http://www.usace.army.mil/publications or
http://www.hnc.usace.army.mil/Missions/Engineering/TECHINFO.aspx

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)
8601 Adelphi Road
College Park, MD 20740-
6001Ph: 866-272-6272
Fax: 301-837-0483
E-mail: contactcenter@gpo.gov
Internet: http://www.archives.gov
Order documents from:
Superintendent of Documents
U.S.Government Printing Office
(GPO)732 North Capitol Street, NW
Washington, DC 20401
Ph: 202-512-1800
Fax: 202-512-2104
E-mail: contactcenter@gpo.gov
Internet:
http://www.gpoaccess.gov

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

-- End of Section --

SECTION 01 45 00.00 20

QUALITY CONTROL

05/25

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2014) Safety and Health RequirementsManual

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals; G

Construction Quality Control (QC) Plan; G

Submit a Construction QC Plan 7 days prior to preconstruction meeting.

Letter Appointing Superintendent; G

1.3 INFORMATION FOR THE CONTRACTING OFFICER

Prior to commencing work on construction, the Contractor can obtain a single copy set of the current report forms from the Contracting Officer. The report forms will consist of the Contractor Production Report, Contractor Production Report (Continuation Sheet), Contractor Quality Control (CQC) Report, (CQC) Report (Continuation Sheet), Preparatory Phase Checklist, Initial Phase Checklist, Rework Items List, and Testing Plan and Log.

Deliver the following to the Contracting Officer during Construction:

a. CQC Report: Submit the Report electronically by 10:00 AM the next day after each day that work is performed and after each day of no-work along with explanation for the work stoppage. CQC Report submittal shall commence on the day following the Notice To Proceed (NTP) and continue until completion of demobilization.

b. Contractor Production Report: Submit the Report electronically by 10:00 AM the next day after each day that work is performed and after each day of no-work with explanation for the work stoppage. The Production Report submittal shall commence the day following the start of dredging and continue until completion of dredging.

c. Preparatory Phase Checklist: Submit the report electronically in the same manner as the CQC Report for each Preparatory Phase held.

d. Initial Phase Checklist: Submit the report electronically in the same manner as the CQC Report for each Initial Phase held.

e. Field Test Reports: Within two working days after the test is performed, submit the report as an electronic attachment to the CQC Report.

f. CQC Meeting Minutes: Within two working days after the meeting is held, submit the report as an electronic attachment to the CQC Report.

g. QC Certifications: As required by the paragraph entitled "QC Certifications."

1.4 QC PROGRAM REQUIREMENTS

Establish and maintain a QC program as described in this section. This QC program is a key element in meeting the objectives of NAVFAC Commissioning. The QC program consists of a QC Organization, QC Plan, QC Plan Meeting(s), a Coordination and Mutual Understanding Meeting, QC meetings, three phases of control, submittal review and approval, testing, completion inspections,and QC certifications and documentation necessary to provide materials, equipment, workmanship, fabrication, construction and operations which comply with the requirements of this Contract. The QC program must cover on-site and off-site work and be keyed to the work sequence. No construction work or testing may be performed unless the QC Manager is on the work site. The QC Manager must report to an officer of the firm and not be subordinate to the Project Superintendent or the Project Manager. The QC Manager, Project Superintendent and Project Manager must work together effectively. Although the QC Manager is the primary individual responsible for quality control, all individuals will be held responsiblefor the quality of work on the job.

1.4.1 Acceptance of the Construction Quality Control (QC) Plan

Acceptance of the QC Plan is required prior to the start of construction. The Contracting Officer reserves the right to require changes in the QC Plan and operations as necessary, including removal of personnel, to ensure the specified quality of work. The Contracting Officer reserves the right to interview any member of the QC organization at any time in order to verify the submitted qualifications. All QC organization personnel are subject to acceptance by the Contracting Officer. The Contracting Officer may require the removal of any individual for non-compliance with quality requirements specified in the Contract.

1.4.2 Preliminary Construction Work Authorized Prior to Acceptance
The only construction work that is authorized to proceed prior to the acceptance of the QC Plan is mobilization of storage and office trailers, temporary utilities, and surveying.

1.4.3 Notification of Changes

Notify the Contracting Officer, in writing, of any proposed changes in

the QC Plan or changes to the QC organization personnel, a minimum of 10 workdays prior to a proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

1.5 PERFORMANCE EVALUATION OF CONTRACTOR

a. As a minimum, the Contractor's performance will be evaluated upon final acceptance of the work. However, interim evaluation may be prepared at any time during contract performance when determined to be in the best interest of the Government.

b. The Contractor will be rated either Exceptional, Very Good, Satisfactory, Marginal, or Unsatisfactory in the areas of Contractor Quality Control, Timely Performance, Effectiveness of Management, Compliance with Labor Standards, and Compliance with Safety Standards. The Contractor will be advised of any unsatisfactory rating, either in an individual element or in the overall rating, prior to completing the evaluation, and all Contractor comments will be maintained as part of the official record. Performance Evaluation Reports will be availableto all DOD contracting offices for their future use in determining Contractor responsibility, in compliance with FAR 36.201 (c).

c. The Federal Acquisition Regulation (FAR) requires that Past Performance Information (PPI) be collected on DoD contracts. The Contractor Performance Assessment Reporting System (CPARS) is a web-enabled application the supports the completion, distribution and retrieval of all contract performance evaluations. Contractor Representative is responsible for reviewing and commenting on evaluations submitted on the Contractor Performance Assessment Reporting System (CPARS) website at https://www.cpars.gov/index.htm.

1.6 QC ORGANIZATION

1.6.1 QC Manager

1.6.1.1 Duties

Provide a QC Manager at the work site to implement and manage the QC program. The only duties and responsibilities of the QC Manager are to manage and implement the QC program on this Contract. The QC Manager shallnot hold any other positions or perform any other duties on this contract. The QC Manager is required to attend the partnering meetings, QC Plan Meetings, Pre-Construction Conference, Coordination and Mutual Understanding Meeting, conduct the QC meetings, perform the three phases of control except for those phases of control designated to be performed by QC Specialists, perform submittal review and approval, ensure testing is performed and provide QC certifications and documentation required in this Contract. The QC Manager is responsible for managing and coordinating the three phases of control and documentation performed by the QC Specialists, testing laboratory personnel and any other inspection and testing personnel required by this Contract. The QC Manager is the manager of all QC activities.

1.6.1.2 Qualifications

A graduate of a four year accredited college or university program in one

of the following disciplines: Engineering, Architecture, Construction Management, Engineering Technology, Building Construction, or Building Science, with a minimum of 10 years experience as a Project Superintendent,QC Manager, Project Manager, Project Engineer or Construction Manager on similar size and type construction contracts which included the major trades that are part of this Contract. The individual must have at least two years experience as a QC Manager. The individual must be familiar withthe requirements of EM 385-1-1, and have experience in the areas of hazard identification, safety compliance, and sustainability.

1.6.1.3 Construction Quality Management Training

In addition to the above experience and education requirements, the QC Manager must have completed the course entitled "Construction Quality Management (CQM) for Contractors." If the QC Manager does not have a current certification, they must obtain the CQM for Contractors course certification within 90 days of award. This course is periodically offered by the Naval Facilities Engineering Command and the Army Corps of Engineers. Contact the Contracting Officer for information on the next scheduled class.

1.6.2 Alternate QC Manager Duties and Qualifications

Designate an alternate for the QC Manager at the work site to serve in the event of the designated QC Manager's absence. The period of absence may not exceed two weeks at one time, and not more than 30 workdays during a calendar year. The qualification requirements for the Alternate QC Managermust be the same as for the QC Manager.

1.7 QUALITY CONTROL (QC) PLAN

1.7.1 Construction Quality Control (QC) Plan

1.7.1.1 Requirements

Provide, for acceptance by the Contracting Officer, a Construction QC Plan submitted in a three-ring binder that includes a table of contents, with major sections identified with tabs, with pages numbered sequentially, and that documents the proposed methods and responsibilities for all QC personnel activities including testing, during the construction of the project, which include:

a. QC ORGANIZATION: A chart showing the QC organizational structure.

b. NAMES AND QUALIFICATIONS: Names and qualifications, in resume format, for each person in the QC organization. Include the CQM for Contractors course certifications for the QC Manager and Alternate QC Manager and QC personnel as required by the paragraphs entitled "Construction Quality Management Training" and "Alternate QC Manager Duties and Qualifications". In addition, if construction must be performed at multiple locations, additional QC personnel meeting all requirement will be tasked to do these additional locations. No work is to be performed at any location without the QC present. If the Contractor elects to work multiple shifts per day, A QCM must be present for each shift. No individual can work more than 12 hour shift per day.

c. DUTIES, RESPONSIBILITY AND AUTHORITY OF QC PERSONNEL: Duties,

responsibilities, and authorities of each person in the QC organization.

d. OUTSIDE ORGANIZATIONS: A listing of outside organizations, such as architectural and consulting engineering firms, that will be employed by the Contractor and a description of the services these firms will provide. NOTE: These entities fall under the realm of Sub-Contractors to this Construction Contract and are subject to the Prime Contractor'spolicies and procedures listed in the QC Plan to include Safety Compliance.

e. APPOINTMENT LETTERS: Letters signed by an officer of the firm appointing the QC Manager and Alternate QC Manager and stating that they are responsible for implementing and managing the QC program as described in this Contract. Include in this letter the responsibility of the QC Manager and Alternate QC Manager to implement and manage the three phases of control, and their authority to stop work which is not in compliance with the Contract and/or Safety compliance. Letters of direction are to be issued by the QC Manager to all other QC Alternate Managers, Specialists and QC personnel outlining their duties, authorities, and responsibilities. Include copies of the letters in the QC Plan.

f. SUBMITTAL PROCEDURES AND INITIAL SUBMITTAL REGISTER: Procedures for reviewing, approving, and managing submittals. Provide the name(s) of the person(s) in the QC organization authorized to review and certify submittals prior to approval. Provide the initial submittal of the Submittal Register as specified in Section 01 33 00 SUBMITTAL PROCEDURES.

g. TESTING LABORATORY INFORMATION: Testing laboratory information required by the paragraphs entitled "Accreditation Requirements", as applicable.

h. TESTING PLAN AND LOG: A Testing Plan and Log that includes the tests required, referenced by the specification paragraph number requiring the test, the frequency, and the person responsible for each test. Use Government forms to log and track tests.

i. PROCEDURES TO COMPLETE REWORK ITEMS: Procedures to identify, record, track, and complete rework items. Use Government forms to record and track rework items.

j. DOCUMENTATION PROCEDURES: Use Government form.

k. LIST OF DEFINABLE FEATURES: A Definable Feature of Work (DFOW) is a task that is separate and distinct from other tasks and has control requirements and work crews unique to that task. A DFOW is identified by different trades or disciplines and is an item or activity on the construction schedule. Include in the list of DFOWs, but not be limited to, all critical path activities on the Network Analysis Schedule (NAS). Include all activities for which this specification requires QC Specialists or specialty inspection personnel. Provide separate DFOWs in the Network Analysis Schedule for each design development stage and submittal package.

l. PROCEDURES FOR PERFORMING THE THREE PHASES OF CONTROL: Identify procedures used to ensure the three phases of control to manage the

quality on this project. For each DFOW, a Preparatory and Initial phase checklist will be filled out during the Preparatory and Initial phase meetings. Conduct the Preparatory and Initial Phases and meetings with a view towards obtaining quality construction by planning ahead and identifying potential problems for each DFOW. Provide GDA ample notification of meeting for attendance.

m. PERSONNEL MATRIX: A personnel matrix showing for each section of the specification who will review and approve submittals, who will performand document the three phases of control, and who will perform and document the testing.

n. PROCEDURES FOR COMPLETION INSPECTION: Procedures for identifying and documenting the completion inspection process. Include in these procedures the responsible party for punch out inspection, pre-final inspection, and final acceptance inspection.

o. TRAINING PROCEDURES AND TRAINING LOG: Procedures for coordinating and documenting the training of personnel required by the Contract. Include a sample record of training for reporting what systems were included in training, who provided training, when and where training was preformedand who attended training.

p. ORGANIZATION AND PERSONNEL CERTIFICATIONS LOG: Procedures for coordinating tracking and documenting all certifications on subcontractors, testing laboratories, suppliers, personnel, vessels etc. QC Manager will ensure that certifications are current, appropriate for the work being performed, and will not lapse during any period of the contract that the work is being performed.

1.8 QC PLAN MEETINGS

Prior to submission of the QC Plan, the QC Manager will meet with the Contracting Officer to discuss the QC Plan requirements of this Contract. The purpose of this meeting is to develop a mutual understanding of the QC Plan requirements prior to plan development and submission and to agree on the Contractor's list of DFOWs.

1.9 COORDINATION AND MUTUAL UNDERSTANDING MEETING

After submission of the QC Plan, and prior to the start of construction, the QC Manager will meet with the Contracting Officer to present the QC program required by this Contract. When a new QC Manager is appointed, the coordination and mutual understanding meeting shall be repeated.

1.9.1 Purpose

The purpose of this meeting is to develop a mutual understanding of the QC details, including documentation, administration for on-site and off-site work, design intent, Cx, environmental requirements and procedures, coordination of activities to be performed, and the coordination of the Contractor's management, production, and QC personnel. At the meeting, the Contractor will be required to explain in detail how three phases of control will be implemented for each DFOW, as well as how each DFOW will be affected by each management plan or requirement as listed below:

a. Waste Management Plan.

c. Procedures for noise and acoustics management.

d. Environmental Protection Plan.

e. Environmental regulatory requirements.

1.9.2 Attendees

As a minimum, the Contractor's personnel required to attend include an officer of the firm, the Project Manager, Project Superintendent, QC Manager, Alternate QC Manager, Environmental Manager, and sub-Contractor's representatives. Each subcontractor who will be assigned QC responsibilities shall have a principal of the firm at the meeting. Minutes of the meeting will be prepared by the QC Manager and signed by the Contractor and the Contracting Officer. Provide a copy of the signed minutes to all attendees and shall be included in the QC Plan.

1.10 QC MEETINGS

After the start of construction, conduct weekly QC meetings by the QC Manager at the work site with the Project Superintendent, QC Personnel, and alternate QCM, and the foremen who are performing the work of the DFOWs. The QC Manager is to prepare the minutes of the meeting and provide a copy to the Contracting Officer within two working days after the meeting. The Contracting Officer may attend these meetings. As a minimum, accomplish the following at each meeting:

a. Review the minutes of the previous meeting.

b. Review the schedule and the status of work and rework.

c. Review the status of submittals.

d. Review the work to be accomplished in the next two weeks and Documentation required.

e. Resolve QC and production problems (RFI, etc.).

f. Address items that may require revising the QC Plan.

g. Review Accident Prevention Plan (APP).

h. Review environmental requirements and procedures.

i. Review Waste Management Plan.

j. Review IAQ Management Plan.

k. Review Environmental Management Plan.

l. Review the status of training completion.

1.11 DESIGN REVIEW AND DOCUMENTATION

1.11.1 Basis of Design and Design Intent

Review the basis of design received from the Contracting Officer and the

design intent.

1.11.2 Design Review

Review design documents to verify that each commissioned system meets the design intent relative to functionality, energy performance, water performance, maintainability, sustainability, system cost, and local environmental impacts. Fully document review in written report.

1.12 THREE PHASES OF CONTROL

Adequately cover both on-site and off-site work with the Three Phases of Control and include the following for each DFOW.

1.12.1 Preparatory Phase

Notify the Contracting Officer at least two work days in advance of each preparatory phase meeting. The meeting will be conducted by the QC Manager and attended by the Project Superintendent and the foreman responsible for the DFOW. When the DFOW will be accomplished by a subcontractor, that subcontractor's foreman shall attend the preparatory phase meeting. Document the results of the preparatory phase actions in the daily Contractor Quality Control Report and in the Preparatory Phase Checklist. Perform the following prior to beginning work on each DFOW:

a. Review each paragraph of the applicable specification sections.

b. Review the Contract drawings.

c. Verify that field measurements are as indicated on construction and/or shop drawings before confirming product orders, in order to minimize waste due to excessive materials.

d. Verify that appropriate shop drawings and submittals for materials and equipment have been submitted and approved. Verify receipt of approved factory test results, when required.

e. Review the testing plan and ensure that provisions have been made to provide the required QC testing.

f. Examine the work area to ensure that the required preliminary work has been completed.

g. Coordinate the schedule of product delivery to designated areas.

h. Arrange for the return of shipping/packaging materials, such as wood pallets, where economically feasible.

i. Examine the required materials, equipment and sample work to ensure that they are on hand and conform to the approved shop drawings and submitted data.

j. Discuss specific controls used and construction methods, construction tolerances, workmanship standards, and the approach that will be used to provide quality construction by planning ahead and identifying potential problems for each DFOW.

k. Review the APP and appropriate Activity Hazard Analysis (AHA) to ensure that applicable safety requirements are met, and that required

Material Safety Data Sheets (MSDS) are submitted.

1.12.2 Initial Phase

Notify the Contracting Officer at least two work days in advance of each initial phase. When construction crews are ready to start work on a DFOW, conduct the initial phase with the Project Superintendent, and the foreman responsible for that DFOW. Observe the initial segment of the DFOW to ensure that the work complies with Contract requirements. Document the results of the initial phase in the daily CQC Report and in the Initial Phase Checklist. Repeat the initial phase for each new crew to work on-site, or when acceptable levels of specified quality are not being met. Perform the following for each DFOW:

a. Establish the quality of workmanship required.

b. Resolve conflicts.

c. Ensure that testing is performed by the approved laboratory.

d. Check work procedures for compliance with the APP and the appropriate AHA to ensure that applicable safety requirements are met.

e. Review the QC Plan and ensure all preparatory work items have been completed and documented.

1.12.3 Follow-Up Phase

Perform the following for on-going work daily, or more frequently as necessary, until the completion of each DFOW and document in the daily CQC Report:

a. Ensure the work is in compliance with Contract requirements.

b. Maintain the quality of workmanship required.

c. Ensure that testing is performed by the approved laboratory.

d. Ensure that rework items are being corrected.

e. Assure manufacturers' representatives have performed necessary inspections if required and perform safety inspections.

f. Review the QC Plan and ensure all work items, testing, and documentation has been completed.

1.12.4 Additional Preparatory and Initial Phases

Conduct additional preparatory and initial phases on the same DFOW if the quality of on-going work is unacceptable, if there are changes in the applicable QC organization, if there are changes in the on-site production supervision or work crew, if work on a DFOW is resumed after substantial period of in activity, or if other problems develop.

1.12.5 Notification of Three Phases of Control for Off-Site Work

Notify the Contracting Officer at least two weeks prior to the start of the

preparatory and initial phases.

1.13 SUBMITTAL REVIEW AND APPROVAL

Procedures for submission, review and approval of submittals are described in Section 01 33 00 SUBMITTAL PROCEDURES.

1.14 QC CERTIFICATIONS

1.14.1 CQC Report Certification

Contain the following statement within the CQC Report: "On behalf of the Contractor, I certify that this report is complete and correct and equipment and material used and work performed during this reporting periodis in compliance with the contract drawings and specifications to the best of my knowledge, except as noted in this report."

1.14.2 Invoice Certification

Furnish a certificate to the Contracting Officer with each payment request, signed by the QC Manager or Alternate QC Manager where applicable attesting that the Plans are current, coordinated and attesting that the work for which payment is requested, including stored material, is in compliance with Contract requirements.

1.14.3 Completion Certification

Upon completion of work under this Contract, the QC Manager shall furnish a certificate to the Contracting Officer attesting that "the work has been completed, inspected, tested and is in compliance with the Contract." Provide a copy of this final QC Certification for completion to the OMSI preparer for inclusion into the OMSI documentation.

1.15 COMPLETION INSPECTIONS

1.15.1 Punch-Out Inspection

Near the completion of all work or any increment thereof, established by a completion time stated in the Contract Clause entitled "Commencement, Prosecution, and Completion of Work," or stated elsewhere in the specifications, the QC Manager must conduct an inspection of the work and develop a "punch list" of items which do not conform to the approved drawings, specifications and Contract. Include in the punch list any remaining items on the "Rework Items List", which were not corrected prior to the Punch-Out Inspection. Include within the punch list the estimated date by which the deficiencies will be corrected. Provide a copy of the punch list to the Contracting Officer. The QC Manager, or staff, must make follow-on inspections to ascertain that all deficiencies have been corrected. Once this is accomplished, notify the Government that the facility is ready for the Government "Pre-Final Inspection".

1.15.2 Pre-Final Inspection

The Government and QCM will perform this inspection to verify that the work area(s) is complete. A Government "Pre-Final Punch List" will be documented by the CQM as a result of this inspection. The QC Manager will ensure that all items on this list are corrected prior to notifying the Government that a "Final" inspection with the Client can be scheduled.

Any items noted on the "Pre-Final" inspection must be corrected in a timely manner and be accomplished before the contract completion date for the work, or any particular increment thereof, if the project is divided into increments by separate completion dates.

1.15.3 Final Acceptance Inspection

Notify the Contracting Officer at least 14 calendar days prior to the date a final acceptance inspection can be held. State within the notice that all items previously identified on the pre-final punch list will be corrected and acceptable, along with any other unfinished Contract work, by the date of the final acceptance inspection. The Contractor must be represented by the QC Manager, the Project Superintendent, and others deemed necessary. Attendees for the Government will include the Contracting Officer, other FEAD/ROICC personnel, and personnel representing the Client. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the Contract Clause entitled "Inspection of Construction."

1.16 DOCUMENTATION

Maintain current and complete records of on-site and off-site QC program operations and activities.

1.16.1 Construction Documentation

Reports are required for each day that work is performed and must be attached to the Contractor Quality Control Report prepared for the same day. Maintain current and complete records of on-site and off-site QC program operations and activities. The forms identified under the paragraph "INFORMATION FOR THE CONTRACTING OFFICER" will be used. Reports are required for each day work is performed. Account for each calendar day throughout the life of the Contract. Every space on the forms must be filled in. Use N/A if nothing can be reported in one of the spaces. The Project Superintendent and the QC Manager must prepare and sign the Contractor Production and CQC Reports, respectively. The reporting of work must be identified by terminology consistent with the construction schedule. In the "remarks" sections of the reports, enter pertinent information including directions received, problems encountered during construction, work progress and delays, conflicts or errors in the drawings or specifications, field changes, safety hazards encountered, instructions given and corrective actions taken, delays encountered and a record of visitors to the work site, quality control problem areas, deviations from the QC Plan, construction deficiencies encountered, meetings held. The "Remarks" section shall also include detailed information specifying the cumulative total of: quantity dredged, quantity processed (the processing facility must be identified and the quantity must be broken out if more than one processing facility is utilized), and quantity placed at the dredged material's final placement location (the placement site must be identified and the quantity must be broken out if more than one placement site is utilized).

For each entry in the report(s), identify the Schedule Activity No. that is associated with the entered remark.

1.16.2 Quality Control Validation

Establish and maintain the following in a series of three ring binders. Binders shall be divided and tabbed as shown below. These binders must be readily available to the Contracting Officer during all business hours.

a. All completed Preparatory and Initial Phase Checklists, arranged by specification section.

b. All milestone inspections, arranged by Activity Number.

c. An up-to-date copy of the Testing Plan and Log with supporting field test reports, arranged by specification section.

d. Copies of all contract modifications, arranged in numerical order. Also include documentation that modified work was accomplished.

e. An up-to-date copy of the Rework Items List.

f. Maintain up-to-date copies of all punch lists issued by the QC staff to the Contractor and Sub-Contractors and all punch lists issued by the Government.

g. Commissioning documentation including QC checklists, schedules, tests, and reports.

1.16.3 Testing Plan and Log

As tests are performed, the QC Manager will record on the "Testing Plan and Log" the date the test was performed and the date the test results were forwarded to the Contracting Officer. Attach a copy of the updated "Testing Plan and Log" to the last daily CQC Report of each month, per the paragraph "INFORMATION FOR THE CONTRACTING OFFICER". Provide a copy of thefinal "Testing Plan and Log" to the OMSI preparer for inclusion into the OMSI documentation.

1.16.4 Rework Items List

The QC Manager must maintain a list of work that does not comply with the Contract, identifying what items need to be reworked, the date the item was originally discovered, the date the item will be corrected by, and the date the item was corrected. There is no requirement to report a rework item that is corrected the same day it is discovered. Attach a copy of the "Rework Items List" to the last daily CQC Report of each month. The Contractor is responsible for including those items identified by the Contracting Officer.

1.17 NOTIFICATION ON NON-COMPLIANCE

The Contracting Officer will notify the Contractor of any detected non-compliance with the Contract. Take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders will be made the subject of claim for extension of time for excess costs or damages by the Contractor.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 PREPARATION

Designate receiving/storage areas for incoming material to be delivered according to installation schedule and to be placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication. Store and handle materials in a manner as to prevent loss from weather and other damage. Keep materials, products, and accessories covered and off the ground, and store in a dry, secure area. Prevent contact with material that may cause corrosion, discoloration, or staining. Protect all materials and installations from damage by the activities of other trades.

-- End of Section --

SECTION 01 50 00

TEMPORARY CONSTRUCTION FACILITIES AND CONTROLS

02/26

PART 1 GENERAL

1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Construction Site Plan; G

1.2 NAVIGATION AIDS

Notify the Federal Aids to Navigation Officer 30 days prior to the commencement of work.

The Contractor shall not relocate or move any aids to navigation that have been established by the U.S. Coast Guard. If it becomes necessary to have any aids to navigation moved in order to complete dredging operations under this contract, the Contractor shall notify the appropriate Coast Guard Office, with a copy to the Contracting Officer and/or his Representative, not less than 30 days prior to the need for movement. The Contractor shall notify the appropriate Coast Guard Office of the approximate time of completion of dredging.

The Coast Guard has indicated that the requirements of navigation may make it necessary to establish times other than those requested. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS PLANS WITH THE COAST GUARD SUFFICIENTLY IN ADVANCE OF THE PLANNED CLOSING TO PREVENT DELAY TO THE DREDGING OPERATIONS AND COMPLY WITH THE COAST GUARD REQUIREMENT.

1.3 LAYOUT OF WORK

a. The Government will establish the following base lines and bench marks at the site of the work: (Monuments and bench marks as shown on the drawings.)

b. From the base lines and bench marks established by the Government, complete the layout of the work and provide measurements for the execution of the work to the location and limit marks indicated, subject to such modifications as the Contracting Officer may require to meet changed conditions or as a result of necessary modifications to the contract work.

c. Provide stakes, templates, platforms, equipment, tools and material, and labor as required for laying out the work from the base lines and bench marks established by the Government. Maintain and preserve all stakes and other marks established by the Contracting Officer until authorized to remove them, and if such marks are destroyed by the Contractor or through his negligence prior to their authorized removal, they may be replaced by the Contracting Officer, at his discretion, and the expense of replacement will be deducted from any amounts due or to become due the Contractor. The Contracting Officer may require that work be suspended at any time when location and limit marks established by the Contractor are not reasonably adequate to permit checking of the work.

1.4 SUBMERGED PIPELINES

Should it become necessary in the performance of this contract to use a submerged pipelines across a navigable channel, the Contractor must notify the Contracting Officer, in writing to be received in the District Office at least ten working days prior to the desired closure date. This notification shall include the following:

(1) Location (Channel Centerline Stationing) and depth (over the top ofthe pipeline) at which the submerged line will be placed;

(2) The desired length of time the channel is to be closed forinstallation of the pipeline;

(3) The date and hour placement or removal will commence;

(4) The date and hour of anticipated completion; and

(5) The name and telephone number of the person to be contacted for information and response to any emergency condition.

The requirements of navigation may make it necessary to establish times other than those requested. It is the contractor's responsibility to coordinate his/her plans with the Coast Guard sufficiently in advance of the planned closing to prevent delay to the dredging operations and comply with the Coast Guard requirements.

1.5 FLOATING PIPELINE

Design rubber float lines to minimize the number of connections in the discharge line and reduce the need to disconnect the float line from the submerged line in moderate storm conditions. Provide an information-only design submittal prior to starting this Definable Feature of Work. Floating pipeline, used as access ways, shall be equipped with walkways and guard rails. The walkway must be securely anchored to the pipeline and a guard rail equivalent in strength to a wood rail 2 inch by 4 inch must be provided on at least one side of the walkway and must be securedto upright at intervals of not more than 8 feet and of not less than 36 nor more than 42 inches in height above the walkway. Float pipelines not equipped with walkways must be barricaded to prevent personnel access.

1.6 CONSTRUCTION SITE PLAN

Prior to the start of work, submit a site plan showing the locations and dimensions of temporary facilities (including layouts and details,

equipment and material storage area (onsite and offsite), and access and haul routes, avenues of ingress/egress to the fenced area and details of the fence installation. Identify any areas which may have to be graveled to prevent the tracking of mud. Indicate if the use of a supplemental or other staging area is desired. Show locations of safety and construction fences, site trailers, construction entrances, trash dumpsters, temporary sanitary facilities, and worker parking areas.

1.7 BRIDGE-TO-BRIDGE RADIO-TELEPHONE EQUIPMENT

In order that radio-telephone communication may be made with passing vessels, all dredges engaged in work under the contract shall be equipped with and operate bridge-to-bridge radio-telephone equipment on VHF Channel 13 (156.65 MHz with low power output having a communication range of approximately ten (10) miles). The Federal Communication Commission has approved the frequency.

1.8 HEAD PROTECTION AREA

THE ENTIRE WORK SITE UNDER THIS CONTRACT IS DESIGNATED AS A HARD HAT AREA. The Contractor shall post the area in accordance with the requirements of paragraph 05.D.01, EM 385-1-1, and shall ensure that all prime and subcontractor personnel, vendors, and visitors utilize hard hats while within the project area. (EM 385-1-1 30 Nov. 2014)

1.9 SIGNAL LIGHTS

The Contractor shall display signal lights and conduct his operations in accordance with the General Regulations of the Coast Guard governing lights and day signals to be displayed by towing vessels with tows on which no light signals can be displayed. Vessels working on wrecks, dredges, and vessels engaged in laying cables or pipe or in submarine or bank protection operations, lights to be displayed on dredge pipelines, and day signals to be displayed by vessels of more than 65 feet in length moored or anchored in a fairway or channel, and the passing by other vessels or floating plant working in navigable channels, as approved by the Commandant, U.S. Coast Guard with respect to vessels on the high seas (33 CAR 81 App. A-72 COLREGS, Part C), vessels in inland waters (33-CFR 93.18 - 93.31a), and vessels in western rivers (33 CFR 95.5.51 - 95.70)), as applicable. (DAEN-PRP Ind dtd. 12 Sep. 83)

1.10 REVERSE SIGNAL ALARM

a. All construction equipment, except light service trucks, panels, pickup trucks, station wagons, crawler-type cranes, power shovels and draglines, whether moving alone or in combination shall be equipped with reverse signal alarms. The alarm shall be mounted on the rear of the equipment and shall be protected or constructed as to withstand severe wear and tear, adverse weather and unfavorable environmental working conditions and shall be certified by the manufacturer to fullymeet the following performance standards.

b. The alarm shall produce a relatively pure tone which shall peak within the American National Std's. Inst. standard octave pass band of 600 to 2400 cycles per second and shall produce a 0.2 to 0.5 second audible warning within the initial three (3) feet of backward movement of the vehicle on which it is mounted and at regular

intervals, not to exceed three (3) seconds throughout the backward movement. The alarm shall automatically stop when backward movement ceases. The sound intensity of the alarm shall range from and not exceed 90-100 db (decibels) at a horizontal distance of five feet from the alarm.

c. Actuation of the alarm shall be automatic by direct connections to any part of the equipment that moves or acts in a manner distinctive only to the rearward movement of the vehicle with no manual controls of any kind between the source of actuation and the alarm. Where application of this requirement to specific types of the equipment hasimpractical application, other means of actuation may be used upon written approval of the Contracting Officer and/or his Representative.

d. The use of the alarm shall be in the addition to prescribed requirements for signalmen.

1.11 INSPECTION

The inspectors will assess whether the gauges, ranges, location marks and limit marks are maintained in proper order; but the presence of the inspector shall not relieve the Contractor of the responsibility for the proper execution of the work in accordance with the specifications. The Contractor will be required:

a. To furnish, on the request of the Contracting Officer and/or his Representative or any inspector, the use of such boats, boatmen, laborers, a part of the ordinary and usual equipment and crew of the dredging plant as may be reasonably necessary in inspecting and supervising the work. However, the Contractor will not be required to furnish such facilities for the surveys prescribed in the clause entitled: "Final Examination and Acceptance."

b. To furnish, on the request of the Contracting Officer or the Contracting Officer's Representative or any inspector, suitable transportation from all points on shore designated by the Contracting Officer and/or his Representative to and from the various pieces of plant and to and from the placement area. Should the Contractor refuse, neglect, or delay compliance with these requirements, the specific facilities may be furnished and maintained by the Contracting Officer or Contracting Officer Representative, and the cost thereof will be deducted from any amounts due or to become due to the Contractor.

PART 2 PRODUCTS

2.1 ACCOMMODATIONS FOR GOVERNMENT INSPECTORS

The Contractor shall furnish regularly to Government inspectors onboard the dredge or other craft upon which they are employed a suitable separate room for an office. The room shall be fully equipped and maintained to the satisfaction of the Contracting Officer and/or his Representative; it shall be properly heated, ventilated, and lighted, and shall have a desk which can be locked, and a chair for each inspector, beverage (e.g. water, coffeeand tea) and bathroom conveniences. In addition, the Contractor shall provide a suitable sleeping area for use by the Government inspector when weather or sea conditions preclude safe transfer to shore. The

entire cost to the Contractor for furnishing, equipping and maintaining the foregoing accommodations shall be included in the contract price. If the Contractor fails to meet these requirements, the Contracting Officer and/or his Representative will secure the facilities referred to above, and the cost thereof will be deducted from payments to the Contractor.

2.2 TEMPORARY SIGNAGE

2.2.1 Safety Sign

The Contractor shall construct a safety sign at a location directed by the Contracting Officer and/or his Representative. The sign shall be 6 feet by 4 feet and shall conform to the requirements as specified in Section 00 90 01, Attachment B, Project Identification and Safety Signs. The Corps of Engineers castle logo (an 8.5" x 11" red decal) is to be used on the sign.

The decal shall receive a thin coat of clear spar varnish after application. The sign shall be erected as soon as possible and within 5 calendar days after the date of the receipt of the Notice to Proceed. The data required by the sign shall be corrected daily. No separate payment will be made for erecting and maintaining the safety sign and all costs in connection therewith will be considered the obligation of the contractor. Upon completion of the project, the Contractor shall remove the sign from the work site.

2.2.2 Project Sign

The Contractor shall furnish and erect a project sign at a location directed by the Contracting Officer or Contracting Officer's Representative. The project sign shall conform with all requirements as specified in Section 00 90 01, Attachment B, Project Identification and Safety Signs. The Corps of Engineers' castle logo and other logos (8.5" x 11") to be used on the sign will be Government furnished. The Contractor will be given these logos at the time of the preconstruction conference.

The decal(s) shall receive a thin coat of clear spar varnish after application. The Contractor shall maintain the sign in good condition throughout the construction period. No separate payment will be made for erecting and maintaining the project sign, and all costs in connection therewith will be considered the obligation of the Contractor. Upon completion of the project, the Contractor shall remove the sign from the work site.

2.2.3 Bulletin Board

Within one calendar day of mobilization on site and prior to the commencement of work activities, provide a clear weatherproof covered bulletin board not less than 36 by 48 inches in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision contained in the contract, Wage Rate Information poster, Safety and Health Information as required by EM 385-1-1 Section 01 and other information approved by the Contracting Officer. Coordinate requirements herein with 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS.

2.2.4 Warning Signs

Post temporary signs, tags, and labels to give workers and the public

adequate warning and caution of construction hazards according to the EM 385-1-1 Section 04. Attach signs to the perimeter fencing every 150 feet warning the public of the presence of construction hazards. Signs must require unauthorized persons to keep out of the construction site. Correct the data required by safety signs daily.

PART 3 EXECUTION

3.1 RESTORATION OF STORAGE AREA

Upon completion of the project remove the bulletin board, signs, barricades, haul roads, and any other temporary products from the site. After removal of trailers, materials, and equipment from within the fenced area, remove the fence. Restore areas used during the performance of the contract to the original or better condition. Remove gravel used to traverse grassed areas and restore the area to its original condition, including top soil and seeding as necessary.

-- End of Section --

SECTION 01 57 20.00 10

ENVIRONMENTAL PROTECTION

02/26

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2014) Safety and Health RequirementsManual
WETLANDS DELINEATION MANUAL	(1987) Corps of Engineers Wetlands Delineation Manual

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 328	Definitions of Waters of the United States
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 279	Standards for the Management of Used Oil
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 355	Emergency Planning and Notification
40 CFR 68	Chemical Accident Prevention Provisions
49 CFR 171 - 178	Hazardous Materials Regulations

1.2 DEFINITIONS

1.2.1 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally and/or historically.

1.2.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitatdisruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2.3 Contractor Generated Hazardous Waste

Contractor generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e. methyl ethyl ketone, toluene etc.), waste thinners, excess paints, excess solvents, waste solvents, and excess pesticides, and contaminated pesticide equipment rinse water.

1.2.4 Surface Discharge

The term "Surface Discharge" implies that the water is discharged with possible sheeting action and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, storm sewers, creeks, and/or "waters of the United States" and would require apermit to discharge water from the governing agency.

1.2.5 Waters of the United States

All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

1.2.6 Wetlands

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, and bogs. Official determination of whether or not an area is classified as a wetland must be done in accordance with WETLANDS DELINEATION MANUAL.

1.3 GENERAL REQUIREMENTS

Minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work must be protected during the entire duration of this contract. The Contractor shall comply with all applicable environmental Federal, State, and local laws and regulations. The Contractor shall be responsible for any delays resulting from failure to comply with environmental laws and regulations.

1.4 OIL TRANSFER OPERATIONS

The Contractor shall assure that oil transfer operations to or from his plant comply with all Federal, state, municipal laws, codes and regulations (see Attachment D of Section 00 90 01 for regulation on "Oil and Hazardous Material Transfer Operations" - 33 CFR 156). Particular attention is invited to 33 CFR Subchapter O, Pollution. The Contractor shall incorporate in the accident prevention program, submitted in compliance with Section 00700, contract clause "ACCIDENT PREVENTION," sufficient information to demonstrate that all fuel transfers will be made in compliance with 33 CFR 156 and any other applicable laws, codes and regulations. (NAP-1/81)

1.5 NOISE LEVEL CRITERIA

Maximum sound pressure levels measured at the booster pumps, engine generators and vehicles including muffler and exhaust components, shall not exceed decibel values prescribed by Federal, State and local codes and regulations. The foregoing applies with the pumps under normal operating conditions at not less than 50% full rated load. Tests will be performed at no additional cost to the Government by the Contractor, or the pump engine and generator manufacturer or by an approved testing agency having proven capability in noise measurements and using approved measurement equipment and acceptable measurement procedures. Test data will be submitted to the Contracting Officer for approval 5 days after the commencement of dredging operations. Should the sound pressure (noise) level test data indicate a need for sound reduction, the Contractor will provide necessary enclosures, baffles or any other appropriate means around booster pumps and engine generators including muffler and exhaust components, so as to attain noise levels which do not exceed those prescribed by afore mentioned regulations. Details of the proposed enclosure or baffling arrangement shall be submitted to the Contracting Officer for approval. Such details will be accomplished by calculations, which indicate anticipated compliance of sound pressure (noise) levels with codes and regulations noted herein before. All this is especially enforceable where these booster and engine generator locations are in bathing areas.

1.6 SUBCONTRACTORS

The Contractor shall ensure compliance with this section by subcontractors.

1.7 PAYMENT

No separate payment will be made for work covered under this section. Payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor, and payment of all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations are the Contractor's responsibility. All costs associated with this section must be included in the contract price. The Contractor shall be responsible for all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations.

1.8 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office

that will review the submittal for the Government. The following shall besubmitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals; G

Environmental Protection Plan; G

1.9 ENVIRONMENTAL PROTECTION PLAN

Prior to commencing construction activities or delivery of materials to the site, the Contractor shall submit an Environmental Protection Plan for review and approval by the Contracting Officer. The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern must be defined within the Environmental Protection Plan as outlined in this section. The Contractor shall address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this section, but which the Contractor considers necessary, shall be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, the Contractor shall meet with the Contracting Officer for the purpose of discussing the implementation of the initial Environmental Protection Plan; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's Environmental Protection Plan. The Environmental Protection Plan shall be current and maintained onsite by the Contractor.

1.9.1 Compliance

No requirement in this Section shall be construed as relieving the Contractor of any applicable Federal, State, and local environmental protection laws and regulations. During Construction, the Contractor will be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

1.9.2 Contents

The environmental protection plan shall include but shall not be limited to, the following:

a. Name(s) of person(s) within the Contractor's organization who is(are) responsible for ensuring adherence to the Environmental Protection Plan.

b. Name(s) and qualifications of person(s) responsible for manifesting hazardous waste to be removed from the site, if applicable.

c. Name(s) and qualifications of person(s) responsible for training the Contractor's environmental protection personnel.

d. Description of the Contractor's environmental protection personnel training program.

e. An erosion and sediment control plan which identifies the type and location of the erosion and sediment controls to be provided.

The plan must include monitoring and reporting requirements to assure that the control measures are in compliance with the erosion and sediment control plan, Federal, State, and local laws and regulations. A Storm Water Pollution Prevention Plan (SWPPP) may be substituted for this plan.

f. Drawings showing locations of proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials on the site.

g. Traffic control plans including measures to reduce erosion of temporary road beds by construction traffic, especially during wet weather. Plan shall include measures to minimize the amount of mud transported onto paved public roads by vehicles or runoff.

h. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or non use. Plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized work areas.

i. Drawing showing the location of borrow areas.

j. The Spill Control plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355, and/or regulated under State or Local laws and regulations. The Spill Control Plan supplements the requirements of EM 385-1-1. This plan shall include, as a minimum:

(1) The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual will immediately notify the Contracting Officer and Facility Response Personnel in addition to the legally required Federal, State, and local reporting channels(including the National Response Center 1-800-424-8802) if a reportable quantity is released to the environment. Include in the plan a list of the required reporting channels and telephone numbers.

(2) The name and qualifications of the individual who will be responsible for implementing and supervising the containment and cleanup.

(3) Training requirements for Contractor's personnel and methods of accomplishing the training.

(4) A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.

(5) The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.

(6) The methods and procedures to be used for expeditious contaminant cleanup.

k. A Non-hazardous solid waste disposal Plan identifying methods and locations for solid waste disposal including clearing debris and schedules for disposal and the following.

(1) The Contractor shall identify any subcontractors responsible for the transportation and disposal of solid waste. Submit licenses or permits for solid waste disposal sites that are not a commercial operating facility.

(2) Evidence of the disposal facility's acceptance of the solid waste must be attached to this plan during the construction. The Contractor shall attach a copy of each of the Non-hazardous Solid Waste Diversion Reports to the disposal plan. The report shall be submitted on the first working day after the first quarter that non-hazardous solid waste has been disposed and/or diverted and shall be for the previous quarter (e.g. the first working day of January, April, July, and October).

(3) The report shall indicate the total amount of waste generated and total amount of waste diverted in cubic yards (CY)or tons along with the percent that was diverted.

l. A recycling and solid waste minimization plan with a list of measures to reduce consumption of energy and natural resources. The plan shall detail the Contractor's actions to comply with and to participate in Federal, State, Regional and local Government sponsored recycling programs to reduce the volume of solid waste at the source.

m. An air pollution control plan detailing provisions to assure that dust, debris, materials, trash, etc., do not become air borne and travel off the project site.

n. A contaminant prevention plan that: identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials. In accordance with EM 385-1-1, a copy of the Material Safety Data Sheets (MSDS) and the maximum quantity of each hazardous material to be onsite at any given time must be included in the contaminant prevention plan. As new hazardous materials are brought onsite or removed from the site, the plan shall be updated.

o. A waste water management plan that identifies the methods and procedures for management and/or discharge of waste waters which are directly derived from construction activities, such as concrete curing water, clean-up water, dewatering of ground water, disinfecting of water, hydrostatic test water, and water used in flushing of lines. If a settling/retention pond is required, the plan must include the design of the pond including drawings, removal plan, and testing requirements for possible pollutants. If land application will be the method of disposal for the waste water, the plan must include a sketch showing the location for land application along with a description of the pretreatment methods to be

implemented. If surface discharge will be the method of disposal, include a copy of the permit and associated documents as an attachment prior to discharging the waste water. If disposal is to a sanitary sewer, the plan must include documentation that the Waste Water Treatment Plant Operator has approved the flow rate, volume, and type of discharge.

p. A historical, archaeological, cultural resources biological resources and wetlands plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources and wetlands known to be on the project site: and/or identifies procedures to be followed if historical archaeological, cultural resources, biological resources and wetlands not previously known to be onsite or in the area are discovered during construction. Include in the plan methods to assure the protection of known or discovered resources, identifying lines of communication between Contractor personnel and the Contracting Officer.

1.9.3 Appendix

Attach to the Environmental Protection Plan, as an appendix, copies of all environmental permits, permit application packages, approvals to construct, notifications, certifications, reports, and termination documents.

1.10 PROTECTION FEATURES

This paragraph supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. Prior to start of any onsite construction activities, the Contractor and the Contracting Officer will make a joint condition survey. Immediately following the survey, the Contractor will prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s),as applicable. This survey report will be signed by both the Contractor and the Contracting Officer upon mutual agreement as to its accuracy and completeness. The Contractor must protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference which their preservation may cause to the work under the contract.

1.11 SPECIAL ENVIRONMENTAL REQUIREMENTS

The Contractor shall comply with the special environmental requirements listed here and attached at the end of this section.

1.12 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations from the drawings, plans and specifications, requested by the Contractor and which may have an environmental impact, will be subject to approval by the Contracting Officer and may require an extended review, processing, and approval time. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact.

1.13 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or regulations, permits, and other elements of the Contractor's Environmental Protection plan. After receipt of such notice, the Contractor will inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions will be granted or equitable adjustments allowed for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

1.14 PROTECTION OF ENVIRONMENTAL RESOURCES

The Contractor shall at all times perform all work and take such steps required to minimize interference with or disturbance to fish and wildlife. The Contractor will not be permitted to alter water flows or otherwise disturb native habitat adjacent to the work area, which in the opinion of the Contracting Officer, are critical to fish and wildlife. The Contractor shall anticipate orders to stop work at the discretion of the Contracting Officer if any fish or wildlife are endangered by construction activities. The environmental resources within the project boundaries and those affected outside the limits of permanent work under this contract shall be protected during the entire period of this contract. The Contractor shall confine his activities to areas defined by the drawings and specifications.

1.14.1 Protection of Endangered and Threatened

SpeciesNot Used

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 ENVIRONMENTAL PERMITS AND COMMITMENTS

This paragraph supplements the Contractor's responsibility under the contract clause "PERMITS AND RESPONSIBILITIES" to the extent that the Government has obtained the NYDEC Water Quality Certificate and Coastal Zone Management Consistency Statement. The Contractor shall Comply with the terms and conditions of the attached NYDEC Water Quality Certificate and Coastal Zone Management Consistency Statement attached as an appendix on this document.

3.2 LAND RESOURCES

The Contractor shall confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction,

the Contractor shall identify any land resources to be preserved within the work area. Except in areas indicated in the drawings or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval. No Ropes, cables, or guys will not be fastened toor attached to any trees for anchorage unless specifically authorized. The Contractor shall provide effective protection for land and vegetation resources at all times, as defined in the following subparagraph. Stone, soil, or other materials displaced into uncleared areas shall be removed by the Contractor.

3.2.1 Work Area Limits

Prior to commencing construction activities the Contractor shall mark the area(s) that need not to be disturbed under this contract. Isolated areas within the general work area, which are not to be disturbed shall be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, any markers must be visible in the dark. The Contractor's personnel must be knowledgeable of the purpose for marking and/or protecting particular objects.

3.2.2 Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features indicated and defined on the drawings to be preserved must be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques. The Contractor shall restore landscape features damaged or destroyed during construction operations outside the limits of the approved work area.

3.2.3 Erosion and Sediment Controls

The Contractor shall be responsible for providing erosion and sediment control measures in accordance with Federal, State, and local laws and regulations. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality standards are not violated as a result of the Contractor's construction activities. The area of bare soil exposed at any one time by construction operations should be kept to a minimum. The Contractor shall Construct or install temporary and permanent erosion and sediment control Best Management Practices (BMPs). BMPs may include, but not be limited to, vegetation cover, stream bank stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, inlet and outfall protection, diversion channels, and sedimentation basins. Any temporary measures shall be removed after the area has been stabilized.

3.2.4 Contractor Facilities and Work Areas

The Contractor's field offices, staging areas stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities will be made only when approved. Erosion and sediment controls must be provided for onsite borrow and spoil areas to prevent sediment from entering nearby waters. Temporary excavation and embankments for plant and/or work areas must be controlled to protect adjacent areas.

3.3 WATER RESOURCES

The Contractor shall monitor construction activities to prevent pollution of surface and ground waters. Toxic or hazardous chemicals shall not be applied to soil or vegetation unless otherwise indicated. All water areas affected by construction activities shall be monitored by the Contractor. For construction activities immediately adjacent to impaired surface waters, the Contractor must be capable of quantifying sediment or pollutant loading to that surface water when required by State or Federally issued Clean Water Act permits.

3.3.1 Cofferdams, Diversions, and Dewatering Operations

Construction operations for dewatering, removal of cofferdams, tailrace excavation, and tunnel closure will be controlled at all times to maintain compliance with existing State water quality standards and designated uses of the surface water body. The Contractor shall comply with the state of New York water quality standards and anti-degradation provisions.

3.3.2 Wetlands

The Contractor shall not enter disturb, destroy, or allow discharge of contaminants into any wetlands, except as authorized herein. The Contractor shall be responsible for the protection of wetlands shown on the drawings in accordance with paragraph 3.1 "Environmental Permits and Commitments" above. Authorization to enter specific wetlands shall not relieve the Contractor from any obligation to protect other wetlands within, adjacent to, or in the vicinity of the construction site and associated boundaries.

3.4 AIR RESOURCES

Equipment operation, activities, or processes will be performed by the Contractor in accordance with all Federal and State air emission and performance laws and standards.

3.4.1 Particulates

Dust particles; aerosols and gaseous by-products from construction activities; and processing and preparation of materials, such as from asphaltic batch plants; must be controlled at all times, including weekends, holidays and hours when work is not in progress. The Contractor shall maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or outside the project boundaries free from particulates which would cause the Federal, State, and local air pollution standards to be exceed or which would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, baghouse, scrubbers, electrostatic precipitators or other methods will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp at all times. The Contractor must have sufficient, competent equipment available to accomplish these tasks. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs. The Contractor shall comply with all State andlocal visibility regulations.

3.4.2 Odors

Odors from construction activities must be controlled at all times. The odors must be in compliance with State regulations and/or local ordinances and may not constitute a health hazard.

3.4.3 Sound Intrusions

The Contractor shall keep all construction activities under surveillance and control to minimize environment damage by noise and shall comply with the provisions of the State of New York rules.

3.4.4 Burning

Burning will not be allowed on the project site unless specified in other sections of the specifications or authorized in writing by the Contracting Officer. The specific time, location, and manner of burning will be subject to approval.

3.5 CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

Disposal of wastes will be as directed below, unless otherwise specified in other sections and/or shown on the drawings.

3.5.1 Solid Wastes

Solid wastes (excluding clearing debris) shall be place in containers which are emptied on a regular schedule. Handling, storage, and disposal shall be conducted to prevent contamination. Segregation measures shall be employed so that no hazardous or toxic waste will become co-mingled with solid waste.

3.5.2 Chemicals and Chemical Wastes

Chemicals shall be dispensed ensuring no spillage to the ground or water. Periodic inspections of dispensing areas to identify leakage and/or potential leakage shall be performed and documented; corrective action shall also be documented. This documentation will be periodically reviewed by the Government. Chemical waste shall be collected in corrosion resistant, compatible containers. Collection drums must be monitored and removed to a staging or storage area when contents are within 6 inches of the top. Wastes will be classified, managed, stored, and disposed of in accordance with Federal, State, and local laws and regulations.

3.5.3 Contractor Generated Hazardous Wastes/Excess Hazardous Materials

Hazardous wastes are defined in 40 CFR 261, or are as defined by applicableState and local regulations. Hazardous materials are defined in 49 CFR 171 - 178. The Contractor shall at a minimum, manage and store hazardous waste in compliance with 40 CFR 262 and shall manage and store hazardous waste in accordance with the installation hazardous waste management plan. The Contractor shall take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. The Contractor shall segregate hazardous waste from other materials and wastes, and shall take precautionary measures such as berming or other appropriate measures against accidental spillage. The Contractor shall be responsiblefor storage, describing, packaging, labeling, marking, and

placarding of hazardous waste and hazardous material in accordance with 49 CFR 171 - 178, State, and local laws and regulations. The Contractor shall transport Contractor generated hazardous waste off Government property within 60 days in accordance with the Environmental Protection Agency n(EPA) and the Department of Transportation laws and regulations. The Contractor shall dispose of hazardous waste in compliance with Federal, State and local laws and regulations. Spills of hazardous or toxic materials shall be immediately reported to the Contracting Officer and the Facility Environmental Office. Cleanup and cleanup costs due to spills are the Contractor's responsibility. The disposition of Contractor generated hazardous waste and excess hazardous materials are the Contractor's responsibility.

3.5.4 Fuel and Lubricants

Storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill andevaporation. Fuel, lubricants and oil shall be managed and stored in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations. Storage of fuel on the project site is not allowed. Storage of fuel on the project site shall be in accordance with all Federal, State, and local laws and regulations.

3.5.5 Waste Water

Disposal of waste water will be as specified below.

a. Waste water from construction activities, such as onsite material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, forms, etc. will not be allowed to enter water ways or to be discharged prior to being treated to remove pollutants. The Contractor shall dispose of the construction related waste water off-Government property in accordance with all Federal, State, Regional and Local laws and regulations.

b. For discharge of ground water and run-off surface water, the Contractor shall discharge in accordance with all Federal, State, Regional, and/or Local laws and regulations.

c. Water generated from the flushing of lines after hydrostatic testing shall be land applied in accordance with all Federal, State, and local laws and regulations for land application.

3.6 RECYCLING AND WASTE MINIMIZATION

The Contractor shall participate in State and local government sponsored recycling programs. The Contractor is further encouraged to minimize solid waste generation throughout the duration of the project.

3.7 NON-HAZARDOUS SOLID WASTE DIVERSION REPORT

The contractor shall maintain an inventory of non-hazardous solid waste

diversion and disposal of construction and demolition debris. The Contractor shall submit a report to the Facility through the Contracting Officer on the first working day after each fiscal year quarter, starting the first quarter that non-hazardous solid waste has been generated.

Include the following in the report:

a. Construction and Demolition (C&D) Debris Disposed in Cubic Yards(CY) or Tons (TN), as appropriate.

b. Construction and Demolition (C&D) Debris Recycled in Cubic Yards(CY) or Tons (TN), as appropriate.

c. Total (C&D) Debris Generated in Cubic Yards (CY) or Tons (TN), asappropriate.

d. Waste sent to Waste-To-Energy Incineration Plant (This amount should not be included in the recycled amount) in Cubic Yards (CY)or Tons (TN), as appropriate.

3.8 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Known existing historical, archaeological, and cultural resources within the Contractor's work area are shown on the drawings. The Contractor shall protect these resources and be responsible for their preservation during the life of the Contract. If during excavation or other construction activities any previously unidentified or unanticipated historical, archaeological, and cultural resources are discovered or found, all activities that may damage or alter such resources will be temporarily suspended. Resources covered by this paragraph include but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone,charcoal, or other deposits; rock or coral alignments, paving's, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, immediately notify the Contracting Officer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in impact to or the destruction of these resources and shall secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources.

3.9 BIOLOGICAL RESOURCES

The Contractor shall minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The protection of threatened and endangered animal and plant species, including their habitat, in accordance with Federal, State, Regional, and local laws and regulations.

3.10 TRAINING OF CONTRACTOR PERSONNEL

Contractor's personnel shall be trained in all phases of environmental protection and pollution control by means of conducting environmental protection/pollution control meetings prior to commencing construction activities. Additional meetings shall be conducted for new personnel and

when site conditions change. The training and meeting agenda shall include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards, familiarization and care of monitoring devices, vegetative covers in order to ensure adequate and continuous environmental/pollution control. Additionally, the meeting topics shall include information on anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants, recognition and protection of archeological sites, artifacts, wetlands and endangered species and their habitat that are known to be in the area.

3.11 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". The Contractor shall unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area must be graded, filled and the entire area seeded unless otherwise indicated.

-- End of Section --

Section 01 58 00

PROJECT IDENTIFICATION
02/26

PART 1 GENERAL

1.1 SUBMITTALS

Not Used.

1.2 QUALITY

ASSURANCENot

Used.

1.3 PROJECT SIGN AND SAFETY SIGN

Prior to initiating any work on site, provide one project identification sign and one safety sign at the location designated. Construct the sign in accordance with project sign detail shown in Attachment C, Section 00 90 01. The sign shall be 6 feet by 4 feet. The Corps of Engineers castle logo (an 8.5" x 11" red decal) to be used on the sign will be Government furnished.

The Contractor will be given this logo at the time of the preconstruction conference. The decal shall receive a thin coat of clear spar varnish after application. The sign shall be erected as soon as possible and within 15 calendar days after the date of the receipt of the Notice to Proceed. The data required by the sign shall be corrected daily. No separate payment will be made for erecting and maintaining the safety sign and all costs in connection therewith will be considered the obligation ofthe contractor. Upon completion of the project, the Contractor shall remove the sign from the work site. Maintain sign throughout the life of the project.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.
-- End of Section --

SECTION 01 78 00

CLOSEOUT SUBMITTAL

05/25

PART 1 GENERAL

1.1 DEFINITIONS

1.1.1 As-Built Drawings

As-built drawings are developed and maintained by the Contractor and depict actual conditions, including deviations from the Contract Documents. These deviations and additions may result from coordination required by, but not limited to contract modifications; official responses to Contractor submitted Requests for Information; direction from the Contracting Officer; designs which are the responsibility of the Contractor, and differing site conditions. Maintain the as-builts throughout construction as red-lined PDF files. These files serve as the basis for the creation of the record drawings.

1.1.1 Record Drawings

The record drawings are the final compilation of actual conditions reflected in the as-built drawings.

1.2 SOURCE DRAWING FILES

Request the full set of electronic drawings, in the source format, for Record Drawing preparation, after award and at least 30 days prior to required use.

1.2.1 Terms and Conditions

Data contained on these electronic files must not be used for any purpose other than as a convenience in the preparation of construction data for the referenced project. Any other use or reuse shall be at the sole risk of the Contractor and without liability or legal exposure to the Government. The Contractor must make no claim and waives to the fullest extent permitted by law, any claim or cause of action of any nature against the Government, its agents or sub consultants that may arise out of or in connection with the use of these electronic files. The Contractor must, to the fullest extent permitted by law, indemnify and hold the Government harmless against all damages, liabilities or costs, including reasonable attorney's fees and defense costs, arising out of or resulting from the use of these electronic files.

These electronic CAD drawing files are not construction documents. Differences may exist between the CAD files and the corresponding construction documents. The Government makes no representation regarding the accuracy or completeness of the electronic CAD files, nor

does it make representation to the compatibility of these files with the Contractor hardware or software. In the event that a conflict arises between the signed and sealed construction documents prepared by the Government and the furnished Source drawing files, the signed and sealed construction documents govern. The Contractor is responsible for determining if any conflict exists. Use of these Source Drawing files does not relieve the Contractor of duty to fully comply with the contract documents, including and without limitation, the need to check, confirm and coordinate the work of all contractors for the project. If the Contractor uses, duplicates or modifies these electronic source drawing files for use in producing construction data related to this contract, remove all previous indicia of ownership (seals, logos, signatures, initials and dates).

1.3 OWNERSHIP

The Government, for itself and such others as it deems appropriate, will have unlimited rights under this contract to all information and materials developed under this contract and furnished to the Government and documentation thereof, reports, and listings, and all other items pertaining to the work and services pursuant to this agreement including any copyright. Unlimited rights under this contract are rights to use, duplicate, or disclose text, data, drawings, and information, in whole or in part in any manner and for any purpose whatsoever without compensation to or approval from the Contractor. The Government will at all reasonable times have the right to inspect the work and will have access to and the right to make copies of the above-mentioned items. All text, electronic digital files, data, and other products generated under this contract shall become the property of the Government. By reference, the following DFAR clauses are included in this contract as a part of the requirements herein:

a. DFAR 252.227-7013, "Rights in Technical Data - Noncommercial Items."
b. DFAR 252.227-7017, "Identification and Assertion of Use, Release, orDisclosure Restrictions."
c. DFAR 252.227-7020, "Rights in Special Works."
d. DFAR 252.227-7028, "Technical Data or Computer Software PreviouslyDelivered to the Government."
e. DFAR 252.227-7037, "Validation of Restrictive Markings on TechnicalData."
f. DFAR 252.227-7025, "Limitations on the Use or Disclosure of Government-Furnished Information Marked with Restrictive Legends."
g. DFAR 252.227-7014, "Rights in Noncommercial Computer Software andNoncommercial Computer Software Documentation."

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-11 Closeout Submittals

As-Built Drawings; G

Record Drawings; G

1.5 QUALITY CONTROL

Additions and corrections to the contract drawings must be equal in quality and detail to that of the originals. Line colors, line weights, lettering, layering conventions, and symbols must be the same as the original line colors, line weights, lettering, layering conventions, and symbols.

PART 2 PRODUCTS

2.1 GOVERNMENT FURNISHED MATERIALS

a. One set of "as-designed" electronic CAD files in the specified software and format revised to reflect all amendments and the final contract PDF drawings. The CAD files are provided to enable preparation of as-built or as-constructed drawings. If discrepancies exist between the CAD files and the contract PDF drawings, correct the CAD files to show the contract PDF drawings.

2.2 SYSTEM DESCRIPTION

Prepare the CAD drawing files in MicroStation V8 format compatible with a Windows 10 operating system.

2.2.1 MicroStation V8 Requirements

a. Digital files and data (e.g., model files, sheet files, reference files, cell libraries) must be compatible with the Government's target CADD system (i.e., basic and advanced CADD software, platform, database software), and adhere to the standards and requirements. The term "compatible" means that data can be accessed directly by the target CADD system without translation, preprocessing, or postprocessing of the electronic digital data files. It is the responsibility of the contractor to ensure this level of compatibility.

b. Model files, sheet files, and other associated files must not be device-dependent. The directory structure of the disc must not require any reconfiguration or other manipulation on the Government's part to view, print, and plot the files directly from the disc. The directory structure of the disc must be configured such that a complete download of the disc's contents to an electronic folder on a Government computer's hard drive will not require any reconfiguration or other manipulation on the Government's part to view, print, and plot the files. A tagged portable document format (.pdf) file containing the set of full-sized plotted Sheet Files must also be submitted. This .pdf set must contain active bookmarks linking to each drawing in the set.

2.2.2 Additional Drawings

If additional drawings are required, prepare them using the specified electronic file format applying the same graphic standards specified for original drawings. The title block and drawing border to be used for any new final record drawings must be identical to that used on the contract drawings.

2.2.2.1 Sheet Numbers and File Names

If a sheet needs to be added between two sequential sheets, append a Supplemental Drawing Designator in accordance with ERDC/ITL TR-12-6

Adding a drawing sheet, and ERDC/ITL TR-12-1 Adding or deleting drawing sheets and index sheet procedures.

PART 3 EXECUTION

3.1 AS-BUILT DRAWINGS

3.1.1 Markup Guidelines

Provide and maintain two black line print copies of the PDF contract drawings for As-Built Drawings.

Make comments and markup the drawings complete without reference to letters, memos, or materials that are not part of the As-Built drawing. Show what was changed, how it was changed, where item(s) were relocated and change related details. These working as-built markup prints must beneat, legible and accurate as follows:

a. Use base colors of red, green, and blue. Color code for changes as follows:

(1) Special (Blue) - Items requiring special information, coordination, or special detailing or detailing notes.

(2) Deletions (Red) - Over-strike deleted graphic items (lines), lettering in notes and leaders.

(3) Additions (Green) - Added items, lettering in notes and leaders.

b. Provide a legend if colors other than the "base" colors of red, green, and blue are used.

c. Add and denote any additional equipment or material facilities, service lines, incorporated under As-Built Revisions if not already shown in legend.

d. Use frequent written explanations on markup drawings to describe changes. Do not totally rely on graphic means to convey the revision.

e. Use legible lettering and precise and clear digital values when marking prints. Clarify ambiguities concerning the nature and application of change involved.

f. Wherever a revision is made, also make changes to related section views, details, legend, profiles, plans and elevation views, schedules, notes and call out designations, and mark accordingly to avoid conflicting data on all other sheets.

g. For deletions, cross out all features, data and captions that relate to that revision.

h. For changes on small-scale drawings and in restricted areas, provide large-scale inserts, with leaders to the applicable location.

i. Indicate one of the following when attaching a print or sketch to

a markup print:

1) Add an entire drawing to contract drawings

2) Change the contract drawing to show

3) Provided for reference only to further detail the initial design.

j. Incorporate all shop and fabrication drawings into the markup drawings.

3.1.2 As-Built Drawings Content

a. Progress As-built Prints: Revise As-Built Drawings in accordance with ERDC/ITL TR-12-1. During construction, the Contractor is responsible for maintaining drawings to show as-built construction conditions. All changes from the contract plans which are made in the work or additional information which might be uncovered in the course of construction shall be documented accordingly and neatly recorded as they occur by means of details and notes. The as-built prints shall be jointly inspected for accuracy and completeness by the Contracting Officer's representative and a responsible representative of the Contractor prior to submission of each monthly pay estimate. Failure to maintain current as-builts is the basis for retainage on contact progress payments. The as-builts shall show the following information, but not limited to:

(1) The location and description of any bridges, utility lines, or any other structures or obstructions within the construction area. The location includes dimensions to permanent features.

(2) The location and dimensions of any changes with the channel.

(3) The grade or alignment of channel, structures or utilities if any changes were made from the contract plans.

(4) Correct elevations if changes were made in channel depths.

(5) All changes, which result from contract modifications.

(6) Where contract drawings or specifications allow options, only the option selected for construction shall be shown on the as-built prints.

(7) All amendments to the contract drawings issued during the solicitation period shall be posted on the as-built drawings.

3.2 RECORD DRAWINGS

a. 50% As-Built Submittal: At the 50% point in construction of this contract (as determined by progress payments) the Contractor shall submit the updated CAD files of the project drawings in the appropriate CAD program to show as-built conditions as above, and submit an updated computer disk and one set of prints to the Contracting Officer for approval. Any required corrections shall be made by the Contractor. The Contractor must use updated CAD record to produce required prints. Preliminary Record Drawing Submittal: At least thirty (30) calendar days

before the anticipated date of final acceptance inspection the Contractor shall deliver two copies of progress prints showing final as-built conditions to the Contracting Officer for review and approval. These as-built prints shall correctly show all features of the projects as it has been constructed, adding such additional drawings as may be necessary. They shall be printed from the CAD files updated in the "Microstation" CAD program. Within ten (10) days, the Government will provide the Contractor one set of prints indicating required corrections to the preliminary submittal. The Contractor shall correct and resubmit within five days. Any required subsequent review and re submission periods will each be accomplished within 5 days. Upon Government approval of the preliminary submittal, the Contractor shall prepare final record drawings.

b. Record Drawing Submission: In the "MicroStation" CAD program each drawing shall be marked with the words "RECORD DRAWING AS-BUILT" followed by the name of the Contractor and date in lettering at least 5/16" high. All revisions to the original contract drawings shall be dated in the revision block. All prints must be reproduced from the updated CAD files. The Contractor shall deliver the following to the Contracting Officer and a minimum of 5 calendar days before the anticipated date of final acceptance inspection of the project:

Two (1) CDs of PDF and CAD files of Record Drawings in ARCH E1 size.
One (1) copy of prints of Record drawings in ARCH E1 size.

c. Failure to make an acceptable submission of Record Drawings will delay the Final Acceptance Inspection for the project and shall be cause for withholding any payment due the Contractor under this contract.

d. Payment: No separate payment will be made for the as-built and record drawings or updating of CAD files required under this contract, and all costs in connection therewith shall be considered a subsidiary obligation of the Contractor.

3.3 RECORD DRAWING FILES

If additional drawings are required, prepare them using the specified electronic file format applying the same graphic standards specified for original drawings. The title block and drawing border to be used for any new final record drawings must be identical to that used on the contract drawings. Accomplish additions and corrections to the contract drawings using CAD files. Provide all program files and hardware necessary to prepare final PDF record drawings. The Contracting Officer will review final PDF record drawings for accuracy and return them to the Contractor for required corrections, changes, additions, and deletions.

3.3.1 Rename the CAD Drawing files

Rename the CAD Drawing files using the contract number as the Project Code field,(e.g., W91238-15-C-10A-102.DGN) as instructed in the Pre-Construction conference. Use only those renamed files for the Marked-up changes. Make all changes on the layer/level as the original item.

a. For MicroStation files (DGN), enter all as-built delta changes and notations on:

- Level #63
- Level/Layer Name contains: ANNO-REVS
- Level/Layer Description: Revisions

c. When final revisions have been completed, show the wording "RECORD DRAWING AS-BUILTS" followed by the name of the Contractor in letters at least 3/16 inch high on the cover sheet drawing. Date RECORD DRAWING AS-BUILTS" drawing revisions in the revision block.

-- End of Section --

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02/26

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PART 1 GENERAL

1.1 GENERAL INFORMATION

This Section covers furnishing suitable dredging plant and performing all work required to remove the specified materials from within the prescribed work area limits as indicated, and placement of the dredge material within the prescribed material placement areas. The Contractor is responsible for making their own investigation of submerged, surface, and overhead structures in the work areas and other locations they find necessary to traverse. The exact location, depths, and heights of various structures including, but not limited to submarine cables, pipes, highlines, docks, piers, bulkheads, and bridges (as applicable), are not known and it will be necessary for the Contractor to ascertain interference problems and notify the respective owners in advance of dredging operations. The Contractor is responsible for making necessary arrangements with the respective owners of the structure(s) to assure satisfactory completion of dredging in the vicinity with a minimum interruption of service, and shall perform their operations in such a manner as will avoid damage to these facilities.

1.2 DEFINITIONS

1.2.1 Maintenance Material

Maintenance material is defined as that comprising shoaling which has occurred since the channel areas were last dredged.

1.2.2 New Work Material

New work material is defined as previously undredged material.

1.2.3 Hard Material

Hard material is defined as material requiring [blasting or] [the use of] special equipment for economical removal, and includes boulders or fragments too large to be removed in one piece by the dredge.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings
Soundings or Sweepings;

1.4 METHOD OF COMMUNICATION

Provide a system of communication between the dredge crew and the crew at the placement area. A portable two-way radio is acceptable.

1.5 OTHER DREDGING OPERATIONS

The Contractor should anticipate the possibility of concurrent dredging operations, adjacent to or nearby the dredge and placement areas in this contract. Delays should be anticipated in transiting to, and through, the placement sites during concurrent dredging and placement operations. As a standard safety precaution, observe all placement site specific restrictions pertaining to the limit of dredges operating within at any given time. Coordination with other dredge plant in the vicinity of the dredge and placement areas is required.

1.6 ENVIRONMENTAL COMPLIANCE AND PROTECTION

Comply with conditions and requirements of State or Federal permits. The Government will secure the permit for dredging and placement of material as indicated. Coordinate with USACE NAN Albany Field Office for placement of excavated materials.

During the life of the contract, provide and maintain environmental protective measures. Also, environmental protective measures required to correct conditions, such as oil spills or debris, that occur during the dredging operations, must be provided. Comply with Federal, State, and local regulations pertaining to water, air, and noise pollution.

1.7 BASIS FOR BIDS

[Base bids on the quantity of dredging indicated. Should the total quantity of dredging vary from that specified as the basis for bidding, the contract price will be adjusted in accordance with FAR 52.243-4 Changes. The dredging conditions specified and indicated describe conditions which are known. However, the Contractor is responsible for other conditions encountered which are not unusual when compared to the conditions recognized in the dredging business as usual in dredging activities such as those required under this contract.]

[For unit price bid, see [SF 1442, "Solicitation, Offer and Award" and "Schedule of Bid Items."] [paragraph entitled "Basis of Bids, Measurement, and Payment" in Section 01 20 00 PRICE AND PAYMENT PROCEDURES.]]

PART 2 PRODUCTS

2.1 CHARACTER OF MATERIAL

The material to be removed is silt, sand, and mud. The in situ bulk density of the predominant material to be dredged is as follows:

a. Dredge Area 1 has an in situ consists of 83.1 percent sand, 0.9 percent gravel, and 16.1 percent fines.

b. The Contractor is ultimately responsible for determination of the characteristics of materials to be dredged.

The removal of hard material is not included. Should the Government direct in writing that hard material be removed, the work shall be performed and an adjustment in the contract price or time for completion, or both, will be made in accordance with "FAR 52.236-2, Differing Site Conditions." If hard material is to be removed, blasting will not be permitted.

PART 3 EXECUTION

3.1 INSPECTION

Inspect the work, keep records of work performed, and ensure that gages, targets, ranges, and other markers are in place and usable for the intended purpose. Provide, at the request of the Contracting Officer, boats, boatmen, laborers, and materials necessary for inspecting, supervising, and surveying the work. When required, provide transportation for the Contracting Officer and inspectors to and from the placement area and between the dredging plant and adjacent points on shore.

The dredge plant will be inspected by the Contracting Officer, or their representative, prior to beginning work to ensure total dredging plant is in safe working condition. Before any machinery or mechanized equipment is placed in service, it must be inspected and tested by the Contractor and certified to be in safe operating condition.

3.2 DREDGING

3.2.1 Order of Work

The Contracting Officer will direct the Contractor on the order of work. The Government reserves the right to change the order of work at any time.

3.2.2 Interference with Navigation

Minimize interference with the use of channels and passages. The Contractor is responsible for shifting or moving of dredges or the interruption of dredging operations to accommodate the movement of vessels and floating equipment, if necessary. Adhere to Coast Guard Regulations for passing vessels.

3.2.3 Lights

Each night, between sunset and sunrise and during periods of restricted visibility, provide lights for floating plants, pipelines, ranges, and markers. Also, provide lights for buoys that could endanger or obstruct navigation. When night work is in progress, maintain lights from sunset to sunrise for the observation of dredging operations. Lighting must conform to United States Coast Guard requirements for visibility and color.

3.2.4 Navigation Warnings

Furnish and maintain navigation warning signs along the pipeline. Provide notice to increase public awareness of potential hazards presented by dredge plant equipment by stating the location, date of construction, equipment mooring, marshaling areas, using local newspapers, radios, television, waterway users associations, or other appropriate area specific communication networks. Ensure that an announcement is made through the same networks at the beginning of the dredging operation. Make periodic updates/status announcements at intervals of not more than a month throughout the contract life.

Display a sturdy and prominent warning sign at all public boat marinas within 10 miles of dredging operations or moored equipment. The Contractor is responsible for keeping this sign current with respect to the dredging operations or equipment.

3.2.5 Ranges, Gages, and Lines

Provide, set, and maintain ranges, buoys, and markers needed to define the work and to facilitate inspection. Establish and maintain gages in locations observable from each part of the work so that the depth may be determined. Suspend dredging when the gages or ranges cannot be seen or followed. The Contracting Officer will furnish, upon request by the Contractor, survey lines, points, and elevations necessary for the setting of ranges, gages, and buoys.

3.2.6 Dredge Plant and Equipment

a. A mechanical dredge with an environmental bucket will be used to perform all dredging work under this contract.

b. 1 dredge(s) may be in operation under this Contract at a time.

c. Maintain all dredge plant and associated equipment such as, but not limited to, scows, coamings, barges, and pipelines, to meet the requirements of the work. Promptly repair leaks or breaks along pipelines.

3.2.7 Layout of Work

The Contractor will be provided layout charts for all dredging areas based on the schedule of work, the Contractor's hydro survey requests, and/or the results of Government hydrographic survey monitoring. The most current Government hydro survey information will be displayed on the dredging layout charts and provided to the Contractor. All depths are measured from MLLW. Other pertinent information to be included with each layout package will be: payment method, required and maximum dredging depths, coordinates for the material placement site, distance one-way from dredging location to placement site, specific placement site instructions, supplemental tide gauge information, horizontal control locations, and computed hydro survey quantities.

The total estimated quantity of material to be removed is computed as that material that is within the specified limits, including side slopes, but excluding unpaid overdepth. The quantities listed are estimates only. All estimated quantities are subject to FAR 52.211-18 Variation in Estimated Quantity.

3.2.7.1 Overdepth Dredging

To cover unavoidable inaccuracies of dredging processes, material actually removed to a depth of 1 feet below the minimum required depth specified and within the dredging limits will be measured and paid for at full contract price.

The maximum amount of allowable unpaid overdepth dredging is 1 foot below the specified maximum paid dredging depth.

3.2.7.2 Side Slopes

Side slopes in the dredge areas within this contract will be measured and paid based on a 1 foot horizontal to 3 foot vertical ratio. Dredging on side slopes must follow, as closely as practicable, the dredge area limits indicated on associated layout drawings.

A 1 foot allowance will be made for dredging beyond the indicated or specified side slopes, except as provided herein. Material removed from within the allowance area will be unpaid. The allowance will be determined by projecting a line upwards, paralleling the project design side slopes, from the intersection of the overdepth dredging limit (at a point located vertically below the limit of dredging at the top of slope). The amount of material excavated from side slopes will be determined by either cross-sections or computer, or both.

3.2.8 Obstructions and Debris

The Government has no knowledge of cables, pipes, or other artificial obstructions or of any wrecks, wreckage, or other material that would necessitate the use of explosives or the employment of additional equipment for economical removal. Contractors should however exercise due diligence in determining the existence of any obstructions within proposed work areas during bid preparation.

3.2.9 Dredging

Requirements Dredge Areas

1) Hudson River Federal Navigation Channel Dredging Area USACE)

a) As determined by the results of a hydrographic survey monitoring, the Government will direct the Contractor to dredging areas within Hudson River FNC. Dredging depths at this area will be between plus or minus 14 feet and plus or minus 15 feet MLLW including paid over depth, unless otherwise stated in the layout drawing.

b) Material placement will be at a NYSDEC approved commercial placement site selected by the Contractor. See Section 01 20 00 PRICE AND PAYMENT PROCEDURES for more details.

3.2.10 Quality Control

Establish and maintain quality control for operations to assure compliance with contractual requirements and maintain records of this quality control for dredging operations.

While performing all dredging work control the horizontal positioning of the dredge with electronic positioning.

3.2.11 Surveys during Progress of Work

Quality of dredging depth will be determined by soundings or sweepings taken behind the dredge as work progresses. The Contractor will take progress soundings or sweepings.

3.2.12 Skimming of Hoppers

Skimming of hoppers must be performed in compliance with environmental requirements and ABS/USCG load line marks.

3.2.13 Salvaged Material

Anchors, chains, firearms, and other articles of value, which are brought to the surface during dredging operations, must remain or become the property of the Government and will be placed on shore at a convenient location near the site of the work, as directed.

3.2.14 Safety of Structures

The prosecution of work must ensure the stability of piers, bulkheads, and other structures lying on or adjacent to the site of the work, insofar as structures may be jeopardized by dredging operations. Repair damage resulting from dredging operations is the responsibility of the Contractor, insofar as such damage may be caused by variation in locations or depth of dredging, or both, from that indicated or permitted under the contract. The Contractor is responsible for coordinating with the owner of the structure for any necessary repairs.

3.2.15 Not Used

3.3 PLACEMENT OPERATONS

3.3.1 Placement of Excavated Materials

Provide for safe transportation and placement of dredged materials. The Contractor will select a commercial upland placement site for use with NYSDEC approval. The placement of dredged materials in unauthorized places is forbidden. Comply with rules and regulations of all, federal, state and local authorities.

3.3.2 Method of Placement

Place all dredged material by the hydraulic offloading. Coordinate completion of load with the Government. Pipeline for hydraulic dredging must discharge into the placement area.

3.3.3 Placement in Indicated Site(s)

In placing excavated material for fill, uniformly grade and allow for shrinkage. Provide and maintain necessary bulkheads, dikes, ditches, weirs, spillways, and other construction necessary to confine and retain the fill in the dredge fill area.

3.3.4 Not Used.

3.3.5 Not Used

3.3.6 Misplaced Dredged Material

Any dredged materials deposited at locations other than in areas designated or approved by the Contracting Officer will be considered misplaced material and will not be paid for until the Contractor, at

his own expense, removes and deposits such misplaced material where directed. This required removal and redeposit of the misplaced material and any necessary placement site restoration work is not the basis for a time extension or additional compensation under this contract.

3.3.7 Submerged Pipelines

If a leak occurs in the discharge pipeline, immediately discontinue using the line until leaks are repaired. Following a leak, the Contractor should conduct, or request the Government to conduct, a hydrosurvey to ensure that any dredged material discharged through the leak did not accumulate or cause mounding. If accumulation did occur, the Contractor must coordinate with the Government to remove the accumulated material, if deemed necessary. The Contractor is responsible for any resulting costs of repair and restoration.

3.4 Not Used

3.5 FINAL EXAMINATION AND ACCEPTANCE

As soon as practicable after the completion of areas, which in the opinion of the Contracting Officer, will not be affected by further dredging operations, each area will be examined by the Government by sounding or sweeping, or both. Remove shoals and lumps as required by methods approved by the Government. However, if the bottom is soft and the shoal areas form no material obstruction to navigation, removal may be waived at the discretion of the Government. The Contractor will be notified when soundings or sweepings are to be made and will be permitted to accompany the sounding or sweeping party and to inspect the data and methods used in preparing the final quantity for payment. When areas are found to be in a satisfactory condition, the work therein will be accepted as complete.

Re-dredging at the Contract price, within the limit of available funds, may be completed with the consent of both the Government and the Contractor when infill or shoaling beyond the Contractor's control occurs in any area previously accepted.

3.6 PLANT REMOVAL

Upon completion of the work, remove all dredging plant, including ranges, buoys, piles, and other markers or obstructions within 30 days.

-- End of Section --