IFB NO. W912P824B0048

US Army Corps of Engineers ®
New Orleans District

Mississippi River Outlets
Vicinity of Venice, Louisiana

Baptiste Collette Bar Channel, #24-2 Maintenance Dredging

Plaquemines Parish, Louisiana

Construction Solicitation and Specifications

12 July 2024

ED 24-007

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, NEW ORLEANS DISTRICT
7400 LEAKE AVENUE
NEW ORLEANS, LA 70118-3651

SOLICITATION: W912P824B0048 12 July 2024

FOR: Mississippi River Outlets, Vicinity of Venice, Louisiana, Baptiste Collette Bar Channel, #24-2 Maintenance Dredging, Plaquemines Parish, Louisiana ED-24-007

TO OPEN:

I. NOTE THE AFFIRMATIVE ACTION PROGRAM REQUIREMENT OF THE EQUAL OPPORTUNITY CLAUSE WHICH MAY APPLY TO THE CONTRACT RESULTING FROM THIS SOLICITATION.

II. NOTE THE CERTIFICATION OF NONSEGREGATED FACILITIES IN THIS SOLICITATION. *Bidders, offerors and applicants are cautioned to note the "Certification of Non-segregated Facilities" in the solicitation. Failure of a bidder or offeror to agree to the certification will render his bid or offer non-responsive to the terms of solicitations involving awards of contracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause.*

III. Prospective contractors must register in the System for Award Management (SAM). See FAR Clause 52.204-7 for required information. The website for SAM is https://www.sam.gov. You will be required to provide your company's Dun and Bradstreet (D&B) D-U-N-S number. If you do not already have a D&B D-U-N-S number, one can be requested at http://fedgov.dnb.com/webform.

BIDDERS MUST PROVIDE FULL, ACCURATE AND COMPLETE INFORMATION AS REQUIRED BY THIS SOLICITATION AND ITS ATTACHMENTS. THE PENALTY FOR MAKING FALSE STATEMENTS IN BIDS IS PRESCRIBED IN 18 U.S.C. 1001. (FAR 52.214-4 APR 1984)

DESCRIPTION AND MAGNITUDE OF WORK: The work consists of the removal and satisfactory disposal of all material excavated from the Baptiste Collette Bar Channel, within the limits shown on the contract drawings.

CAUTION TO BIDDERS: **In delivery of hand-carried bids, bidders are cautioned to allow sufficient time for delays which may be encountered as a result of frequent trains which are subject to block all access roads to place of bid opening for various lengths of time and for visitor background checks by MVN security when entering the installation at place of bid opening.** ***Such delays DO NOT permit acceptance or consideration of late bids.***

NOTE: ALL WORK UNDER THESE SPECIFICATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF EM 385-1-1 "CORPS OF ENGINEERS SAFETY AND OCCUPATIONAL HEALTH REQUIREMENTS MANUAL", DATED MARCH 2024.

ATTENTION: Contractors must complete, and submit with their bid, the provisions located in Section 00600. A bidder may also submit, in lieu of the completed Section 00600, a complete hard copy of their Online Representations and Certifications Applications (ORCA) registration with an expiration date on or after the date of award.

NOTE: ALL WORK UNDER THESE SPECIFICATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF EM 385-1-1 "CORPS OF ENGINEERS SAFETY AND OCCUPATIONAL HEALTH REQUIREMENTS MANUAL", LATEST CONSOLIDATED VERSION.

ALL INQUIRIES REGARDING THIS SOLICITATION
SHOULD BE MADE TO THE FOLLOWING:

FRANCESCA DEBOER
CONTRACT SPECIALIST

U.S. ARMY CORPS OF ENGINEERS, NEW ORLEANS DISTRICT

E-MAIL: Francesca.E.deBoer@usace.army.mil
PHONE: (504) 862- 2704

COLLECT CALLS NOT ACCEPTED

NOTE: FOR THE MOST PROMPT REPSONSE, PLEASE SEND ALL QUESTIONS VIA EMAIL

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SOLICITATION, OFFER, AND AWARD *(Construction, Alteration, or Repair)*	1. SOLICITATION NO. W912P824B0048	2. TYPE OF SOLICITATION [X] SEALED BID (IFB) [ ] NEGOTIATED *(RFP)*	3. DATE ISSUED 12-Jul-2024	PAGE OF PAGES 1 OF 63

IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.

4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO.	6. PROJECT NO. ED-24-007

7. ISSUED BY CODE W912P8	8. ADDRESS OFFER TO *(If Other Than Item 7)* CODE
CONTRACTING DIV- CHIEF 7400 LEAKE AVENUE, ROOM 172 NEW ORLEANS LA 70118-3651 TEL: FAX:	**See Item 7** TEL: FAX:

9. FOR INFORMATION CALL:	A. NAME FRANCESCA E DEBOER	B. TELEPHONE NO. *(Include area code)* *(NO COLLECT CALLS)*

SOLICITATION

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS *(Title, identifying no., date):*

Collette Baptiste Maint. Dredging #24-2

Mississippi River Outlets, Vicinity of Venice, Louisiana, Baptiste Collette Bar Channel, #24-2 Maintenance Dredging, Plaquemines Parish, Louisiana ED-24-007

This is an UNRESTRICTED procurement.

Description of Work: The work consists of the removal and satisfactory disposal of all material excavated from the Baptiste Collette Bar Channel, within the limits shown on the contract drawings. (The estimated time of completion is 150 calendar days after receipt of notice to proceed. The solicitation will include 11 drawings and specifications).

The estimated value of this work is between $10,000,000.00 and $25,000,000.00.

Bid Opening to be established by future amendment

11. The Contractor shall begin performance within 10 calendar days and complete it within 150 calendar days after receiving [ ] award, [X] notice to proceed. This performance period is [X] mandatory, [ ] negotiable. *(See* FAR 52.211-10 *.)*

12 A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? *(If "YES," indicate within how many calendar days after award in Item 12B.)* [X] YES [ ] NO	12B. CALENDAR DAYS 5

13. ADDITIONAL SOLICITATION REQUIREMENTS:

A. Sealed offers in original and 0 copies to perform the work required are due at the place specified in Item 8 by _____ *(hour)* local time _____ *(date).* If this is a sealed bid solicitation, offers must be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.

B. An offer guarantee [X] is, [ ] is not required.

C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.

D. Offers providing less than 60 calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

SOLICITATION, OFFER, AND AWARD (Continued)

(Construction, Alteration, or Repair)

OFFER ***(Must be fully completed by offeror)***

14. NAME AND ADDRESS OF OFFEROR *(Include ZIP Code)*		15. TELEPHONE NO. *(Include area code)*
		16. REMITTANCE ADDRESS *(Include only if different than Item 14)* **See Item 14**
CODE	FACILITY CODE	

17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due. *(Insert any number equal to or greater than the minimum requirements stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)*

AMOUNTS	SEE SCHEDULE OF PRICES

18. The offeror agrees to furnish any required performance and payment bonds.

19. ACKNOWLEDGMENT OF AMENDMENTS

(The offeror acknowledges receipt of amendments to the solicitation -- give number and date of each)

AMENDMENT NO.										
DATE										

20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER *(Type or print)*	20B. SIGNATURE	20C. OFFER DATE

AWARD ***(To be completed by Government)***

21. ITEMS ACCEPTED:

22. AMOUNT	23. ACCOUNTING AND APPROPRIATION DATA

24. SUBMIT INVOICES TO ADDRESS SHOWN IN *(4 copies unless otherwise specified)*	**ITEM**	25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO ☐ 10 U.S.C. 2304(c) ☐ 41 U.S.C. 253(c)
26. ADMINISTERED BY CODE		27. PAYMENT WILL BE MADE BY: CODE

CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE

☐ 28. NEGOTIATED AGREEMENT *(Contractor is required to sign this document and return _____ copies to issuing office.)* Contractor agrees to furnish and deliver all items or perform all work, requisitions identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications or incorporated by reference in or attached to this contract.

☐ 29. AWARD *(Contractor is not required to sign this document.)* Your offer on this solicitation, is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.

30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN *(Type or print)*		31A. NAME OF CONTRACTING OFFICER *(Type or print)* TEL: EMAIL:
30B. SIGNATURE	30C. DATE	31B. UNITED STATES OF AMERICA BY
		31C. AWARD DATE

Section 00010 - Bidding Schedule

BIDDING SCHEDULE

Item	DESCRIPTION	Estimated Quantity	Unit	Unit Price	Estimated Amount
BASE WORK					
0001	Mobilization and Demobilization	1	JOB		
0002	Dredging				
0002AA	First 800,000	800,000	CY		
0002AB	All Over 800,000	300,000	CY		
TOTAL BASE WORK:					$
OPTIONAL WORK (OW)					
0003	Aerial Photography Documentation - OW	1	JOB		
0004	Bird Nesting Prevention and Avoidance Measures - OW	60	DAY		
TOTAL OPTION WORK:					$
TOTAL BASE WORK + OPTION WORK:					$

Award will be made as a whole to one bidder.

NOTE 1: The unit "JOB" as used in this Bidding Schedule is synonymous with the term "Lump Sum" used elsewhere within these plans and specifications.

NOTE 2: Bidders shall furnish unit prices for each item listed in the Schedule requiring a unit price. If the bidder fails to insert a unit price in the appropriate blank for required item(s), but does furnish an extended total, or an estimated amount for such item(s), the Government shall deem the unit price to be the quotient obtained by dividing the extended amount for that line item by the quantity. IF A BIDDER OMITS BOTH THE UNIT PRICE AND THE EXTENDED TOTAL OR ESTIMATED AMOUNT FOR ANY ITEM, ITS BID SHALL BE DECLARED NON-RESPONSIVE AND THEREFORE INELIGIBLE FOR AWARD.

NOTE 3: Any bid may be rejected if the Contracting Officer determines in writing that it is unreasonable as to price. Unreasonableness of price includes not only total price of bid, but the price for individual line items as well. Any bid may be rejected if the prices for any line items or subline items are materially unbalanced (See FAR 14.404-2, Rejection of Individual Bids).

NOTE 4: THE NOTICE TO PROCEED (NTP): The successful bidder is advised that performance and payment bonds shall be submitted in accordance with the time frame in block 12B of SF 1442 after Notice of Award. The NTP will be issued immediately after verification of acceptable performance and payment bonds. Within seven (7) days after issuance of the NTP, the Contractor shall initiate a meeting to discuss the submittal process with the Area or Resident Engineer or his authorized representative. Physical work cannot start until the Accident Prevention Program, Contractor Quality Control Plan, and other submittals which may be required, have been submitted and approved and all preliminary meetings called for under the contract, have been conducted.

NOTE 5: RAPID VENDOR PAYMENT. Web based instructions for the submission of invoices may be found at the following website:

http://www.mvn.usace.army.mil/BusinessWithUs/Contracting/RapidVendorPayment

NOTE 6: Option for Increased Quantity- Separately Priced Line Item (FAR 52.217-7). The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor any time prior to the completion date of the basic line item or any previously exercised option or executed modification. **Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.**

NOTE 7: EVALUATION OF OPTIONS (FAR 52.217-5 JUL 1990). Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the government to exercise the option(s).

NOTE 8: OPTION WORK ITEM: The Government may require the delivery of, in whole or part, the numbered line items identified in the schedule as an OPTIONAL WORK item, in the quantity and price stated in the schedule. The Contracting Officer may exercise the OPTIONAL WORK by written notice to the Contractor. If the Government activates the Optional Work Items, the activation will occur while the Contractor's plant is within the limits of work. No additional mobilization/demobilization will be paid to the Contractor for the Optional Work. Bidders shall bid on all items including optional items (see "EVALUATION OF OPTIONS" FAR 52.217-5). Failure to bid on all items will result in a non-responsive bid.

NOTE 9: TIME ADJUSTMENT IN THE EVENT OF THE EXERCISE OF OPTIONAL WORK. In the event that the OPTIONAL WORK item is exercised under the terms of the contract, the time required for completion of the contract will not be adjusted but shall be performed concurrent with the original contract duration of 150 calendar days established for the BASE WORK items specified in Section 00700, CONTRACT CLAUSES, paragraph entitled COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK.

EVALUATION OF SUBLINE ITEMS (Dec 2019 - AFARS 5152.211-9000).

Item Nos. 0002 are subdivided into two or more estimated quantities and are to be separately priced. The Government will evaluate each of these items on the basis of total price of its subline items.

(End of Clause)

VARIATIONS IN ESTIMATED QUANTITIES - SUBLINE ITEMS (Dec 2019) - AFARS 5152.211-9001).

This variation in estimated quantities clause is applicable only to item Nos. 0002.

(a) Variation from the estimated quantity in the actual work performed under any second or subsequent subline item or elimination of all work under such a second or subsequent subline item will not be the basis for an adjustment in contract unit price.

(b) Where the actual quantity of work performed for item Nos.0002 is less than 85% of the quantity of the first subline item listed under such item, the contractor will be paid at the contract unit price for that subline item for the actual quantity of work performed and, in addition, an equitable adjustment shall be made in accordance with the clause at Federal Acquisition Regulation (FAR) 52.211-18, VARIATION IN ESTIMATED QUANTITY.

(c) If the actual quantity of work performed under item Nos. 0002 exceeds 115% or is less than 85% of the total estimated quantity of the subline item under that item and/or if the quantity of the work performed under the second subline item or any subsequent subline item under item Nos. NONE exceeds 115% or is less than 85% of the estimated quantity of any such subline item, and if such variation causes an increase or a decrease in the time required for performance of this contract the contract completion time will be adjusted in accordance with the clause FAR 52.211-18, VARIATION IN ESTIMATED QUANTITY.

(End of Clause)

BID BOND *(See instructions on reverse)*	DATE BOND EXECUTED *(Must not be later than bid opening date)*	**OMB Control Number: 9000-0045**

Paperwork Reduction Act Statement - This information collection meets the requirements of 44 USC § 3507, as amended by section 2 of the Paperwork Reduction Act of 1995. You do not need to answer these questions unless we display a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is 9000-0045. We estimate that it will take 1 hour to read the instructions, gather the facts, and answer the questions. Send only comments relating to our time estimate, including suggestions for reducing this burden, or any other aspects of this collection of information to: General Services Administration, Regulatory Secretariat Division (M1V1CB), 1800 F Street, NW, Washington, DC 20405.

PRINCIPAL *(Legal name and business address)*	TYPE OF ORGANIZATION *("X" one)* ☐ INDIVIDUAL ☐ PARTNERSHIP ☐ JOINT VENTURE ☐ CORPORATION ☐ OTHER *(Specify)* STATE OF INCORPORATION

SURETY(IES) *(Name and business address)*

PENAL SUM OF BOND					BID IDENTIFICATION	
PERCENT OF BID PRICE	AMOUNT NOT TO EXCEED				BID DATE	INVITATION NUMBER
	MILLION(S)	THOUSAND(S)	HUNDRED(S)	CENTS	FOR *(Construction, Supplies or Services)*	

OBLIGATION:

We, the Principal and Surety(ies) are firmly bound to the United States of America (hereinafter called the Government) in the above penal sum. For payment of the penal sum, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally. However, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us. For all other purposes, each Surety binds itself, jointly and severally with the Principal, for the payment of the sum shown opposite the name of the Surety. If no limit of liability is indicated, the limit of liability is the full amount of the penal sum.

CONDITIONS:

The Principal has submitted the bid identified above.

THEREFORE:

The above obligation is void if the Principal - (a) upon acceptance by the Government of the bid identified above, within the period specified therein for acceptance (sixty (60) days if no period is specified), executes the further contractual documents and gives the bond(s) required by the terms of the bid as accepted within the time specified (ten (10) days if no period is specified) after receipt of the forms by the principal; or (b) in the event of failure to execute such further contractual documents and give such bonds, pays the Government for any cost of procuring the work which exceeds the amount of the bid.

Each Surety executing this instrument agrees that its obligation is not impaired by any extension(s) of the time for acceptance of the bid that the Principal may grant to the Government. Notice to the surety(ies) of extension(s) is waived. However, waiver of the notice applies only to extensions aggregating not more than sixty (60) calendar days in addition to the period originally allowed for acceptance of the bid.

WITNESS:

The Principal and Surety(ies) executed this bid bond and affixed their seals on the above date.

PRINCIPAL

SIGNATURE(S)	1. (Seal)	2. (Seal)	3. (Seal)	Corporate Seal
NAME(S) & TITLE(S) *(Typed)*	1.	2.	3.	

INDIVIDUAL SURETY(IES)

SIGNATURE(S)	1. (Seal)	2. (Seal)
NAME(S) *(Typed)*	1.	2.

CORPORATE SURETY(IES)

SURETY A	NAME & ADDRESS		STATE OF INCORPORATION	LIABILITY LIMIT ($)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		

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STANDARD FORM 24 (REV. 8/2016)
Prescribed by GSA - FAR (48 CFR) 53.228(a)

SURETY B	NAME & ADDRESS		STATE OF INCORPORATION	LIABILITY LIMIT ($)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY C	NAME & ADDRESS		STATE OF INCORPORATION	LIABILITY LIMIT ($)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY D	NAME & ADDRESS		STATE OF INCORPORATION	LIABILITY LIMIT ($)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY E	NAME & ADDRESS		STATE OF INCORPORATION	LIABILITY LIMIT ($)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY F	NAME & ADDRESS		STATE OF INCORPORATION	LIABILITY LIMIT ($)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		
SURETY G	NAME & ADDRESS		STATE OF INCORPORATION	LIABILITY LIMIT ($)	Corporate Seal
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) *(Typed)*	1.	2.		

INSTRUCTIONS

1. This form is authorized for use when a bid guaranty is required. Any deviation from this form will require the written approval of the Administrator of General Services.

2. Insert the full legal name and business address of the Principal in the space designated "Principal" on the face of the form. An authorized person shall sign the bond. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.

3. The bond may express penal sum as a percentage of the bid price. In these cases, the bond may state a maximum dollar limitation (e.g., 20% of the bid price but the amount not to exceed _____ dollars).

4. (a) Corporations executing the bond as sureties must appear on the Department of the Treasury's list of approved sureties and must act within the limitations listed therein. The value put into the LIABILITY LIMIT block is the penal sum (i.e., the face value) of the bond, unless a co-surety arrangement is proposed.

(b) When multiple corporate sureties are involved, their names and addresses shall appear in the spaces (Surety A, Surety B, etc.) headed "CORPORATE SURETY(IES)." In the space designated "SURETY(IES)" on the face of the form, insert only the letter identifier corresponding to each of the sureties. Moreover, when co-surety arrangements exist, the parties may allocate their respective limitations of liability under the bond, provided that the sum total of their liability equals 100% of the bond penal sum.

(c) When individual sureties are involved, a completed Affidavit of Individual Surety (Standard Form 28) for each individual surety, shall accompany the bond. The Government may require the surety to furnish additional substantiating information concerning its financial capability.

5. Corporations executing the bond shall affix their corporate seals. Individuals shall execute the bond opposite the word "Corporate Seal"; and shall affix an adhesive seal if executed in Maine, New Hampshire, or any other jurisdiction requiring adhesive seals.

6. Type the name and title of each person signing this bond in the space provided.

7. In its application to negotiated contracts, the terms "bid" and "bidder" shall include "proposal" and "offeror."

Section 00100 - Instructions to Bidders

CLAUSES INCORPORATED BY REFERENCE

52.204-7	System for Award Management	OCT 2018
52.204-22	Alternative Line Item Proposal	JAN 2017
52.209-7	Information Regarding Responsibility Matters	OCT 2018
52.209-13	Violation of Arms Control Treaties or Agreements -- Certification	NOV 2021
52.214-3	Amendments To Invitations For Bids	DEC 2016
52.214-4	False Statements In Bids	APR 1984
52.214-5	Submission Of Bids	DEC 2016
52.214-6	Explanation To Prospective Bidders	APR 1984
52.214-7	Late Submissions, Modifications, and Withdrawals of Bids	NOV 1999
52.214-12	Preparation Of Bids	APR 1984
52.214-18	Preparation of Bids-Construction	APR 1984
52.214-19	Contract Award-Sealed Bidding-Construction	AUG 1996
52.214-29	Order Of Precedence--Sealed Bidding	JAN 1986
52.214-34	Submission Of Offers In The English Language	APR 1991
52.214-35	Submission Of Offers In U.S. Currency	APR 1991
52.222-5	Construction Wage Rate Requirements--Secondary Site of the Work	MAY 2014
52.222-23	Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity for Construction	FEB 1999
52.225-10	Notice of Buy American Requirement--Construction Materials	MAY 2014
52.232-13	Notice Of Progress Payments	APR 1984
52.236-27	Site Visit (Construction)	FEB 1995
52.252-1	Solicitation Provisions Incorporated By Reference	FEB 1998

CLAUSES INCORPORATED BY FULL TEXT

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a Firm Fixed Price contract resulting from this solicitation.

(End of provision)

52.217-5 EVALUATION OF OPTIONS (JUL 1990)

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

(End of provision)

52.228-1 BID GUARANTEE (SEP 1996)

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer 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.-

(c) The amount of the bid guarantee shall be _twenty_ percent (20%) of the bid price or $_3,000,000.00_, whichever is less.-

(d) 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 furnish executed bond(s) within 10 days after receipt of them by the bidder, the Contracting Officer may terminate the contract for default.-

(e) 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, and the bid guarantee is available to offset the difference.

(End of provision)

52.233-2 SERVICE OF PROTEST (SEP 2006)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from

Karen Hargrave, Contracting Officer,
U.S.Army Corps of Engineers,
ATTN: CEMVN- CT-W,
7400 Leake Avenue, New Orleans, LA 70118-3651,
504) 862-2704.

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

SECTION 00100 - INSTRUCTIONS TO BIDDERS

INSTRUCTIONS TO BIDDERS

SOLICITATION NUMBER: W912P824B0048

NOTE: BIDDERS MAY SUBMIT BIDS BY ONLY ONE METHOD: A) ELECTRONIC COMMERCE (EMAIL) OR BY 2) PHYSICAL SUBMISSION. BIDDERS SHALL LIMIT THE BID SUBMITTAL TO ONE OPTION OR THE OTHER, NOT BOTH.

Electronic Submission of Bids/Proposals (Email):

The New Orleans District utilizes electronic commerce (Email) for receipt of electronic bids under this IFB solicitation. To submit an electronic commerce (Email) bid please follow these steps:

1. Send an email containing your name, email address and bid/proposal to the following emails associated with the IFB (**MUST include all emails**):
    - francesca.e.deboer@usace.army.mil
    - karen.d.hargrave@usace.army.mil

2. **ALL BIDS SUBMITTED BY EMAIL MUST CONTAIN THE SOLICITATION NUMBER IN THE SUBJECT LINE.**

3. Once the agency receives your bid/proposal at the above email addresses, you will then receive a confirmation email stating your bid/proposal was received. If a bidder does not receive a reply acknowledging receipt electronically from the New Orleans District, it is incumbent upon the bidder to seek confirmation from the issuing Contracting office by phone.

Note: The size limit for incoming emails is 35MB. Any bid/proposal over this size may not be accepted by the server and will constitute the bid not being received timely. Please note that embedded links, URLs, and other html language included may interfere with the USACE server security, which may cause emails to be removed prior to being received by the contracting office. Bidders are advised to refrain from including external links, embedded links, URLs, and other html language not germane to the proposal/bid. Please note it is a bidder's responsibility, when transmitting its bid electronically, to ensure the receipt of its bid to the proper designee at the proper time. See FAR 14.304(b)(1)(i) regarding untimely electronic bids. Please note, MVN's computer system firewall may cause a delay in receipt of emails, so be sure to allow ample time for possible delay. If your email would exceed 35MB you can use one of the following methods as a work-around:

- Use .zip files as attachments. Combine multiple files into a .zip file to compress file size prior to adding as an email attachment.
- Send multiple emails. Label each email with same subject line and indicate number of emails. For example: Smith Construction W912P823BXXXX (1 of 2) Smith Construction W912P823BXXXX (2 of 2).

Physical Submission of Bids:

Bidders may submit their bids by hand carrying or express mail to the New Orleans District Contracting Office in Room 172. Bidders are advised to allow adequate time to ensure timely submission of its bid. Traffic onto the New Orleans District campus may be delayed by trains blocking the entrance or security either at the gate and/or inside of the building. Express delivery may be utilized but it is incumbent upon the bidder to ensure bid delivery time and date is before the receipt of bid cutoff time. See FAR 14.304(b)(1)(ii) and (c).

Bid Opening:

The Bid Opening is currently scheduled for TBD. The Contracting Officer and Contract Specialist will begin downloading bids at TBD which is the bid submission receipt cutoff time. All bids received after TBD, will be considered late.

Audio Teleconference Bid Opening Information:

Bid Opening will be held on TBD. Please use the following call-in information to attend the meeting: TBD

Following the conclusion of the bid opening, in accordance with FAR 14.403(b), abstracts of offers for unclassified acquisitions shall be available for public inspection via SAM.GOV.

Section 00600 - Reps and Certs

CLAUSES INCORPORATED BY REFERENCE

52.204-16	Commercial and Government Entity Code Reporting	AUG 2020
52.204-19	Incorporation by Reference of Representations and Certifications.	DEC 2014

CLAUSES INCORPORATED BY FULL TEXT

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (MAY 2024)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 237990.

(2) The small business size standard is $45,000,000.

(3) The small business size standard for a concern that submits an offer, other than on a construction or service acquisition, but proposes to furnish an end item that it did not itself manufacture, process, or produce is 500 employees, or 150 employees for information technology value-added resellers under NAICS code 541519, if the acquisition--

(i) Is set aside for small business and has a value above the simplified acquisition threshold;

(ii) Uses the HUBZone price evaluation preference regardless of dollar value, unless the offeror waives the price evaluation preference; or

(iii) Is an 8(a), HUBZone, service-disabled veteran-owned, economically disadvantaged women-owned, or women-owned small business set-aside or sole-source award regardless of dollar value.

(b)(1) If the provision at 52.204-7, System for Award Management, is included in this solicitation, paragraph (d) of this provision applies.

(2) If the provision at 52.204-7, System for Award Management, is not included in this solicitation, and the Offeror has an active registration in the System for Award Management (SAM), the Offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The Offeror shall indicate which option applies by checking one of the following boxes:

[ ] Paragraph (d) applies.

[ ] Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c) (1) The following representations or certifications in SAM are applicable to this solicitation as indicated:

(i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—

(A) The acquisition is to be made under the simplified acquisition procedures in Part 13;

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed $150,000.

(iii) 52.203-18, Prohibition on Contracting with Entities that Require Certain Internal Confidentiality Agreements or Statements--Representation. This provision applies to all solicitations.

(iv) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the provision at 52.204-7, System for Award Management.

(v) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—

(A) Are not set aside for small business concerns;

(B) Exceed the simplified acquisition threshold; and

(C) Are for contracts that will be performed in the United States or its outlying areas.

(vi) 52.204-26, Covered Telecommunications Equipment or Services--Representation. This provision applies to all solicitations.

(vii) 52.209-2, Prohibition on Contracting with Inverted Domestic Corporations--Representation.

(viii) 52.209-5, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.

(ix) 52.209-11, Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law. This provision applies to all solicitations.

(x) 52.214-14, Place of Performance--Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.

(xi) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.

(xii) 52.219-1, Small Business Program Representations (Basic, Alternates I, and II). This provision applies to solicitations when the contract is for supplies to be delivered or services to be performed in the United States or its outlying areas, or when the contracting officer has applied part 19 in accordance with 19.000(b)(1)(ii).

(A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.

(B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

(C) The provision with its Alternate II applies to solicitations that will result in a multiple-award contract with more than one NAICS code assigned.

(xiii) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract is for supplies to be delivered or services to be performed in the United States or its outlying areas, or when the contracting officer has applied part 19 in accordance with 19.000(b)(1)(ii).

(xiv) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.

(xv) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.

(xvi) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial products or commercial services.

(xvii) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of biobased products in USDA-designated product categories; or
include the clause at 52.223-2, Reporting of Biobased Products Under Service and Construction Contracts.

(xviii) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA- designated items.

(xix) 52.223-22, Public Disclosure of Greenhouse Gas Emissions and Reduction Goals--Representation. This provision applies to solicitations that include the clause at 52.204-7.

(xx) 52.225-2, Buy American Certificate. This provision applies to solicitations containing the clause at 52.225-1.

(xxi) 52.225-4, Buy American-Free Trade Agreements-Israeli Trade Act Certificate. (Basic, Alternates II and III.) This provision applies to solicitations containing the clause at 52.225-3.

(A) If the acquisition value is less than $50,000, the basic provision applies.

(B) If the acquisition value is $50,000 or more but is less than $100,000, the provision with its Alternate II applies.

(C) If the acquisition value is $100,000 or more but is less than $102,280, the provision with its Alternate III applies.

(xxii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.

(xxiii) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan--Certification. This provision applies to all solicitations.

(xxiv) 52.225-25, Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran—Representation and Certification. This provision applies to all solicitations.

(xxv) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions.

(2) The following representations or certifications are applicable as indicated by the Contracting Officer:

[Contracting Officer check as appropriate.]

(i) 52.204-17, Ownership or Control of Offeror.

(ii) 52.204-20, Predecessor of Offeror.

(iii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.

(iv) 52.222-48, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment--Certification.

(v) 52.222-52 Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services--Certification.

(vi) 52.227-6, Royalty Information.

(A) Basic.

(B) Alternate I.

(vii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.

(d) The Offeror has completed the annual representations and certifications electronically in SAM accessed through https://www.sam.gov. After reviewing the SAM information, the Offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [offeror to insert changes, identifying change by clause number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR Clause	Title	Date	Change

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on SAM.

(End of provision)

52.209-12 CERTIFICATION REGARDING TAX MATTERS (OCT 2020)

(a) This provision implements section 523 of Division B of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235), and similar provisions, if contained in subsequent appropriations acts.

(b) If the Offeror is proposing a total contract price that will exceed $5.5 million (including options), the Offeror shall certify that, to the best of its knowledge and belief, it--

(1) Has [ ] filed all Federal tax returns required during the three years preceding the certification;

(2) Has not [ ] been convicted of a criminal offense under the Internal Revenue Code of 1986; and

(3) Has not [ ], more than 90 days prior to certification, been notified of any unpaid Federal tax assessment for which the liability remains unsatisfied, unless the assessment is the subject of an installment agreement or offer in compromise that has been approved by the Internal Revenue Service and is not in default, or the assessment is the subject of a non-frivolous administrative or judicial proceeding.

(End of provision)

252.204-7007 ALTERNATE A, ANNUAL REPRESENTATIONS AND CERTIFICATIONS (NOV 2023)

Substitute the following paragraphs (b), (d) and (e) for paragraphs (b) and (d) of the provision at FAR 52.204-8:

(b)(1) If the provision at FAR 52.204-7, System for Award Management, is included in this solicitation, paragraph (e) of this provision applies.

(2) If the provision at FAR 52.204-7, System for Award Management, is not included in this solicitation, and the Offeror has an active registration in the System for Award Management (SAM), the Offeror may choose to use paragraph (e) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The Offeror shall indicate which option applies by checking one of the following boxes:

__ (i) Paragraph (e) applies.

__ (ii) Paragraph (e) does not apply and the Offeror has completed the individual representations and certifications in the solicitation.

(d)(1) The following representations or certifications in the SAM database are applicable to this solicitation as indicated:

(i) 252.204-7016, Covered Defense Telecommunications Equipment or Services--Representation. Applies to all solicitations.

(ii) 252.216-7008, Economic Price Adjustment--Wage Rates or Material Prices Controlled by a Foreign Government. Applies to solicitations for fixed-price supply and service contracts when the contract is to be performed wholly or in part in a foreign country, and a foreign government controls wage rates or material prices and may during contract performance impose a mandatory change in wages or prices of materials.

(iii) 252.225-7042, Authorization to Perform. Applies to all solicitations when performance will be wholly or in part in a foreign country.

(iv) 252.225-7049, Prohibition on Acquisition of Certain Foreign Commercial Satellite Services--Representations. Applies to solicitations for the acquisition of commercial satellite services.

(v) 252.225-7050, Disclosure of Ownership or Control by the Government of a Country that is a State Sponsor of Terrorism. Applies to all solicitations expected to result in contracts of $150,000 or more.

(vi) 252.229-7012, Tax Exemptions (Italy)--Representation. Applies to solicitations when contract performance will be in Italy.

(vii) 252.229-7013, Tax Exemptions (Spain)--Representation. Applies to solicitations when contract performance will be in Spain.

(viii) 252.247-7022, Representation of Extent of Transportation by Sea. Applies to all solicitations except those for direct purchase of ocean transportation services or those with an anticipated value at or below the simplified acquisition threshold.

(2) The following representations or certifications in SAM are applicable to this solicitation as indicated by the Contracting Officer: [Contracting Officer check as appropriate.]

____ (i) 252.209-7002, Disclosure of Ownership or Control by a Foreign Government.

____ (ii) 252.225-7000, Buy American--Balance of Payments Program Certificate.

____ (iii) 252.225-7020, Trade Agreements Certificate.

____ Use with Alternate I.

____ (iv) 252.225-7031, Secondary Arab Boycott of Israel.

____ (v) 252.225-7035, Buy American--Free Trade Agreements--Balance of Payments Program Certificate.

____ Use with Alternate I.

____ Use with Alternate II.

____ Use with Alternate III.

____ Use with Alternate IV.

____ Use with Alternate V.

____ (vi) 252.226-7002, Representation for Demonstration Project for Contractors Employing Persons with Disabilities.

____ (vii) 252.232-7015, Performance-Based Payments--Representation.

(e) The Offeror has completed the annual representations and certifications electronically via the SAM website at https://www.sam.gov. After reviewing the SAM database information, the Offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in FAR 52.204-8(c) and paragraph (d) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer, and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [Offeror to insert changes, identifying change by provision number, title, date_____]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR/DFARS provision No.	Title	Date	Change

Any changes provided by the Offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications located in the SAM database.

(End of provision)

Section 00700 - Contract Clauses

CLAUSES INCORPORATED BY REFERENCE

52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	MAY 2014
52.203-7	Anti-Kickback Procedures	JUN 2020
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	MAY 2014
52.203-10	Price Or Fee Adjustment For Illegal Or Improper Activity	MAY 2014
52.203-12	Limitation On Payments To Influence Certain Federal Transactions	JUN 2020
52.203-13	Contractor Code of Business Ethics and Conduct	NOV 2021
52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards	JUN 2020
52.204-13	System for Award Management Maintenance	OCT 2018
52.204-18	Commercial and Government Entity Code Maintenance	AUG 2020
52.204-23	Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab Covered Entities	DEC 2023
52.204-25	Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment	NOV 2021
52.204-27	Prohibition on a ByteDance Covered Application	JUN 2023
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	NOV 2021
52.209-9	Updates of Publicly Available Information Regarding Responsibility Matters	OCT 2018
52.209-10	Prohibition on Contracting With Inverted Domestic Corporations	NOV 2015
52.211-13	Time Extensions	SEP 2000
52.211-18	Variation in Estimated Quantity	APR 1984
52.219-8	Utilization of Small Business Concerns	FEB 2024
52.219-9	Small Business Subcontracting Plan	SEP 2023
52.222-1	Notice To The Government Of Labor Disputes	FEB 1997
52.222-3	Convict Labor	JUN 2003
52.222-4	Contract Work Hours and Safety Standards - Overtime Compensation	MAY 2018
52.222-6	Construction Wage Rate Requirements	AUG 2018
52.222-7	Withholding of Funds	MAY 2014
52.222-8	Payrolls and Basic Records	JUL 2021
52.222-9	Apprentices and Trainees	JUL 2005
52.222-10	Compliance with Copeland Act Requirements	FEB 1988
52.222-11	Subcontracts (Labor Standards)	MAY 2014
52.222-12	Contract Termination-Debarment	MAY 2014
52.222-14	Disputes Concerning Labor Standards	FEB 1988
52.222-15	Certification of Eligibility	MAY 2014
52.222-21	Prohibition Of Segregated Facilities	APR 2015
52.222-26	Equal Opportunity	SEP 2016
52.222-27	Affirmative Action Compliance Requirements for Construction	APR 2015
52.222-30	Construction Wage Rate Requirements--Price Adjustment (None or Separately Specified Method)	AUG 2018

52.222-32	Construction Wage Rate Requirements--Price Adjustment (Actual Method)	AUG 2018
52.222-35	Equal Opportunity for Veterans	JUN 2020
52.222-36	Equal Opportunity for Workers with Disabilities	JUN 2020
52.222-37	Employment Reports on Veterans	JUN 2020
52.222-40	Notification of Employee Rights Under the National Labor Relations Act	DEC 2010
52.222-50	Combating Trafficking in Persons	NOV 2021
52.222-54	Employment Eligibility Verification	MAY 2022
52.222-55	Minimum Wages for Contractor Workers Under Executive Order 14026	JAN 2022
52.222-62	Paid Sick Leave Under Executive Order 13706	JAN 2022
52.223-2	Reporting of Biobased Products Under Service and Construction Contracts.	MAY 2024
52.225-13	Restrictions on Certain Foreign Purchases	FEB 2021
52.225-25	Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran-- Representation and Certifications.	JUN 2020
52.226-8	Encouraging Contractor Policies To Ban Text Messaging While Driving	MAY 2024
52.228-2	Additional Bond Security	OCT 1997
52.228-11	Individual Surety--Pledge of Assets	FEB 2021
52.228-12	Prospective Subcontractor Requests for Bonds	DEC 2022
52.228-15	Performance and Payment Bonds--Construction	JUN 2020
52.229-3	Federal, State And Local Taxes	FEB 2013
52.229-11	Tax on Certain Foreign Procurements--Notice and Representation	JUN 2020
52.229-12	Tax on Certain Foreign Procurements	FEB 2021
52.232-5	Payments under Fixed-Price Construction Contracts	MAY 2014
52.232-17	Interest	MAY 2014
52.232-23	Assignment Of Claims	MAY 2014
52.232-27	Prompt Payment for Construction Contracts	JAN 2017
52.232-33	Payment by Electronic Funds Transfer--System for Award Management	OCT 2018
52.232-39	Unenforceability of Unauthorized Obligations	JUN 2013
52.232-40	Providing Accelerated Payments to Small Business Subcontractors	MAR 2023
52.233-1	Disputes	MAY 2014
52.233-3	Protest After Award	AUG 1996
52.233-4	Applicable Law for Breach of Contract Claim	OCT 2004
52.236-2	Differing Site Conditions	APR 1984
52.236-3	Site Investigation and Conditions Affecting the Work	APR 1984
52.236-5	Material and Workmanship	APR 1984
52.236-6	Superintendence by the Contractor	APR 1984
52.236-7	Permits and Responsibilities	NOV 1991
52.236-8	Other Contracts	APR 1984
52.236-9	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements	APR 1984
52.236-10	Operations and Storage Areas	APR 1984
52.236-11	Use and Possession Prior to Completion	APR 1984
52.236-12	Cleaning Up	APR 1984
52.236-13	Accident Prevention	NOV 1991
52.236-26	Preconstruction Conference	FEB 1995
52.242-5	Payments to Small Business Subcontractors	JAN 2017
52.242-13	Bankruptcy	JUL 1995

52.242-14	Suspension of Work	APR 1984
52.243-4	Changes	JUN 2007
52.243-6	Change Order Accounting	APR 1984
52.244-6	Subcontracts for Commercial Products and Commercial Services	FEB 2024
52.246-12	Inspection of Construction	AUG 1996
52.249-2	Termination For Convenience Of The Government (Fixed-Price)	APR 2012
52.249-10	Default (Fixed-Price Construction)	APR 1984
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	JAN 2023
252.203-7003	Agency Office of the Inspector General	AUG 2019
252.203-7004	Display of Hotline Posters	JAN 2023
252.204-7006	Billing Instructions--Cost Vouchers	MAY 2023
252.204-7008	Compliance With Safeguarding Covered Defense Information Controls	OCT 2016
252.204-7012	Safeguarding Covered Defense Information and Cyber Incident Reporting	MAY 2024
252.205-7000	Provision Of Information To Cooperative Agreement Holders	JUN 2023
252.209-7004	Subcontracting With Firms That Are Owned or Controlled By The Government of a Country that is a State Sponsor of Terrorism	MAY 2019
252.219-7003	Small Business Subcontracting Plan (DOD Contracts)	DEC 2019
252.222-7006	Restrictions on the Use of Mandatory Arbitration Agreements	JAN 2023
252.223-7004	Drug Free Work Force	SEP 1988
252.225-7001	Buy American and Balance of Payments Program	FEB 2024
252.225-7002	Qualifying Country Sources As Subcontractors	MAR 2022
252.232-7003	Electronic Submission of Payment Requests and Receiving Reports	DEC 2018
252.236-7000	Modification Proposals-Price Breakdown	DEC 1991
252.242-7004	Material Management And Accounting System	MAY 2011
252.242-7006	Accounting System Administration	FEB 2012
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.243-7002	Requests for Equitable Adjustment	DEC 2022
252.244-7001	Contractor Purchasing System Administration	MAY 2014

CLAUSES INCORPORATED BY FULL TEXT

52.202-1 DEFINITIONS (JUN 2020)

When a solicitation provision or contract clause uses a word or term that is defined in the Federal Acquisition Regulation (FAR), the word or term has the same meaning as the definition in FAR 2.101 in effect at the time the solicitation was issued, unless--

(a) The solicitation, or amended solicitation, provides a different definition;

(b) The contracting parties agree to a different definition;

(c) The part, subpart, or section of the FAR where the provision or clause is prescribed provides a different meaning;

(d) The word or term is defined in FAR part 31, for use in the cost principles and procedures; or

(e) The word or term defines an acquisition-related threshold, and if the threshold is adjusted for inflation as set forth in FAR 1.109(a), then the changed threshold applies throughout the remaining term of the contract, unless there is a subsequent threshold adjustment; see FAR 1.109(d).

(End of clause)

52.204-24 REPRESENTATION REGARDING CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT (NOV 2021)

The Offeror shall not complete the representation at paragraph (d)(1) of this provision if the Offeror has represented that it "does not provide covered telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument" in paragraph (c)(1) in the provision at 52.204-26, Covered Telecommunications Equipment or Services--Representation, or in paragraph (v)(2)(i) of the provision at 52.212-3, Offeror Representations and Certifications-Commercial Products and Commercial Services. The Offeror shall not complete the representation in paragraph (d)(2) of this provision if the Offeror has represented that it "does not use covered telecommunications equipment or services, or any equipment, system, or service that uses covered telecommunications equipment or services" in paragraph (c)(2) of the provision at 52.204-26, or in paragraph (v)(2)(ii) of the provision at 52.212-3.

(a) Definitions. As used in this provision-

Backhaul, covered telecommunications equipment or services, critical technology, interconnection arrangements, reasonable inquiry, roaming, and substantial or essential component have the meanings provided in the clause 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

(b) Prohibition.

(1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. Nothing in the prohibition shall be construed to--

(i) Prohibit the head of an executive agency from procuring with an entity to provide a service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(ii) Cover telecommunications equipment that cannot route or redirect user data traffic or cannot permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract or extending or renewing a contract with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract. Nothing in the prohibition shall be construed to--

(i) Prohibit the head of an executive agency from procuring with an entity to provide a service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(ii) Cover telecommunications equipment that cannot route or redirect user data traffic or cannot permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(c) Procedures. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (https://www.sam.gov) for entities excluded from receiving federal awards for "covered telecommunications equipment or services."

(d) Representations. The Offeror represents that--

(1) It [___] will, [___] will not provide covered telecommunications equipment or services to the Government in the performance of any contract, subcontract or other contractual instrument resulting from this solicitation. The Offeror shall provide the additional disclosure information required at paragraph (e)(1) of this section if the Offeror responds "will" in paragraph (d)(1) of this section; and

(2) After conducting a reasonable inquiry, for purposes of this representation, the Offeror represents that--

It [___] does, [___] does not use covered telecommunications equipment or services, or use any equipment, system, or service that uses covered telecommunications equipment or services. The Offeror shall provide the additional disclosure information required at paragraph (e)(2) of this section if the Offeror responds "does" in paragraph (d)(2) of this section.

(e) Disclosures.

(1) Disclosure for the representation in paragraph (d)(1) of this provision. If the Offeror has responded "will" in the representation in paragraph (d)(1) of this provision, the Offeror shall provide the following information as part of the offer:

(i) For covered equipment--

(A) The entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the original equipment manufacturer (OEM) or a distributor, if known);

(B) A description of all covered telecommunications equipment offered (include brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); and

(C) Explanation of the proposed use of covered telecommunications equipment and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(1) of this provision.

(ii) For covered services--

(A) If the service is related to item maintenance: A description of all covered telecommunications services offered (include on the item being maintained: Brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); or

(B) If not associated with maintenance, the Product Service Code (PSC) of the service being provided; and explanation of the proposed use of covered telecommunications services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(1) of this provision.

(2) Disclosure for the representation in paragraph (d)(2) of this provision. If the Offeror has responded "does" in the representation in paragraph (d)(2) of this provision, the Offeror shall provide the following information as part of the offer:

(i) For covered equipment--

(A) The entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the OEM or a distributor, if known);

(B) A description of all covered telecommunications equipment offered (include brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); and

(C) Explanation of the proposed use of covered telecommunications equipment and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(2) of this provision.

(ii) For covered services--

(A) If the service is related to item maintenance: A description of all covered telecommunications services offered (include on the item being maintained: Brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); or

(B) If not associated with maintenance, the PSC of the service being provided; and explanation of the proposed use of covered telecommunications services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(2) of this provision.

(End of provision)

52.204-26 COVERED TELECOMMUNICATIONS EQUIPMENT OR SERVICES--REPRESENTATION (OCT 2020)

(a) Definitions. As used in this provision, “covered telecommunications equipment or services” and "reasonable inquiry" have the meaning provided in the clause 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

(b) Procedures. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (https://www.sam.gov) for entities excluded from receiving federal awards for “covered telecommunications equipment or services”.

(c) Representations.

(1) The Offeror represents that it [___] does, [___] does not provide covered telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument.

(2) After conducting a reasonable inquiry for purposes of this representation, the offeror represents that it [___] does, [___] does not use covered telecommunications equipment or services, or any equipment, system, or service that uses covered telecommunications equipment or services.

(End of provision)

52.209-11 REPRESENTATION BY CORPORATIONS REGARDING DELINQUENT TAX LIABILITY OR A FELONY CONVICTION UNDER ANY FEDERAL LAW (FEB 2016)

(a) As required by sections 744 and 745 of Division E of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235), and similar provisions, if contained in subsequent appropriations acts, the Government will not enter into a contract with any corporation that--

(1) Has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless an agency has considered suspension or debarment of the corporation and made a determination that suspension or debarment is not necessary to protect the interests of the Government; or

(2) Was convicted of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless an agency has considered suspension or debarment of the corporation and made a determination that this action is not necessary to protect the interests of the Government.

(b) The Offeror represents that--

(1) It is [ ] is not [ ] a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability; and

(2) It is [ ] is not [ ] a corporation that was convicted of a felony criminal violation under a Federal law within the preceding 24 months.

(End of provision)

52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

The Contractor shall be required to

(a) commence work under this contract within 10 calendar days after the date the Contractor receives the notice to proceed,

(b) prosecute the work diligently, and

(c) complete the entire work ready for use not later than 150 calendar days after the date of receipt by him of notice to proceed. The time stated for completion shall include final cleanup of the premises.

(End of Clause)

NOTE: The term “work” includes tasks such as submission of submittals, performance of preliminary and/or BD surveys, and does not have to be dredging.

52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000)

(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 $3,465.00 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.

(End of clause)

52.217-7 OPTION FOR INCREASED QUANTITY--SEPARATELY PRICED LINE ITEM (MAR 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor any time prior to the completion date of the basic line item or any previously exercised option or executed modification. **Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.**

52.228-14 IRREVOCABLE LETTER OF CREDIT (NOV 2014)

(a) “Irrevocable letter of credit” (ILC), as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or condition the letter of credit.

(b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.

(c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured financial institution as provided in paragraph (d) of this clause, and--

(1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;

(2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:

(i) For contracts subject to 40 U.S.C. chapter 31, subchapter III, Bonds, the later of--

(A) One year following the expected date of final payment;

(B) For performance bonds only, until completion of any warranty period; or

(C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.

(ii) For contracts not subject to the Miller Act, the later of--

(A) 90 days following final payment; or

(B) For performance bonds only, until completion of any warranty period.

(d)(1) Only federally insured financial institutions rated investment grade by a commercial rating service shall issue or confirm the ILC.

(2) Unless the financial institution issuing the ILC had letter of credit business of at least $25 million in the past year, ILCs over $5 million must be confirmed by another acceptable financial institution that had letter of credit business of at least $25 million in the past year.

(3) The Offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institutions have the required credit rating as of the date of issuance of the ILC.

(4) The current rating for a financial institution is available through any of the following rating services registered with the U.S. Securities and Exchange Commission (SEC) as a Nationally Recognized Statistical Rating Organization (NRSRO). NRSRO's can be located at the Web site http://www.sec.gov/answers/nrsro.htm maintained by the SEC.

(e) The following format shall be used by the issuing financial institution to create an ILC:

___
[Issuing Financial Institution's Letterhead or Name and Address]

Issue Date _ ___

IRREVOCABLE LETTER OF CREDIT NO. ___

Account party's name ___ _

Account party's address ___ _

For Solicitation No. W912P8-24-B0048 (for reference only)

TO: Department of the Army
Corps of Engineers, New Orleans District
7400 Leake Ave. New Orleans, LA 70118

1. We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up to United States $ ___ . This Letter of Credit is payable at [issuing financial institution's and, if any, confirming financial institution's] office at [___ issuing financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on ___ , or any automatically extended expiration date.

2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of Credit on or before the expiration date or any automatically extended expiration date.

3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.

4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.

5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, International Chamber of Commerce Publication No. ____ -- (Insert version in effect at the time of ILC issuance, e.g., ``Publication 600, 2006 edition") and to the extent not inconsistent therewith, to the laws of ____ --[State of confirming financial institution, if any, otherwise State of issuing financial institution].

6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

___

[___ Issuing financial institution]

(f) The following format shall be used by the financial institution to confirm an ILC:

___ [Confirming Financial Institution's Letterhead or Name and Address]

(Date) ___

Our Letter of Credit Advice Number ___

Beneficiary: ___ [U.S. Government agency]

Issuing Financial Institution: ___

Issuing Financial Institution's LC No.: ___

Gentlemen:

1. We hereby confirm the above indicated Letter of Credit, the original of which is attached, issued by ___ [name of issuing financial institution] for drawings of up to United States dollars ___ _/U.S. $ ___ and expiring with our close of business on ___ [the expiration date], or any automatically extended expiration date.

2. Draft(s) drawn under the Letter of Credit and this Confirmation are payable at our office located at ___ _.

3. We hereby undertake to honor sight draft(s) drawn under and presented with the Letter of Credit and this Confirmation at our offices as specified herein.

4. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this confirmation that it be deemed automatically extended without amendment for one year from the expiration date hereof, or any automatically extended expiration date, unless:

(a) At least 60 days prior to any such expiration date, we shall notify the Contracting Officer, or the transferee and the issuing financial institution, by registered mail or other receipted means of delivery, that we elect not to consider this confirmation extended for any such additional period; or

(b) The issuing financial institution shall have exercised its right to notify you or the transferee, the account party, and ourselves, of its election not to extend the expiration date of the Letter of Credit.

5. This confirmation is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, International Chamber of Commerce Publication No. ___ -- (Insert version in effect at the time of ILC issuance, e.g., ``Publication 600, 2006 edition") and to the extent not inconsistent therewith, to the laws of ___ --[State of confirming financial institution].

6. If this confirmation expires during an interruption of business of this financial institution as described in Article 17 of the UCP, we specifically agree to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

___

[Confirming financial institution]

(g) The following format shall be used by the Contracting Officer for a sight draft to draw on the Letter of Credit:

SIGHT DRAFT

___
[City, State]

(Date) ___

[Name and address of financial institution]

Pay to the order of ___ [Beneficiary Agency] ___ the sum of United States ___ This draft is drawn under Irrevocable Letter of Credit No. ___

___ [Beneficiary Agency]

By: ___

(End of clause)

52.232-16 PROGRESS PAYMENTS (NOV 2021)

The Government will make progress payments to the Contractor when requested as work progresses, but not more frequently than monthly, in amounts of $2,500 or more approved by the Contracting Officer, under the following conditions:

(a) Computation of amounts.

(1) Unless the Contractor requests a smaller amount, the Government will compute each progress payment as 80 percent of the Contractor's total costs incurred under this contract whether or not actually paid, plus financing payments to subcontractors (see paragraph (j) of this clause), less the sum of all previous progress payments made by the Government under this contract. The Contracting Officer will consider cost of money that would be allowable under Federal Acquisition Regulation (FAR) 31.205-10 as an incurred cost for progress payment purposes.

(2) The amount of financing and other payments for supplies and services purchased directly for the contract are limited to the amounts that have been paid by cash, check, or other forms of payment, or that are determined due and will be paid to subcontractors--

(i) In accordance with the terms and conditions of a subcontract or invoice; and

(ii) Ordinarily within 30 days of the submission of the Contractor's payment request to the Government.

(3) The Government will exclude accrued costs of Contractor contributions under employee pension plans until actually paid unless--

(i) The Contractor's practice is to make contributions to the retirement fund quarterly or more frequently; and

(ii) The contribution does not remain unpaid 30 days after the end of the applicable quarter or shorter payment period (any contribution remaining unpaid shall be excluded from the Contractor's total costs for progress payments until paid).

(4) The Contractor shall not include the following in total costs for progress payment purposes in paragraph (a)(1) of this clause:

(i) Costs that are not reasonable, allocable to this contract, and consistent with sound and generally accepted accounting principles and practices.

(ii) Costs incurred by subcontractors or suppliers.

(iii) Costs ordinarily capitalized and subject to depreciation or amortization except for the properly depreciated or amortized portion of such costs.

(iv) Payments made or amounts payable to subcontractors or suppliers, except for --

(A) Completed work, including partial deliveries, to which the Contractor has acquired title; and

(B) Work under cost-reimbursement or time-and-material subcontracts to which the Contractor has acquired title.

(5) The amount of unliquidated progress payments may exceed neither (i) the progress payments made against incomplete work (including allowable unliquidated progress payments to subcontractors) nor

(ii) the value, for progress payment purposes, of the incomplete work. Incomplete work shall be considered to be the supplies and services required by this contract, for which delivery and invoicing by the Contractor and acceptance by the Government are incomplete.

(6) The total amount of progress payments shall not exceed 80 percent of the total contract price.

(7) If a progress payment or the unliquidated progress payments exceed the amounts permitted by subparagraphs (a)(4) or (a)(5) of this clause, the Contractor shall repay the amount of such excess to the Government on demand.

(8) Notwithstanding any other terms of the contract, the Contractor agrees not to request progress payments in dollar amounts of less than $2,500. The Contracting Officer may make exceptions.

(9) The costs applicable to items delivered, invoiced, and accepted shall not include costs in excess of the contract price of the items.

(b) Liquidation. Except as provided in the Termination for Convenience of the Government clause, all progress payments shall be liquidated by deducting from any payment under this contract, other than advance or progress payments, the unliquidated progress payments, or 80 percent of the amount invoiced, whichever is less. The Contractor shall repay to the Government any amounts required by a retroactive price reduction, after computing liquidations and payments on past invoices at the reduced prices and adjusting the unliquidated progress payments accordingly. The Government reserves the right to unilaterally change from the ordinary liquidation rate to an alternate rate when deemed appropriate for proper contract financing.

(c) Reduction or suspension. The Contracting Officer may reduce or suspend progress payments, increase the rate of liquidation, or take a combination of these actions, after finding on substantial evidence any of the following conditions:

(1) The Contractor failed to comply with any material requirement of this contract (which includes paragraphs (f) and (g) of this clause).

(2) Performance of this contract is endangered by the Contractor's --

(i) Failure to make progress or

(ii) Unsatisfactory financial condition.

(3) Inventory allocated to this contract substantially exceeds reasonable requirements.

(4) The Contractor is delinquent in payment of the costs of performing this contract in the ordinary course of business.

(5) The fair value of the undelivered work is less than the amount of unliquidated progress payments for that work.

(6) The Contractor is realizing less profit than that reflected in the establishment of any alternate liquidation rate in paragraph (b) of this clause, and that rate is less than the progress payment rate stated in subparagraph (a)(1) of this clause.

(d) Title.

(1) Title to the property described in this paragraph (d) shall vest in the Government. Vestiture shall be immediately upon the date of this contract, for property acquired or produced before that date. Otherwise, vestiture shall occur when the property is or should have been allocable or properly chargeable to this contract.

(2) "Property," as used in this clause, includes all of the below-described items acquired or produced by the Contractor that are or should be allocable or properly chargeable to this contract under sound and generally accepted accounting principles and practices.

(i) Parts, materials, inventories, and work in process;

(ii) Special tooling and special test equipment to which the Government is to acquire title;

(iii) Nondurable (i.e., noncapital) tools, jigs, dies, fixtures, molds, patterns, taps, gauges, test equipment, and other similar manufacturing aids, title to which would not be obtained as special tooling under paragraph (d) (2)(ii) of this clause; and

(iv) Drawings and technical data, to the extent the Contractor or subcontractors are required to deliver them to the Government by other clauses of this contract.

(3) Although title to property is in the Government under this clause, other applicable clauses of this contract; e.g., the termination clauses, shall determine the handling and disposition of the property.

(4) The Contractor may sell any scrap resulting from production under this contract without requesting the Contracting Officer's approval, but the proceeds shall be credited against the costs of performance.

(5) To acquire for its own use or dispose of property to which title is vested in the Government under this clause, the Contractor must obtain the Contracting Officer's advance approval of the action and the terms. The Contractor shall (i) exclude the allocable costs of the property from the costs of contract performance, and (ii) repay to the Government any amount of unliquidated progress payments allocable to the property. Repayment may be by cash or credit memorandum.

(6) When the Contractor completes all of the obligations under this contract, including liquidation of all progress payments, title shall vest in the Contractor for all property (or the proceeds thereof) not--

(i) Delivered to, and accepted by, the Government under this contract; or

(ii) Incorporated in supplies delivered to, and accepted by, the Government under this contract and to which title is vested in the Government under this clause.

(7) The terms of this contract concerning liability for Government-furnished property shall not apply to property to which the Government acquired title solely under this clause.

(e) Risk of loss. Before delivery to and acceptance by the Government, the Contractor shall bear the risk of loss for property, the title to which vests in the Government under this clause, except to the extent the Government expressly assumes the risk. The Contractor shall repay the Government an amount equal to the unliquidated progress payments that are based on costs allocable to property that is lost (see 45.101).

(f) Control of costs and property. The Contractor shall maintain an accounting system and controls adequate for the proper administration of this clause.

(g) Reports, forms, and access to records. (1) The Contractor shall promptly furnish reports, certificates, financial statements, and other pertinent information (including estimates to complete) reasonably requested by the Contracting Officer for the administration of this clause. Also, the Contractor shall give the Government reasonable opportunity to examine and verify the Contractor's books, records, and accounts.

(2) The Contractor shall furnish estimates to complete that have been developed or updated within six months of the date of the progress payment request. The estimates to complete shall represent the Contractor's best estimate of total costs to complete all remaining contract work required under the contract. The estimates shall include sufficient detail to permit Government verification.

(3) Each Contractor request for progress payment shall:

(i) Be submitted on Standard Form 1443, Contractor's Request for Progress Payment, or the electronic equivalent as required by agency regulations, in accordance with the form instructions and the contract terms; and

(ii) Include any additional supporting documentation requested by the Contracting Officer.

(h) Special terms regarding default. If this contract is terminated under the Default clause, (i) the Contractor shall, on demand, repay to the Government the amount of unliquidated progress payments and (ii) title shall vest in the Contractor, on full liquidation of progress payments, for all property for which the Government elects not to require delivery under the Default clause. The Government shall be liable for no payment except as provided by the Default clause.

(i) Reservations of rights.

(1) No payment or vesting of title under this clause shall --

(i) Excuse the Contractor from performance of obligations under this contract or

(ii) Constitute a waiver of any of the rights or remedies of the parties under the contract.

(2) The Government's rights and remedies under this clause

(i) Shall not be exclusive but rather shall be in addition to any other rights and remedies provided by law or this contract and

(ii) Shall not be affected by delayed, partial, or omitted exercise of any right, remedy, power, or privilege, nor shall such exercise or any single exercise preclude or impair any further exercise under this clause or the exercise of any other right, power, or privilege of the Government.

(j) Financing payments to subcontractors. The financing payments to subcontractors mentioned in paragraphs (a)(1) and (a)(2) of this clause shall be all financing payments to subcontractors or divisions, if the following conditions are met:

(1) The amounts included are limited to--

(i) The unliquidated remainder of financing payments made; plus

(ii) Any unpaid subcontractor requests for financing payments.

(2) The subcontract or interdivisional order is expected to involve a minimum of approximately 6 months between the beginning of work and the first delivery; or, if the subcontractor is a small business concern, 4 months.

(3) If the financing payments are in the form of progress payments, the terms of the subcontract or interdivisional order concerning progress payments--

(i) Are substantially similar to the terms of this clause for any subcontractor that is a large business concern, or this clause with its Alternate I for any subcontractor that is a small business concern;

(ii) Are at least as favorable to the Government as the terms of this clause;

(iii) Are not more favorable to the subcontractor or division than the terms of this clause are to the Contractor;

(iv) Are in conformance with the requirements of FAR 32.504(e); and

(v) Subordinate all subcontractor rights concerning property to which the Government has title under the subcontract to the Government's right to require delivery of the property to the Government if--

(A) The Contractor defaults; or

(B) The subcontractor becomes bankrupt or insolvent.

(4) If the financing payments are in the form of performance-based payments, the terms of the subcontract or interdivisional order concerning payments--

(i) Are substantially similar to the Performance-Based Payments clause at FAR 52.232-32 and meet the criteria for, and definition of, performance-based payments in FAR Part 32;

(ii) Are in conformance with the requirements of FAR 32.504(f); and

(iii) Subordinate all subcontractor rights concerning property to which the Government has title under the subcontract to the Government's right to require delivery of the property to the Government if--

(A) The Contractor defaults; or

(B) The subcontractor becomes bankrupt or insolvent.

(5) If the financing payments are in the form of commercial product or commercial service financing payments, the terms of the subcontract or interdivisional order concerning payments--

(i) Are constructed in accordance with FAR 32.206(c) and included in a subcontract for a commercial product or commercial service purchase that meets the definition and standards for acquisition of commercial products and commercial services in FAR parts 2 and 12;

(ii) Are in conformance with the requirements of FAR 32.504(g); and

(iii) Subordinate all subcontractor rights concerning property to which the Government has title under the subcontract to the Government's right to require delivery of the property to the Government if--

(A) The Contractor defaults; or

(B) The subcontractor becomes bankrupt or insolvent.

(6) If financing is in the form of progress payments, the progress payment rate in the subcontract is the customary rate used by the contracting agency, depending on whether the subcontractor is or is not a small business concern.

(7) Concerning any proceeds received by the Government for property to which title has vested in the Government under the subcontract terms, the parties agree that the proceeds shall be applied to reducing any unliquidated financing payments by the Government to the Contractor under this contract.

(8) If no unliquidated financing payments to the Contractor remain, but there are unliquidated financing payments that the Contractor has made to any subcontractor, the Contractor shall be subrogated to all the rights the Government obtained through the terms required by this clause to be in any subcontract, as if all such rights had been assigned and transferred to the Contractor.

(9) To facilitate small business participation in subcontracting under this contract, the Contractor shall provide financing payments to small business concerns, in conformity with the standards for customary contract financing payments stated in Subpart 32.113. The Contractor shall not consider the need for such financing payments as a handicap or adverse factor in the award of subcontracts.

(k) Limitations on undefinitized contract actions. Notwithstanding any other progress payment provisions in this contract, progress payments may not exceed 80 percent of costs incurred on work accomplished under undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes. This limitation shall apply to the costs incurred, as computed in accordance with paragraph (a) of this clause, and shall remain in effect until the contract action is definitized. Costs incurred which are subject to this limitation shall be segregated on Contractor progress payment requests and invoices from those costs eligible for higher progress payment rates. For purposes of progress payment liquidation, as described in paragraph (b) of this clause, progress payments for undefinitized contract actions shall be liquidated at 80 percent of the amount invoiced for work performed under the undefinitized contract action as long as the contract action remains undefinitized. The amount of unliquidated progress payments for undefinitized contract actions shall not exceed 80 percent of the maximum liability of the Government under the undefinitized contract

action or such lower limit specified elsewhere in the contract. Separate limits may be specified for separate actions.

(l) Due date. The designated payment office will make progress payments on the _____ (Contracting Officer insert date as prescribed by agency head; if not prescribed, insert "30th") day after the designated billing office receives a proper progress payment request. In the event that the Government requires an audit or other review of a specific progress payment request to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the specified due date. Progress payments are considered contract financing and are not subject to the interest penalty provisions of the Prompt Payment Act.

(m) Progress payments under indefinite--delivery contracts. The Contractor shall account for and submit progress payment requests under individual orders as if the order constituted a separate contract, unless otherwise specified in this contract.

(End of clause)

52.232-16 PROGRESS PAYMENTS (NOV 2021) (DEVIATION 2020-O0010)
The Government will make progress payments to the Contractor when requested as work progresses, but not more frequently than monthly, in amounts of $2,500 or more approved by the Contracting Officer, under the following conditions:
(a) Computation of amounts.
(1) Unless the Contractor requests a smaller amount, the Government will compute each progress payment as 90 percent of the Contractor's total costs incurred under this contract whether or not actually paid, plus financing payments to subcontractors (see paragraph (j) of this clause), less the sum of all previous progress payments made by the Government under this contract. The Contracting Officer will consider cost of money that would be allowable under Federal Acquisition Regulation (FAR) 31.205-10 as an incurred cost for progress payment purposes.
(2) The amount of financing and other payments for supplies and services purchased directly for the contract are limited to the amounts that have been paid by cash, check, or other forms of payment, or that are determined due and will be paid to subcontractors—
(i) In accordance with the terms and conditions of a subcontract or invoice; and
(ii) Ordinarily within 30 days of the submission of the Contractor's payment request to the Government.
(3) The Government will exclude accrued costs of Contractor contributions under employee pension plans until actually paid unless-
(i) The Contractor's practice is to make contributions to the retirement fund quarterly or more frequently; and
(ii) The contribution does not remain unpaid 30 days after the end of the applicable quarter or shorter payment period (any contribution remaining unpaid shall be excluded from the Contractor's total costs for progress payments until paid).
(4) The Contractor shall not include the following in total costs for progress payment purposes in paragraph (a)(1) of this clause:
(i) Costs that are not reasonable, allocable to this contract, and consistent with sound and generally accepted accounting principles and practices.
(ii) Costs incurred by subcontractors or suppliers.
(iii) Costs ordinarily capitalized and subject to depreciation or amortization except for the properly depreciated or amortized portion of such costs.
(iv) Payments made or amounts payable to subcontractors or suppliers, except for-
(A) Completed work, including partial deliveries, to which the Contractor has acquired title; and
(B) Work under cost-reimbursement or time-and-material subcontracts to which the Contractor has acquired title.
(5) The amount of unliquidated progress payments may exceed neither (i) the progress payments made against incomplete work (including allowable unliquidated progress payments to subcontractors) nor (ii) the value, for progress payment purposes, of the incomplete work. Incomplete work shall be considered to be the supplies and services required by this contract, for which delivery and invoicing by the Contractor and acceptance by the Government are incomplete.
(6) The total amount of progress payments shall not exceed 90 percent of the total contract price.

(7) If a progress payment or the unliquidated progress payments exceed the amounts permitted by subparagraphs (a)(4) or (a)(5) above, the Contractor shall repay the amount of such excess to the Government on demand.
(8) Notwithstanding any other terms of the contract, the Contractor agrees not to request progress payments in dollar amounts of less than $2,500. The Contracting Officer may make exceptions.
(9) The costs applicable to items delivered, invoiced, and accepted shall not include costs in excess of the contract price of the items.
(b) Liquidation. Except as provided in the Termination for Convenience of the Government clause, all progress payments shall be liquidated by deducting from any payment under this contract, other than advance or progress payments, the unliquidated progress payments, or 90 percent of the amount invoiced, whichever is less. The Contractor shall repay to the Government any amounts required by a retroactive price reduction, after computing liquidations and payments on past invoices at the reduced prices and adjusting the unliquidated progress payments accordingly. The Government reserves the right to unilaterally change from the ordinary liquidation rate to an alternate rate when deemed appropriate for proper contract financing.
(c) Reduction or suspension. The Contracting Officer may reduce or suspend progress payments, increase the rate of liquidation, or take a combination of these actions, after finding on substantial evidence any of the following conditions:
(1) The Contractor failed to comply with any material requirement of this contract (which includes paragraphs (f) and (g) below).
(2) Performance of this contract is endangered by the Contractor's (i) failure to make progress or (ii) unsatisfactory financial condition.
(3) Inventory allocated to this contract substantially exceeds reasonable requirements.
(4) The Contractor is delinquent in payment of the costs of performing this contract in the ordinary course of business.
(5) The fair value of the undelivered work is less than the amount of unliquidated progress payments for that work.
(6) The Contractor is realizing less profit than that reflected in the establishment of any alternate liquidation rate in paragraph (b) above, and that rate is less than the progress payment rate stated in subparagraph (a)(1) above.
(d) Title.
(1) Title to the property described in this paragraph (d) shall vest in the Government. Vestiture shall be immediately upon the date of this contract, for property acquired or produced before that date. Otherwise, vestiture shall occur when the property is or should have been allocable or properly chargeable to this contract.
(2) Property, as used in this clause, includes all of the below-described items acquired or produced by the Contractor that are or should be allocable or properly chargeable to this contract under sound and generally accepted accounting principles and practices.
(i) Parts, materials, inventories, and work in process;
(ii) Special tooling and special test equipment to which the Government is to acquire title;
(iii) Nondurable (i.e., noncapital) tools, jigs, dies, fixtures, molds, patterns, taps, gauges, test equipment, and other similar manufacturing aids, title to which would not be obtained as special tooling under subparagraph (ii) above; and
(iv) Drawings and technical data, to the extent the Contractor or subcontractors are required to deliver them to the Government by other clauses of this contract.
(3) Although title to property is in the Government under this clause, other applicable clauses of this contract, e.g., the termination clauses, shall determine the handling and disposition of the property.
(4) The Contractor may sell any scrap resulting from production under this contract without requesting the Contracting Officer's approval, but the proceeds shall be credited against the costs of performance.
(5) To acquire for its own use or dispose of property to which title is vested in the Government under this clause, the Contractor must obtain the Contracting Officer's advance approval of the action and the terms. The Contractor shall (i) exclude the allocable costs of the property from the costs of contract performance, and (ii) repay to the Government any amount of unliquidated progress payments allocable to the property. Repayment may be by cash or credit memorandum.
(6) When the Contractor completes all of the obligations under this contract, including liquidation of all progress payments, title shall vest in the Contractor for all property (or the proceeds thereof) not—
(i) Delivered to, and accepted by, the Government under this contract; or
(ii) Incorporated in supplies delivered to, and accepted by, the Government under this contract and to which title is vested in the Government under this clause.

(7) The terms of this contract concerning liability for Government-furnished property shall not apply to property to which the Government acquired title solely under this clause.
(e) Risk of loss. Before delivery to and acceptance by the Government, the Contractor shall bear the risk of loss for property, the title to which vests in the Government under this clause, except to the extent the Government expressly assumes the risk. The Contractor shall repay the Government an amount equal to the unliquidated progress payments that are based on costs allocable to property that is lost (see 45.101).
(f) Control of costs and property. The Contractor shall maintain an accounting system and controls adequate for the proper administration of this clause.
(g) Reports, forms, and access to records.
(1) The Contractor shall promptly furnish reports, certificates, financial statements, and other pertinent information (including estimates to complete) reasonably requested by the Contracting Officer for the administration of this clause. Also, the Contractor shall give the Government reasonable opportunity to examine and verify the Contractor's books, records, and accounts.
(2) The Contractor shall furnish estimates to complete that have been developed or updated within six months of the date of the progress payment request. The estimates to complete shall represent the Contractor's best estimate of total costs to complete all remaining contract work required under the contract. The estimates shall include sufficient detail to permit Government verification.
(3) Each Contractor request for progress payment shall:
(i) Be submitted on Standard Form 1443, Contractor's Request for Progress Payment, or the electronic equivalent as required by agency regulations, in accordance with the form instructions and the contract terms; and
(ii) Include any additional supporting documentation requested by the Contracting Officer.
(h) Special terms regarding default. If this contract is terminated under the Default clause, (i) the Contractor shall, on demand, repay to the Government the amount of unliquidated progress payments, and (ii) title shall vest in the Contractor, on full liquidation of progress payments, for all property for which the Government elects not to require delivery under the Default clause. The Government shall be liable for no payment except as provided by the Default clause.
(i) Reservations of rights.
(1) No payment or vesting of title under this clause shall (i) excuse the Contractor from performance of obligations under this contract or (ii) constitute a waiver of any of the rights or remedies of the parties under the contract.

(2) The Government's rights and remedies under this clause (i) shall not be exclusive but rather shall be in addition to any other rights and remedies provided by law or this contract and (ii) shall not be affected by delayed, partial, or omitted exercise of any right, remedy, power, or privilege, nor shall such exercise or any single exercise preclude or impair any further exercise under this clause or the exercise of any other right, power, or privilege of the Government.
(j) Financing payments to subcontractors. The financing payments to subcontractors mentioned in paragraphs (a)(1) and (a)(2) of this clause shall be all financing payments to subcontractors or divisions, if the following conditions are met:
(1) The amounts included are limited to—
(i) The unliquidated remainder of financing payments made; plus
(ii) Any unpaid subcontractor requests for financing payments.
(2) The subcontract or interdivisional order is expected to involve a minimum of approximately 6 months between the beginning of work and the first delivery; or, if the subcontractor is a small business concern, 4 months.
(3) If the financing payments are in the form of progress payments, the terms of the subcontract or interdivisional order concerning progress payments—
(i) Are substantially similar to the terms of this clause for any subcontractor that is a large business concern, or this clause with its Alternate I for any subcontractor that is a small business concern;
(ii) Are at least as favorable to the Government as the terms of this clause;
(iii) Are not more favorable to the subcontractor or division than the terms of this clause are to the Contractor;
(iv) Are in conformance with the requirements of FAR 32.504(e); and
(v) Subordinate all subcontractor rights concerning property to which the Government has title under the subcontract to the Government's right to require delivery of the property to the Government if—
(A) The Contractor defaults; or
(B) The subcontractor becomes bankrupt or insolvent.

(4) If the financing payments are in the form of performance-based payments, the terms of the subcontract or interdivisional order concerning payments—
(i) Are substantially similar to the Performance-Based Payments clause at FAR 52.232-32 and meet the criteria for, and definition of, performance-based payments in FAR Part 32;
(ii) Are in conformance with the requirements of FAR 32.504(f); and
(iii) Subordinate all subcontractor rights concerning property to which the Government has title under the subcontract to the Government's right to require delivery of the property to the Government if—
(A) The Contractor defaults; or
(B) The subcontractor becomes bankrupt or insolvent.
(5) If the financing payments are in the form of commercial product or commercial service financing payments, the terms of the subcontract or interdivisional order concerning payments—
(i) Are constructed in accordance with FAR 32.206(c) and included in a subcontract for a commercial product or commercial service purchase that meets the definition and standards for acquisition of commercial products and commercial services in FAR parts 2 and 12;
(ii) Are in conformance with the requirements of FAR 32.504(g); and
(iii) Subordinate all subcontractor rights concerning property to which the Government has title under the subcontract to the Government's right to require delivery of the property to the Government if—
(A) The Contractor defaults; or
(B) The subcontractor becomes bankrupt or insolvent.
(6) If financing is in the form of progress payments, the progress payment rate in the subcontract is the customary rate used by the contracting agency, depending on whether the subcontractor is or is not a small business concern.
(7) Concerning any proceeds received by the Government for property to which title has vested in the Government under the subcontract terms, the parties agree that the proceeds shall be applied to reducing any unliquidated financing payments by the Government to the Contractor under this contract.
(8) If no unliquidated financing payments to the Contractor remain, but there are unliquidated financing payments that the Contractor has made to any subcontractor, the Contractor shall be subrogated to all the rights the Government obtained through the terms required by this clause to be in any subcontract, as if all such rights had been assigned and transferred to the Contractor.
(9) To facilitate small business participation in subcontracting under this contract, the Contractor shall provide financing payments to small business concerns, in conformity with the standards for customary contract financing payments stated in FAR 32.113. The Contractor shall not consider the need for such financing payments as a handicap or adverse factor in the award of subcontracts.
(k) Limitations on undefinitized contract actions. Notwithstanding any other progress payment provisions in this contract, progress payments may not exceed 80 percent of costs incurred on work accomplished under undefinitized contract actions. A contract action is any action resulting in a contract, as defined in subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes. This limitation shall apply to the costs incurred, as computed in accordance with paragraph (a) of this clause, and shall remain in effect until the contract action is definitized. Costs incurred which are subject to this limitation shall be segregated on Contractor progress payment requests and invoices from those costs eligible for higher progress payment rates. For purposes of progress payment liquidation, as described in paragraph (b) of this clause, progress payments for undefinitized contract actions shall be liquidated at 80 percent of the amount invoiced for work performed under the undefinitized contract action as long as the contract action remains undefinitized. The amount of unliquidated progress payments for undefinitized contract actions shall not exceed 80 percent of the maximum liability of the Government under the undefinitized contract action or such lower limit specified elsewhere in the contract. Separate limits may be specified for separate actions.
(l) Due date. The designated payment office will make progress payments on the _____ [Contracting Officer insert date as prescribed by agency head; if not prescribed, insert "30th"] day after the designated billing office receives a proper progress payment request. In the event that the Government requires an audit or other review of a specific progress payment request to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the specified due date. Progress payments are considered contract financing and are not subject to the interest penalty provisions of the Prompt Payment Act.
(m) Progress payments under indefinite-delivery contracts. The Contractor shall account for and submit progress payment requests under individual orders as if the order constituted a separate contract, unless otherwise specified in this contract.

(End of clause)

52.236-1 PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984)

The Contractor shall perform on the site, and with its own organization, work equivalent to at least 20% 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 performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

(End of clause)

52.236-4 PHYSICAL DATA (APR 1984)

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

(a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by surveys.

(b) Weather Conditions. Data on weather conditions may be obtained from the National Weather Service.

(c) Transportation Facilities. Floating plant may access the site of work via the Mississippi River and/or Breton Sound.

(d) Condition of Channel. Depths within the channel may be inadequate for the movement of floating plant due to serious shoaling. However, the Contractor should verify the required dimensions. Cross sections and/or dredging history of the channel are available for inspection at the Corps of Engineers District Office, New Orleans, Louisiana.

(e) Channel Traffic. Traffic in the channels consists of tugs, barge tows, commercial fishing boats, oil field access and small pleasure craft.

(f) Obstruction of Channel. The Government will not undertake to keep the channel 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 River and Harbor Act approved 8 August 1917. The Contractor shall conduct the work 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 completion of the work, the Contractor shall promptly remove its plant, including ranges, buoys, piles and other markers placed by him/her under the contract in navigable water or on shore.

(g) Estimates of quantities involved in certain items of work for which bids are being solicited on a lump sum or job basis have been made for the use of the Government. Copies of these quantity estimates may be viewed or obtained by contacting the U.S. Army Engineer District, New Orleans, Corps of Engineers, Attention: Contracting Officer, CEMVN-CT, 7400 Leake Ave, New Orleans, Louisiana 70118-3651. It is expressly understood that the accuracy of these estimates is in no way warranted and that the furnishing of this information to a bidder will not relieve him of his responsibility to estimate the quantities involved.

(h) Stage Hydrograph. Real time stage hydrograph data of the Mississippi River Basin may be obtained from the New Orleans District website at:

(http://rivergages.mvr.usace.army.mil/WaterControl/new/layout.cfm)

The specific gages are as follows:

- Mississippi River at New Orleans (Carrollton) – Gage # 01300
- Mississippi River at Venice – Gage # 01480

Historic hydrographic data provided does not constitute a prediction.

(End of clause)

52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)

(a) The **Contractor shall, within five (5) days after the work commences on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval an electronic copy of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment).** The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

(b) The Contractor shall enter the actual progress on the chart as directed by the Contracting Officer, and upon doing so shall immediately deliver three (3) copies of the annotated schedule to the Contracting Officer. If, in the opinion of the Contracting Officer, the Contractor falls behind the approved schedule, the Contractor shall 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 in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.

(c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause 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 this contract.

(End of Clause)

NOTE: An electronic copy of the schedule as discussed in subparagraph (a) above, that is compatible with Primavera 6, shall also be provided.

52.236-16 QUANTITY SURVEYS (APR 1984) - ALTERNATE I (APR 1984)

(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 Contractor shall conduct the original and final surveys and surveys for any periods for which progress payments are requested. All these surveys shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement in a specific instance. The Government shall make such computations as are necessary to determine the quantities of work performed or finally in place. The Contractor shall make the computations based on the surveys for any periods for which progress payments are requested.

(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, who shall use them as necessary to determine the amount of progress payments. The

Contractor shall retain copies of all such material furnished to the Contracting Officer.

(End of clause)

Note: In subparagraph (c), the word "Promptly" is defined as "within three (3) calendar days."

52.236-17 LAYOUT OF WORK (APR 1984)

The Contractor shall lay out its work from Government established baselines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of replacement from any amounts due or to become due to the Contractor.

(End of Clause)

NOTE: For clarification purposes, the term "baselines and benchmarks" shall refer to "centerline and gage(s)" to be used in this contract for horizontal and vertical control respectively. Gages established by the Government shall be re-established by the contractor as deemed necessary in order to layout and control the work.

52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995)
(a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

(b) Site visits may be arranged during normal duty hours by contacting:

Name: Jason Binet
Address: 7400 Leake Avenue, New Orleans, LA 70118
Telephone: 504-862-2127

(End of provision)

52.244-2 SUBCONTRACTS (JUN 2020)

(a) Definitions. As used in this clause--

Approved purchasing system means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

Consent to subcontract means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

Subcontract means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.

(c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that—

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds—

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, or 5 percent of the total estimated cost of the contract.

(d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:

(e)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c), or (d) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate certified cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting—

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason certified cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor's certified cost or pricing data in determining
the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's certified cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (c), (d), or (e) of this clause.

(f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination—

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:

_____
_____

(End of clause)

252.203-7000 REQUIREMENTS RELATING TO COMPENSATION OF FORMER DOD OFFICIALS (SEP 2011)

(a) Definition. Covered DoD official, as used in this clause, means an individual that--

(1) Leaves or left DoD service on or after January 28, 2008; and

(2)(i) Participated personally and substantially in an acquisition as defined in 41 U.S.C. 131 with a value in excess of $10 million, and serves or served--

(A) In an Executive Schedule position under subchapter II of chapter 53 of Title 5, United States Code;

(B) In a position in the Senior Executive Service under subchapter VIII of chapter 53 of Title 5, United States Code; or

(C) In a general or flag officer position compensated at a rate of pay for grade O-7 or above under section 201 of Title 37, United States Code; or

(ii) Serves or served in DoD in one of the following positions: Program manager, deputy program manager, procuring contracting officer, administrative contracting officer, source selection authority, member of the source selection evaluation board, or chief of a financial or technical evaluation team for a contract in an amount in excess of $10 million.

(b) The Contractor shall not knowingly provide compensation to a covered DoD official within 2 years after the official leaves DoD service, without first determining that the official has sought and received, or has not received after 30 days of seeking, a written opinion from the appropriate DoD ethics counselor regarding the applicability of post-employment restrictions to the activities that the official is expected to undertake on behalf of the Contractor.

(c) Failure by the Contractor to comply with paragraph (b) of this clause may subject the Contractor to rescission of this contract, suspension, or debarment in accordance with 41 U.S.C. 2105(c).

(End of clause)

252.203-7002 REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS (DEC 2022)

(a) The Contractor shall inform its employees in writing, in the predominant native language of the workforce, of contractor employee whistleblower rights and protections under 10 U.S.C. 4701, as described in subpart 203.9 of the Defense Federal Acquisition Regulation Supplement.

(b) The Contractor shall include the substance of this clause, including this paragraph (b), in all subcontracts.

(End of clause)

252.203-7005 REPRESENTATION RELATING TO COMPENSATION OF FORMER DOD OFFICIALS (SEP 2022)

(a) Definition. Covered DoD official is defined in the clause at 252.203-7000, Requirements Relating to Compensation of Former DoD Officials.

(b) By submission of this offer, the Offeror represents, to the best of its knowledge and belief, that all covered DoD officials employed by or otherwise receiving compensation from the Offeror, and who are expected to undertake activities on behalf of the Offeror for any resulting contract, are presently in compliance with all applicable post-employment restrictions, including those contained in 18 U.S.C. 207, 41 U.S.C. 2101-2107, 5 CFR part 2641, section 1045 of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91), and Federal Acquisition Regulation 3.104-2.

(End of provision)

252.204-7003 CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)

The Contractor's procedures for protecting against unauthorized disclosure of information shall not require Department of Defense employees or members of the Armed Forces to relinquish control of their work products, whether classified or not, to the contractor.

(End of clause)

252.204-7015 NOTICE OF AUTHORIZED DISCLOSURE OF INFORMATION FOR LITIGATION SUPPORT (JAN 2023)

(a) Definitions. As used in this clause--

Computer software means computer programs, source code, source code listings, object code listings, design details, algorithms, processes, flow charts, formulae, and related material that would enable the software to be reproduced, recreated, or recompiled. Computer software does not include computer data bases or computer software documentation.

Litigation support means administrative, technical, or professional services provided in support of the Government during or in anticipation of litigation.

Litigation support contractor means a contractor (including its experts, technical consultants, subcontractors, and suppliers) providing litigation support under a contract that contains the clause at 252.204-7014, Limitations on the Use or Disclosure of Information by Litigation Support Contractors.

Sensitive information means controlled unclassified information of a commercial, financial, proprietary, or privileged nature. The term includes technical data and computer software, but does not include information that is lawfully, publicly available without restriction.

Technical data means recorded information, regardless of the form or method of the recording, of a scientific or technical nature (including computer software documentation). The term does not include computer software or data incidental to contract administration, such as financial and/or management information.

(b) Notice of authorized disclosures. Notwithstanding any other provision of this solicitation or contract, the Government may disclose to a litigation support contractor, for the sole purpose of litigation support activities, any information, including sensitive information, received—

(1) Within or in connection with a quotation or offer; or

(2) In the performance of or in connection with a contract.

(c) Subcontracts. Include the substance of this clause, including this paragraph (c), in all subcontracts, including subcontracts for commercial products or commercial services.

(End of clause)

252.204-7016 COVERED DEFENSE TELECOMMUNICATIONS EQUIPMENT OR SERVICES -- REPRESENTATION (DEC 2019)

(a) Definitions. As used in this provision, covered defense telecommunications equipment or services has the meaning provided in the clause 252.204-7018, Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services.

(b) Procedures. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (https://www.sam.gov) for entities excluded from receiving federal awards for "covered defense telecommunications equipment or services".

(c) Representation. The Offeror represents that it [ ] does, [ ] does not provide covered defense telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument.

(End of provision)

252.204-7017 PROHIBITION ON THE ACQUISITION OF COVERED DEFENSE TELECOMMUNICATIONS EQUIPMENT OR SERVICES--REPRESENTATION (MAY 2021)

The Offeror is not required to complete the representation in this provision if the Offeror has represented in the provision at 252.204-7016, Covered Defense Telecommunications Equipment or Services--Representation, that it "does not provide covered defense telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument."

(a) Definitions. Covered defense telecommunications equipment or services, covered mission, critical technology, and substantial or essential component, as used in this provision, have the meanings given in the 252.204-7018 clause, Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services, of this solicitation.

(b) Prohibition. Section 1656 of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91) prohibits agencies from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service to carry out covered missions that uses covered defense telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

(c) Procedures. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) at https://www.sam.gov for entities that are excluded when providing any equipment, system, or service to carry out covered missions that uses covered defense telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless a waiver is granted.

(d) Representation. If in its annual representations and certifications in SAM the Offeror has represented in paragraph (c) of the provision at 252.204-7016, Covered Defense Telecommunications Equipment or Services--Representation, that it "does" provide covered defense telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument, then the Offeror shall complete the following additional representation:

The Offeror represents that it [ ] will [ ] will not provide covered defense telecommunications equipment or services as a part of its offered products or services to DoD in the performance of any award resulting from this solicitation.

(e) Disclosures. If the Offeror has represented in paragraph (d) of this provision that it “will provide covered defense telecommunications equipment or services,” the Offeror shall provide the following information as part of the offer:

(1) A description of all covered defense telecommunications equipment and services offered (include brand or manufacturer; product, such as model number, original equipment manufacturer (OEM) number, manufacturer part number, or wholesaler number; and item description, as applicable).

(2) An explanation of the proposed use of covered defense telecommunications equipment and services and any factors relevant to determining if such use would be permissible under the prohibition referenced in paragraph (b) of this provision.

(3) For services, the entity providing the covered defense telecommunications services (include entity name, unique entity identifier, and Commercial and Government Entity (CAGE) code, if known).

(4) For equipment, the entity that produced or provided the covered defense telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the OEM or a distributor, if known).

(End of provision)

252.204-7018 PROHIBITION ON THE ACQUISITION OF COVERED DEFENSE TELECOMMUNICATIONS EQUIPMENT OR SERVICES (JAN 2023)

(a) Definitions. As used in this clause--

Covered defense telecommunications equipment or services means--

(1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation, or any subsidiary or affiliate of such entities;

(2) Telecommunications services provided by such entities or using such equipment; or

(3) Telecommunications equipment or services produced or provided by an entity that the Secretary of Defense reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Covered foreign country means--

(1) The People's Republic of China; or

(2) The Russian Federation.

Covered missions means--

(1) The nuclear deterrence mission of DoD, including with respect to nuclear command, control, and communications, integrated tactical warning and attack assessment, and continuity of Government; or

(2) The homeland defense mission of DoD, including with respect to ballistic missile defense.

Critical technology means--

(1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;

(2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled--

(i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or

(ii) For reasons relating to regional stability or surreptitious listening;

(3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);

(4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);

(5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or

(6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

Substantial or essential component means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) Prohibition. In accordance with section 1656 of the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. 115-91), the contractor shall not provide to the Government any equipment, system, or service to carry out covered missions that uses covered defense telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless the covered defense telecommunication equipment or services are covered by a waiver described in Defense Federal Acquisition Regulation Supplement 204.2104.

(c) Procedures. The Contractor shall review the list of excluded parties in the System for Award Management (SAM) at https://www.sam.gov for entities that are excluded when providing any equipment, system, or service, to carry out covered missions, that uses covered defense telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless a waiver is granted.

(d) Reporting.

(1) In the event the Contractor identifies covered defense telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, the Contractor shall report at https://dibnet.dod.mil the information in paragraph (d)(2) of this clause.

(2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause:

(i) Within 3 business days from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 30 business days of submitting the information in paragraph (d)(2)(i) of this clause: Any further available

information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of a covered defense telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial products or commercial services.

(End of clause)

252.204-7019 NOTICE OF NIST SP 800-171 DOD ASSESSMENT REQUIREMENTS (NOV 2023)

(a) Definitions.

Basic Assessment, Medium Assessment, and High Assessment have the meaning given in the clause 252.204-7020, NIST SP 800-171 DoD Assessments.

Covered contractor information system has the meaning given in the clause 252.204-7012, Safeguarding Covered Defense Information and Cyber Incident Reporting, of this solicitation.

(b) Requirement. In order to be considered for award, if the Offeror is required to implement NIST SP 800-171, the Offeror shall have a current assessment (i.e., not more than 3 years old unless a lesser time is specified in the solicitation) (see 252.204-7020) for each covered contractor information system that is relevant to the offer, contract, task order, or delivery order. The Basic, Medium, and High NIST SP 800-171 DoD Assessments are described in the NIST SP 800-171 DoD Assessment Methodology located at https://www.acq.osd.mil/asda/dpc/cp/cyber/docs/safeguarding/NIST-SP-800-171-Assessment-Methodology-Version-1.2.1-6.24.2020.pdf.

(c) Procedures.

(1) The Offeror shall verify that summary level scores of a current NIST SP 800-171 DoD Assessment (i.e., not more than 3 years old unless a lesser time is specified in the solicitation) are posted in the Supplier Performance Risk System (SPRS) (https://www.sprs.csd.disa.mil/) for all covered contractor information systems relevant to the offer.

(2) If the Offeror does not have summary level scores of a current NIST SP 800-171 DoD Assessment (i.e., not more than 3 years old unless a lesser time is specified in the solicitation) posted in SPRS, the Offeror may conduct and submit a Basic Assessment to webptsmh@navy.mil for posting to SPRS in the format identified in paragraph (d) of this provision.

(d) Summary level scores. Summary level scores for all assessments will be posted 30 days post-assessment in SPRS to provide DoD Components visibility into the summary level scores of strategic assessments.

(1) Basic Assessments. An Offeror may follow the procedures in paragraph (c)(2) of this provision for posting Basic Assessments to SPRS.

(i) The email shall include the following information:

(A) Cybersecurity standard assessed (e.g., NIST SP 800-171 Rev 1).

(B) Organization conducting the assessment (e.g., Contractor self-assessment).

(C) For each system security plan (security requirement 3.12.4) supporting the performance of a DoD contract--

(1) All industry Commercial and Government Entity (CAGE) code(s) associated with the information system(s) addressed by the system security plan; and

(2) A brief description of the system security plan architecture, if more than one plan exists.

(D) Date the assessment was completed.

(E) Summary level score (e.g., 95 out of 110, NOT the individual value for each requirement).

(F) Date that all requirements are expected to be implemented (i.e., a score of 110 is expected to be achieved) based on information gathered from associated plan(s) of action developed in accordance with NIST SP 800-171.

(ii) If multiple system security plans are addressed in the email described at paragraph (d)(1)(i) of this section, the Offeror shall use the following format for the report:

System security plan	CAGE codes supported by this plan	Brief description of the plan architecture	Date of assessment	Total score	Date score of 110 will achieved
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

(2) Medium and High Assessments. DoD will post the following Medium and/or High Assessment summary level scores to SPRS for each system assessed:

(i) The standard assessed (e.g., NIST SP 800-171 Rev 1).

(ii) Organization conducting the assessment, e.g., DCMA, or a specific organization (identified by Department of Defense Activity Address Code (DoDAAC)).

(iii) All industry CAGE code(s) associated with the information system(s) addressed by the system security plan.

(iv) A brief description of the system security plan architecture, if more than one system security plan exists.

(v) Date and level of the assessment, i.e., medium or high.

(vi) Summary level score (e.g., 105 out of 110, not the individual value assigned for each requirement).

(vii) Date that all requirements are expected to be implemented (i.e., a score of 110 is expected to be achieved) based on information gathered from associated plan(s) of action developed in accordance with NIST SP 800-171.

(3) Accessibility.

(i) Assessment summary level scores posted in SPRS are available to DoD personnel, and are protected, in

accordance with the standards set forth in DoD Instruction 5000.79, Defense-wide Sharing and Use of Supplier and Product Performance Information (PI).

(ii) Authorized representatives of the Offeror for which the assessment was conducted may access SPRS to view their own summary level scores, in accordance with the SPRS Software User's Guide for Awardees/Contractors available at https://www.sprs.csd.disa.mil/pdf/SPRS_Awardee.pdf.

(iii) A High NIST SP 800-171 DoD Assessment may result in documentation in addition to that listed in this section. DoD will retain and protect any such documentation as "Controlled Unclassified Information (CUI)" and intended for internal DoD use only. The information will be protected against unauthorized use and release, including through the exercise of applicable exemptions under the Freedom of Information Act (e.g., Exemption 4 covers trade secrets and commercial or financial information obtained from a contractor that is privileged or confidential).

(End of provision)

252.204-7020 NIST SP 800-171 DOD ASSESSMENT REQUIREMENTS (NOV 2023)

(a) Definitions.

Basic Assessment means a contractor's self-assessment of the contractor's implementation of NIST SP 800-171 that-

(1) Is based on the Contractor's review of their system security plan(s) associated with covered contractor information system(s);

(2) Is conducted in accordance with the NIST SP 800-171 DoD Assessment Methodology; and

(3) Results in a confidence level of "Low" in the resulting score, because it is a self-generated score.

Covered contractor information system has the meaning given in the clause 252.204-7012, Safeguarding Covered Defense Information and Cyber Incident Reporting, of this contract.

High Assessment means an assessment that is conducted by Government personnel using NIST SP 800-171A, Assessing Security Requirements for Controlled Unclassified Information that--

(1) Consists of--

(i) A review of a contractor's Basic Assessment;

(ii) A thorough document review;

(iii) Verification, examination, and demonstration of a Contractor's system security plan to validate that NIST SP 800-171 security requirements have been implemented as described in the contractor's system security plan; and

(iv) Discussions with the contractor to obtain additional information or clarification, as needed; and

(2) Results in a confidence level of "High" in the resulting score.

Medium Assessment means an assessment conducted by the Government that--

(1) Consists of--

(i) A review of a contractor's Basic Assessment;

(ii) A thorough document review; and

(iii) Discussions with the contractor to obtain additional information or clarification, as needed; and

(2) Results in a confidence level of "Medium" in the resulting score.

(b) Applicability. This clause applies to covered contractor information systems that are required to comply with the National Institute of Standards and Technology (NIST) Special Publication (SP) 800-171, in accordance with Defense Federal Acquisition Regulation System (DFARS) clause at 252.204-7012, Safeguarding Covered Defense Information and Cyber Incident Reporting, of this contract.

(c) Requirements. The Contractor shall provide access to its facilities, systems, and personnel necessary for the Government to conduct a Medium or High NIST SP 800-171 DoD Assessment, as described in NIST SP 800-171 DoD Assessment Methodology at https://www.acq.osd.mil/asda/dpc/cp/cyber/docs/safeguarding/NIST-SP-800-171-Assessment-Methodology-Version-1.2.1-6.24.2020.pdf, if necessary.

(d) Procedures. Summary level scores for all assessments will be posted in the Supplier Performance Risk System (SPRS) (https://www.sprs.csd.disa.mil/) to provide DoD Components visibility into the summary level scores of strategic assessments.

(1) Basic Assessments. A contractor may submit, via encrypted email, summary level scores of Basic Assessments conducted in accordance with the NIST SP 800-171 DoD Assessment Methodology to webptsmh@navy.mil for posting to SPRS.

(i) The email shall include the following information:

(A) Version of NIST SP 800-171 against which the assessment was conducted.

(B) Organization conducting the assessment (e.g., Contractor self-assessment).

(C) For each system security plan (security requirement 3.12.4) supporting the performance of a DoD contract--

(1) All industry Commercial and Government Entity (CAGE) code(s) associated with the information system(s) addressed by the system security plan; and

(2) A brief description of the system security plan architecture, if more than one plan exists.

(D) Date the assessment was completed.

(E) Summary level score (e.g., 95 out of 110, NOT the individual value for each requirement).

(F) Date that all requirements are expected to be implemented (i.e., a score of 110 is expected to be achieved) based on information gathered from associated plan(s) of action developed in accordance with NIST SP 800-171.

(ii) If multiple system security plans are addressed in the email described at paragraph (b)(1)(i) of this section, the Contractor shall use the following format for the report:

System security plan	CAGE codes supported by this plan	Brief description of the plan architecture	Date of assessment	Total score	Date score of 110 will achieved
_____	_____	_____	_____	_____	_____

(2) Medium and High Assessments. DoD will post the following Medium and/or High Assessment summary level scores to SPRS for each system security plan assessed:

(i) The standard assessed (e.g., NIST SP 800-171 Rev 1).

(ii) Organization conducting the assessment, e.g., DCMA, or a specific organization (identified by Department of Defense Activity Address Code (DoDAAC)).

(iii) All industry CAGE code(s) associated with the information system(s) addressed by the system security plan.

(iv) A brief description of the system security plan architecture, if more than one system security plan exists.

(v) Date and level of the assessment, i.e., medium or high.

(vi) Summary level score (e.g., 105 out of 110, not the individual value assigned for each requirement).

(vii) Date that all requirements are expected to be implemented (i.e., a score of 110 is expected to be achieved) based on information gathered from associated plan(s) of action developed in accordance with NIST SP 800-171.

(e) Rebuttals. (1) DoD will provide Medium and High Assessment summary level scores to the Contractor and offer the opportunity for rebuttal and adjudication of assessment summary level scores prior to posting the summary level scores to SPRS (see SPRS User's Guide https://www.sprs.csd.disa.mil/pdf/SPRS_Awardee.pdf).

(2) Upon completion of each assessment, the contractor has 14 business days to provide additional information to demonstrate that they meet any security requirements not observed by the assessment team or to rebut the findings that may be of question.

(f) Accessibility.

(1) Assessment summary level scores posted in SPRS are available to DoD personnel, and are protected, in accordance with the standards set forth in DoD Instruction 5000.79, Defense-wide Sharing and Use of Supplier and Product Performance Information (PI).

(2) Authorized representatives of the Contractor for which the assessment was conducted may access SPRS to view their own summary level scores, in accordance with the SPRS Software User's Guide for Awardees/Contractors available at https://www.sprs.csd.disa.mil/pdf/SPRS_Awardee.pdf.

(3) A High NIST SP 800-171 DoD Assessment may result in documentation in addition to that listed in this clause. DoD will retain and protect any such documentation as "Controlled Unclassified Information (CUI)" and intended for internal DoD use only. The information will be protected against unauthorized use and release, including through the exercise of applicable exemptions under the Freedom of Information Act (e.g., Exemption 4 covers trade secrets and commercial or financial information obtained from a contractor that is privileged or confidential).

(g) Subcontracts.

(1) The Contractor shall insert the substance of this clause, including this paragraph (g), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial products or commercial services (excluding commercially available off-the-shelf items).

(2) The Contractor shall not award a subcontract or other contractual instrument, that is subject to the implementation of NIST SP 800-171 security requirements, in accordance with DFARS clause 252.204-7012 of this contract, unless the subcontractor has completed, within the last 3 years, at least a Basic NIST SP 800-171 DoD Assessment, as described in https://www.acq.osd.mil/asda/dpc/cp/cyber/docs/safeguarding/NIST-SP-800-171-Assessment-Methodology-Version-1.2.1-6.24.2020.pdf, for all covered contractor information systems relevant to its offer that are not part of an information technology service or system operated on behalf of the Government.

(3) If a subcontractor does not have summary level scores of a current NIST SP 800-171 DoD Assessment (i.e., not more than 3 years old unless a lesser time is specified in the solicitation) posted in SPRS, the subcontractor may conduct and submit a Basic Assessment, in accordance with the NIST SP 800-171 DoD Assessment Methodology, to webptsmh@navy.mil for posting to SPRS along with the information required by paragraph (d) of this clause.

(End of clause)

252.215-7013 SUPPLIES AND SERVICES PROVIDED BY NONTRADITIONAL DEFENSE CONTRACTORS (JAN 2023)

Offerors are advised that in accordance with 10 U.S.C. 3457, supplies and services provided by a nontraditional defense contractor, as defined in DFARS 202.101, may be treated as commercial products or commercial services. The decision to apply commercial product or commercial service procedures to the procurement of supplies and services from a nontraditional defense contractor does not require a commercial product or commercial service determination and does not mean the supplies or services are commercial.

(End of provision)

252.219-7011 NOTIFICATION TO DELAY PERFORMANCE (JUN 1998)

The Contractor shall not begin performance under this purchase order until 2 working days have passed from the date of its receipt. Unless the Contractor receives notification from the Small Business Administration that it is ineligible for this 8(a) award, or otherwise receives instructions from the Contracting Officer, performance under this purchase order may begin on the third working day following receipt of the purchase order. If a determination of ineligibility is issued within the 2-day period, the purchase order shall be considered canceled.

(End of clause)

252.225-7048 EXPORT-CONTROLLED ITEMS (JUNE 2013)

(a) Definition. ``Export-controlled items," as used in this clause, means items subject to the Export Administration Regulations (EAR) (15 CFR Parts 730-774) or the International Traffic in Arms Regulations (ITAR) (22 CFR Parts 120-130). The term includes--

(1) ``Defense items," defined in the Arms Export Control Act, 22 U.S.C. 2778(j)(4)(A), as defense articles, defense services, and related technical data, and further defined in the ITAR, 22 CFR Part 120; and

(2) ``Items," defined in the EAR as ``commodities", ``software", and ``technology," terms that are also defined in the EAR, 15 CFR 772.1.

(b) The Contractor shall comply with all applicable laws and regulations regarding export-controlled items, including, but not limited to, the requirement for contractors to register with the Department of State in accordance

with the ITAR. The Contractor shall consult with the Department of State regarding any questions relating to compliance with the ITAR and shall consult with the Department of Commerce regarding any questions relating to compliance with the EAR.

(c) The Contractor's responsibility to comply with all applicable laws and regulations regarding export-controlled items exists independent of, and is not established or limited by, the information provided by this clause.

(d) Nothing in the terms of this contract adds, changes, supersedes, or waives any of the requirements of applicable Federal laws, Executive orders, and regulations, including but not limited to—

(1) The Export Administration Act of 1979, as amended (50 U.S.C. App. 2401, et seq.);

(2) The Arms Export Control Act (22 U.S.C. 2751, et seq.);

(3) The International Emergency Economic Powers Act (50 U.S.C. 1701, et seq.);

(4) The Export Administration Regulations (15 CFR Parts 730-774);

(5) The International Traffic in Arms Regulations (22 CFR Parts 120-130); and

(6) Executive Order 13222, as extended.

(e) The Contractor shall include the substance of this clause, including this paragraph (e), in all subcontracts.

(End of clause)

252.232-7004 DOD PROGRESS PAYMENT RATES (MAR 2020) (DEVIATION 2020-O0010)
If the Contractor is a small business concern, the Progress Payments clause of this contract is modified to change each mention of the progress payment rate and liquidation rate (excepting paragraph (k), Limitations on Undefinitized Contract Actions) to 95 percent.
(End of clause)

252.232-7010 LEVIES ON CONTRACT PAYMENTS (DEC 2006)

(a) 26 U.S.C. 6331(h) authorizes the Internal Revenue Service (IRS) to continuously levy up to 100 percent of contract payments, up to the amount of tax debt.

(b) When a levy is imposed on a payment under this contract and the Contractor believes that the levy may result in an inability to perform the contract, the Contractor shall promptly notify the Procuring Contracting Officer in writing, with a copy to the Administrative Contracting Officer, and shall provide--

(1) The total dollar amount of the levy;

(2) A statement that the Contractor believes that the levy may result in an inability to perform the contract, including rationale and adequate supporting documentation; and

(3) Advice as to whether the inability to perform may adversely affect national security, including rationale and adequate supporting documentation.

(c) DoD shall promptly review the Contractor's assessment, and the Procuring Contracting Officer shall provide a written notification to the Contractor including--

(1) A statement as to whether DoD agrees that the levy may result in an inability to perform the contract; and

(2)(i) If the levy may result in an inability to perform the contract and the lack of performance will adversely affect national security, the total amount of the monies collected that should be returned to the Contractor; or

(ii) If the levy may result in an inability to perform the contract but will not impact national security, a recommendation that the Contractor promptly notify the IRS to attempt to resolve the tax situation.

(d) Any DoD determination under this clause is not subject to appeal under the Contract Disputes Act.

(End of clause)

252.236-7001 CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000)

(a) The Government will provide to the Contractor, without charge, one (1) 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 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 govern small-scale 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 that 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 the 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 specifications and the contract drawings identified on the following index of drawings:

Title	File	Drawing No.
Mississippi River Outlets, Vicinity of Venice, Louisiana, Baptiste Collette Bar Channel, #24-2 Maintenance Dredging, Plaquemines Parish, Louisiana	H-16-48454	G-01 thru G-02 C-01 thru C-09

(End of clause)

252.236-7002 OBSTRUCTION OF NAVIGABLE WATERWAYS. (DEC 1991)

(a) The Contractor shall --

(1) Promptly recover and remove any material, plant, machinery, or appliance which the contractor loses, dumps, throws overboard, sinks, or misplaces, and which, in the opinion of the Contracting Officer, may be dangerous to or obstruct navigation;

(2) Give immediate notice, with description and locations of any such obstructions, to the Contracting Officer; and

(3) When required by the Contracting Officer, mark or buoy such obstructions until the same are removed.

(b) The Contracting Officer may --

(1) Remove the obstructions by contract or otherwise should the Contractor refuse, neglect, or delay compliance with paragraph (a) of this clause; and

(2) Deduct the cost of removal from any monies due or to become due to the Contractor; or

(3) Recover the cost of removal under the Contractor's bond.

(c) The Contractor's liability for the removal of a vessel wrecked or sunk without fault or negligence is limited to that provided in sections 15, 19, and 20 of the River and Harbor Act of March 3, 1899 (33 U.S.C. 410 et. seq.).

252.236-7004 PAYMENT FOR MOBILIZATION AND DEMOBILIZATION (DEC 1991)

(a) The Government will pay all costs for the mobilization and demobilization of all of the Contractor's plant and equipment at the contract lump sum price for this item.

(1) Sixty percent (60%) of the lump sum price upon completion of the contractor's mobilization at the work site.

(2) The remaining forty percent (40%)percent upon completion of demobilization.

(b) The Contracting Officer may require the Contractor to furnish cost data to justify this portion of the bid if the Contracting Officer believes that the percentages in paragraphs (a) (1) and (2) of this clause do not bear a reasonable relation to the cost of the work in this contract.

(1) Failure to justify such price to the satisfaction of the Contracting Officer will result in payment, as determined by the Contracting Officer, of --

(i) Actual mobilization costs at completion of mobilization;

(ii) Actual demobilization costs at completion of demobilization; and

(iii) The remainder of this item in the final payment under this contract.

(2) The Contracting Officer's determination of the actual costs in paragraph (b)(1) of this clause is not subject to appeal.

252.244-7000 SUBCONTRACTS FOR COMMERCIAL PRODUCTS OR COMMERCIAL SERVICES (NOV 2023)

(a) The Contractor shall not include the terms of any Federal Acquisition Regulation (FAR) clause or Defense Federal Acquisition Regulation Supplement (DFARS) clause in subcontracts for commercial products or commercial services at any tier under this contract, unless--

(1) For DFARS clauses, it is so specified in the particular clause; or

(2) For FAR clauses, the clause is listed at FAR 12.301(d) or it is so specified in paragraph (e)(1) of the clause at FAR 52.212-5 or paragraph (b)(1) of the clause at FAR 52.244-6, as applicable. (Section 847(b)(1)(B), Pub. L. 114-328)

(b)(1) In accordance with 10 U.S.C. 3457(c), the Contractor shall treat as commercial products any items valued at less than $10,000 per item that were purchased by the Contractor for use in the performance of multiple contracts with the Department of Defense and other parties and are not identifiable to any particular contract when purchased.

(2) The Contractor shall ensure that any items to be used in performance of this contract, that are treated as commercial products pursuant to paragraph (b)(1) of this clause, meet all terms and conditions of this contract that are applicable to commercial products or commercial services in accordance with the clause at FAR 52.244-6 and paragraph (a) of this clause.

(c) Subcontracts. The Contractor shall include the terms of this clause, including this paragraph (c), in subcontracts awarded under this contract, including subcontracts for the acquisition of commercial products or commercial services.

(End of clause)

Special Contract Requirements:
1) FAR provision 52.229-11 and FAR clause 52.229-12

FAR provision 52.229-11 and FAR clause 52.229-12 are included in this solicitation. This provision and clause concern the imposition of a 2 percent Federal excise tax withholding on any resultant contract award or payment request. This rule applies to Federal Government contracts for goods or services that are awarded to foreign persons – such as foreign contractors. It implements the Department of the Treasury's final regulations published in the Federal Register at 81 FR 55133 on August 18, 2016, under section 5000C of the Internal Revenue Code relating to the 2 percent tax on payments made by the U.S. Government to foreign persons pursuant to certain contracts.

Pursuant to the FAR 52.229-3 Federal, State, and Local Taxes, taxes imposed under 26 U.S.C. 5000 C may not be included in the contract price or reimbursed.

Exemptions from this excise tax must be claimed by an Offeror when it submits, with its offer, a U.S. Department of Treasury Internal Revenue Service (IRS) Form W-14, Certificate of Foreign Contracting Party Receiving Federal Procurement Payments, available via the internet at www.irs.gov/W14. If not submitted with the offer, exemptions will not be applied to any resulting contract and the Government will withhold a full 2 percent on each contract payment. Failure to submit an IRS Form W-14 with each payment request will also result in an automatic withholding of 2 percent from the payment request.

When filling out the IRS Form W-14 the following information may be used to complete Part I, Lines 6 and 7.

Line 6 Contract/reference number: *W912P824B0052*
Line 7 "Name and address of the acquiring agency": *USACE, New Orleans District*

Any exemption claimed and self-certified is subject to audit by the IRS. Any disputes concerning this tax are adjudicated by the IRS because the Section 5000C tax is a tax matter not a contract issue.

Offerors are encouraged to seek guidance from their own tax professionals for advice concerning the provision, clause, and exclusions exclusion/submission of IRS Form W-14. Additional information is also available at:

Notwithstanding the above, the USACE does not have a means of withholding this excise tax at this time. As a result, contractors are expected to comply with the instructions above and to properly complete and return the W-14 at proposal submission, and with each pay application. The amount due for each withholding will be confirmed by USACE, BUT WILL NOT BE WITHHELD. It is the contractor's responsibility to set aside, or remit to the IRS, the amount confirmed by USACE. Whether the contractor sets the money aside for future payment to the IRS, or makes payment to the IRS, is the contractor's discretion, based on its analysis of the regulations regarding the excise tax. In the event that USACE is able to withhold during contract performance, it will notify the contractor and make such a withholding (including any catch up withholdings); no advance notice is required to the contractor prior to the withholding. Under no circumstances is USACE liable for any tax not paid by the contractor. The contractor is liable for the tax, to the extent required by law, regardless of whether USACE makes a withholding.

FAR 29.204 expressly states that “[a]gencies merely withhold the tax (section 5000C tax) for the Internal Revenue Service (IRS). All substantive issues regarding the underlying section 5000C tax, e.g., the imposition of, and exemption from the tax, are matters under the jurisdiction of the IRS.” Therefore, we cannot help you determine how the tax law applies to you. We strongly recommend that you contact the IRS and/or a tax professional should you have any questions of this nature. To be clear, this information does not constitute tax advice or a representation of your tax liability. Furnishing this information does not create liability for the USACE for any Federal, state, or local taxes applicable to the above-referenced contract or any other contract.

****

For submission requirements and basis of evaluation:

Executed FAR Provision 52.229-11.
Completed IRS Form W-14, Certificate of Foreign Contracting Party Receiving Federal Procurement Payments, if applicable. If not submitted with the offer, exemptions will not be applied to any resulting contract and the Government will withhold a full 2 percent on each payment.

WAGE RATE DETERMINATION

U.S. Department of Labor Wage and Hour Division
Washington, D.C. 20210

Response to SF-308 Request for
Davis-Bacon Project Wage Determination

Project Wage Decision Number: **2024-LA-2415730805092024**

State: Louisiana

County: Lafourche Parish

Construction Type: Dredging

Agency: U.S. Army Corps of Engineers

Contract Number: W912P822B0031

Project Name: Port Fourchon Navigation Channel

Description of Work (as clarified):

Removal and satisfactory disposal of all material excavated from the Port Fourchon Navigation Channel

Date of Decision: 05/09/2024
Expires: 11/09/2024

Modification Number: N/A

Classification	Hourly Rate	Fringe Benefits
Derrick Operator	$17.20	$0.00
Dozer Operator	$17.20	$0.00
Dredge 16" "and Over		
Deckhand	$17.20	$0.00
Dredge Tender Operator	$17.20	$0.00
Fireman	$17.20	$0.00
First Assistant Engineer	$17.20	$0.00
Leverman	$17.20	$0.00

Oiler	$17.20	$0.00
Second Assistant Engineer	$17.20	$0.00
Shoreman	$17.20	$0.00
Third Assistant Engineer	$17.20	$0.00
Truck Driver	$17.20	$0.00
Dredge Under 16" "		
Deckhand	$17.20	$0.00
Dredge Tender Operator	$17.20	$0.00
Leverman	$17.20	$0.00
Oiler	$17.20	$0.00
Hydraulic Dredging		
First Cook	$17.20	$0.00
Handyman	$17.20	$0.00
Janitor, Cabin Person	$17.20	$0.00
Second Cook	$17.20	$0.00
Marsh Buggy, Dragline, Oiler.	$17.20	$0.00
Marsh Buggy, Dragline, Operator	$17.20	$0.00
Self-Propelled Hopper Dredge, Drag		
Tender	$17.20	$0.00

This wage determination is specifically for the project listed above. It cannot be used for any other purpose including contracts and or project.

The request for a Welder cannot be approved because the work of a welder is considered to be incidental to the craft for which welding is performed (i.e. ironworker, heavy equipment mechanic, etc.). Welders must receive the wage rate that prevails for the craft to which welding is incidental.

Further, in the event the above referenced contract is subject to Executive Order (EO) 14026 and the approved conformed hourly wage rate (not including any fringe benefits) is less than the EO minimum wage, you are required to comply with the minimum wage requirements of EO 14026, codified at 29 CFR Part 10. Please note that this EO 14026 applies to contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). See https://www.dol.gov/agencies/whd/government-contracts/eo14026 for additional information regarding EO 14026, including coverage and minimum wage requirements.

If you have any questions and or additional comments, please do not hesitate to contact me at thomas.rhontia@dol.gov.

Approved by:
Timothy Holmes
For
RhonTia Thomas-Johnson
Chief
Branch of Construction Wage Determinations
202-693-0087
Thomas.rhontia@dol.gov

CONSTRUCTION AND ARCHITECT-ENGINEER (A-E) CONTRACTS (UAI 5131.105)

(d)(2)(i)(B) For the predetermined schedule of construction equipment use rates, use Engineer Pamphlet (EP) 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule.

(End of special contract requirement)

NOTE1: Reference "Construction and Architect-Engineer Contracts" (FAR 31.105). Costs for repairs or overhauling are not allowed.

NOTE 2: A copy of the “EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE” for Region III can be obtained from the following website:

http://www.publications.usace.army.mil/Portals/76/Publications/EngineerPamphlets/EP_1110-1-8_Vol_03.pdf?ver=2017-05-15-131043-527

UAI CONTRACT CLAUSES

EVALUATION OF SUBLINE ITEMS (Dec 2019 - AFARS 5152.211-9000).

Item No. 0002 is subdivided into two or more estimated quantities and are to be separately priced. The Government will evaluate each of these items on the basis oftotal price of its subline items.

(End of Clause)

VARIATIONS IN ESTIMATED QUANTITIES - SUBLINE ITEMS (Dec 2019 – AFARS 5152.211-9001).

This variation in estimated quantities clause is applicable only to item No. 0002.

(a) Variation from the estimated quantity in the actual work performed under any second or subsequent subline item or elimination of all work under such a second or subsequent subline item will not be the basis for an adjustment in contract unit price.

(b) Where the actual quantity of work performed for item No.0002 is less than 85% of the quantity of the first subline item listed under such item, the contractor will be paid at the contract unit price for that subline item for the actual quantity of work performed and, in addition, an equitable adjustment shall be made in accordance with the clause at Federal Acquisition Regulation (FAR) 52.211-18, VARIATION IN ESTIMATED QUANTITY.

(c) If the actual quantity of work performed under item No. 0002 exceeds 115% or is less than 85% of the total estimated quantity of the subline item under that item and/or if the quantity of the work performed under the second subline item or any subsequent subline item under item Nos. NONE exceeds 115% or is less than 85% of the estimated quantity of any such subline item, and if such variation causes an increase or a decrease in the time required for performance of this contract the contract completion time will be adjusted in accordance with the clause
FAR 52.211-18, VARIATION IN ESTIMATED QUANTITY.

(End of Clause)

UAI 5152.222-9000 CONTRACTOR SUPPLY AND USE OF ELECTRONIC SOFTWARE FOR PROCESSING WAGE RATE REQUIREMENTS STATUTE CERTIFIED LABOR PAYROLLS (APR 2011)

(a) 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 Wage Rate Requirements statute.
(b) If the contractor elects to use an electronic 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 the Wage Rate Requirements statute. When the contractor uses an electronic 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 payroll system, then the contractor shall obtain and provide electronic system access to the Government, as required to comply with the Wage Rate Requirements 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.
(c) The contractor's provision and use of an electronic payroll processing system shall meet the following basic functional criteria:

(1) commercially available;
(2) compliant with appropriate Wage Rate Requirements statute payroll provisions in the Federal Acquisition Regulation (FAR);
(3) able to accommodate the required numbers of employees and subcontractors planned to be employed under the contract;
(4) capable of producing an Excel spreadsheet-compatible electronic output of weekly payroll records 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 RMS;
(5) demonstrated security of data and data entry rights;
(6) ability to produce contractor-certified electronic versions of weekly payroll data;
(7) ability to identify erroneous entries and track the date/time of all versions of the certified Wage Rate Requirements statute payrolls submitted to the government over the life of the contract;
(8) capable of generating a durable record copy, that is, a CD or DVD 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 payroll processing system shall be provided to the Government during contract closeout.
(d) 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 compliance with the Wage Rate Requirements statute by using electronic payroll processing services shall not be a separately bid or reimbursed item under this contract.

(End of clause)

UAI 5152.236-9009 PARTNERING (FEB 2000)

In order to most effectively accomplish this contract, the Government proposes to form a partnership with the Contractor to develop a cohesive building team. It is anticipated that this partnership would involve the **Project Development Team (PDT),** the Contractor, primary subcontractors and designers, and the Corps of Engineers. This partnership would strive to develop a cooperative management team drawing on the strengths of each team member in an effort to achieve a quality project within budget and on schedule. This partnership would be bilateral in membership and participation will be completely voluntary. Any cost associated with effectuating this partnership, excluding travel and lodging cost of Government personnel, will be borne by **the individual parties.** The partnering meetings shall be held **at a place and time as agreed upon by all concerned parties.**

(End of clause)

UAI 5152.249-9000 BASIS FOR SETTLEMENT OF PROPOSALS (MAR 2009)
Actual costs will be used to determine equipment costs for a settlement proposal submitted on the total cost basis under Federal Acquisition Regulation (FAR) 49.206-2(b). In evaluating a termination settlement proposal using the total cost basis, the following principles will be applied to determine allowable equipment costs:
(a) Actual costs for each piece of equipment, or groups of similar serial or series equipment, need not be available in the contractor's accounting records to determine total actual equipment costs.
(b) If equipment costs have been allocated to a contract using predetermined rates, those charges will be adjusted to actual costs.
(c) Recorded job costs adjusted for unallowable expenses will be used to determine equipment operating expenses.
(d) Ownership costs (depreciation) will be determined using the contractor's depreciation schedule (subject to the provisions of Federal Acquisition Regulation
(FAR) 31.205-11).
(e) License, taxes, storage and insurance costs are normally recovered as an indirect expense and unless the contractor charges these costs directly to contracts, they will be recovered through the indirect expense rate.

UAI 5152.231-9000 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE (MAR 1995)

(a) This clause does not apply to terminations. See UAI 5152.249-9000, Basis for Settlement of Proposals, and Federal Acquisition Regulation (FAR) part 49.

(b) Allowable costs for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a Contractor or Subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the Contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the Contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of Engineering Pamphlet (EP) 1110-1-8, "Construction Equipment Ownership and Operating Expense Schedule," Region III. 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 a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d) (ii) and FAR 31.205-36, Rental Costs. Rates for equipment rented from an organization under common control, lease-¬purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the simplified acquisition threshold (SAT), the Contracting Officer shall request the Contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

(End of Clause)

NOTE 1: Costs for repairs or overhauling are not allowed.

NOTE 2: A copy of the "EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE" for Region III can be obtained from the following website:
http://www.publications.usace.army.mil/Portals/76/Publications/EngineerPamphlets/EP_1110-1-8.pdf

UAI 22.1302-100 Veterans Employment Emphasis for U.S. Army Corps of Engineers Contracts

In addition to complying with the requirements outlined in FAR Part 22.13, FAR Provision 52.222-38, FAR Clause 52.222-35, FAR Clause 52.222-37, DFARS 222.13 and Department of Labor regulations, U.S. Army Corps of Engineers (USACE) contractors and subcontractors at all tiers are encouraged to promote the training and employment of U.S. veterans while performing under a USACE contract. While no set-aside, evaluation preference, or incentive applies to the solicitation or performance under the resultant contract, USACE contractors are encouraged to seek out highly qualified veterans to perform services under this contract. The following resources are available to assist USACE contractors in their outreach efforts:

U.S. Department of Labor Veterans employment: **www.vets.gov/**
Federal veteran employment information: **www.fedshirevets.gov/index.aspx**
Veterans' Employment and Training Service (VETS): **http://www.dol.gov/vets/**
Veterans Opportunity to Work (VOW) Program: **http://benefits.va.gov/vow/**
U.S. Army Warrior Transition Command Employment Index: **wtc.army.mil/modules/employers/index.html**
Hiring Our Heroes initiative: **www.uschamberfoundation.org/hiring-our-heroes**
Guide to Hiring Veterans: **www.whitehouse.gov/sites/default/files/**

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SECTION 01100 - GENERAL PROVISIONS

1. DAMAGE TO WORK

The responsibility for damage to any part of the permanent work shall be as set forth in the Contract Clause in Section 00700 entitled, PERMITS AND RESPONSIBILITIES (FAR 52.236-7). However, if, in the judgment of the Contracting Officer, any part of the permanent work performed by the Contractor is damaged by flood, earthquake, hurricane, or tornado which damage is not due to the failure of the Contractor to take reasonable precautions or to exercise sound engineering and construction practices in the conduct of the work, the Contractor shall make the repairs as ordered by the Contracting Officer and full compensation for such repairs will be made at the applicable contract unit price or Job prices as fixed and established in the contract. If, in the opinion of the Contracting Officer, there is no contract unit or Job prices applicable to any part of such work, an equitable adjustment shall be made pursuant to the Contract Clause in Section 00700 entitled, CHANGES (FAR 52.243-4). Except as herein provided; damage to all work (including temporary construction), utilities, materials, equipment and plant shall be repaired to the satisfaction of the Contracting Officer at the Contractor's expense, regardless of the cause of such damage.

2. SAFETY PROVISIONS

The safety provisions as specified herein refer to the March 2024 edition of EM 385-1-1. Safety will be in compliance with this referenced Corps of Engineers Safety Manual. This latest edition can be located on the following website:

https://www.publications.usace.army.mil/Portals/76/EM%20385-1-1%20_EFFECTIVE%2015March2024.pdf

Use of appropriate safety equipment is mandatory and not limited to hard hats, safety vests, and safety-toed boots. Any personnel not wearing proper personal protective equipment (PPE) shall be removed from the jobsite until PPE compliance has been established. The Contractor is responsible for daily clean up and complete restoration of the area once the contract is complete.

(a) Mishap Investigation and Reporting. The investigation, analysis, and reporting of accidents and near misses shall be governed as set forth in EM 385-1-1, Chapter 2-8.d. Utilize ENG Form 3394 to report accidents and near misses. Form can be found at:

https://www.publications.usace.army.mil/Portals/76/Publications/EngineerForms/Eng_Form_3394_2021Aug.pdf.

(b) Accident Prevention Plan (APP). (See the Contract Clause in Section 00700, entitled ACCIDENT PREVENTION (FAR 52.236-13).) Within 15 days after

receipt of Notice of Award of the contract, and at least 7 days prior to the prework conference, four copies of the Accident Prevention Plan shall be submitted to the Contracting Officer for review and acceptance. The plan shall be prepared in the following format: Link to fillable form ENG for 6293 (APP):

https://www.publications.usace.army.mil/LinkClick.aspx?fileticket=LmW_eJDoLpI%3d&tabid=16438&portalid=76&mid=43543

(1) Executed CESO Form A-02, Accident Prevention Plan Checklist, addressing each item/sub-item on the list: Link to fillable form:

http://www.usace.army.mil/Portals/2/docs/Safety/EM%20385-1-1,%202014%20Sections/Checklists/CESO%20Checklist%20A-02%20Accident%20Prevention%20Plan.pdf)

(2) Activity Hazard Analysis (AHA) Requirements. Contractor shall follow AHA requirements in EM 385-1-1, Chapter 2-6 utilizing ENG form 6206. Specific AHA requirements are identified in paragraph 6 of each chapter of EM 385-1-1. Link to fillable ENG form 6206 (AHA form):

https://www.publications.usace.army.mil/LinkClick.aspx?fileticket=K66no-4L-v4%3d&tabid=16438&portalid=76&mid=43543

(3) A copy of company policy statement regarding accident prevention.

(4) When marine plant and equipment are in use under a contract, the method of fuel oil transfer shall be included on MVN Form 385-10 (Latest Edition), Fuel Oil Transfer-Floating Plant, (available upon request). (Refer to 33 CFR 156).

The Contractor shall not commence physical work at the site until the Contracting Officer, or his/her authorized representative has accepted the Accident Prevention Plan. The Contractor may submit its Accident Prevention Plan only for the first phase of construction provided that it is accompanied by an outline of the remaining phases of construction. All remaining phases shall be submitted and accepted prior to the beginning of work in each phase. Also refer to Chapter 2 of EM 385-1-1.

(c) Comprehensive Hazard Communication (HazCom) Program. The Contractor shall develop, implement, and maintain at the workplace a written, Comprehensive Hazard Communication Program (see Chapter 6-7 of EM 385-1-1) that includes identification of potential hazards as prescribed in 29 CFR Part 1910.1200 and/or 1926.59, effects of exposure and control measures to be used for chemical products and physical agents that may be encountered during the performance of work on this contract, provisions for container labeling, Safety

Data Sheets, and employee training program, and other criteria in accordance with 29 CFR Part 1910.1200 and/or 1926.59. Training shall include communication methods and systems to be used (i.e., voice, hand signals, radios or other means), and training in the use and understanding of safety data sheets and chemical product hazard warning labels. Prior to bringing hazardous substances, as defined in 29 CFR 1910.1200 and/or 1926.59, onto the job site, a copy of the Hazard Communication Program and the Safety Data Sheets of each substance shall be submitted to the Contracting Officer and made available to the Contractor's employees as part of its Accident Prevention Plan. A site map shall be attached to the inventory showing where the inventoried hazardous substances are stored. The inventory list and site map shall be updated monthly to assure accuracy.

(d) Daily Inspections. The Contractor shall perform daily safety inspections and record them on the forms approved by the Contracting Officer. Reports of daily inspections shall be maintained at the jobsite in accordance with Section 01 45 04.00 10, CONTRACTOR QUALITY CONTROL. The reports shall be records of the daily inspections and resulting actions. Each report shall include, as a minimum, the following:

(1) Phase(s) of construction underway during the inspection.

(2) Locations of areas where inspections were made.

(3) Results of inspections, including nature of deficiencies observed and corrective actions taken, or to be taken, date, and signature of the person responsible for its contents.

(e) Safety Sign. The Contractor shall furnish, erect, and maintain a safety sign at the site where indicated by the Contracting Officer. The sign shall conform to the requirements of this paragraph and the drawing included at the end of this section. The lettering shall be black, the safety circle and cross green, and the background white. When placed on a floating plant, the sign may be half size. The sign shall be erected as soon as practicable, but not later than 15 calendar days after the date established for commencement of work. The data required shall be current. The sign coordinator is Timothy Lacoste@ 504.862.2663. The data required shall be current. No separate payment will be made for construction and erection of the safety sign and all costs in connection therewith will be considered an incidental obligation of the Contractor.

(f) Project Sign. Prior to commencement of work, the Contractor shall construct a project sign at the site of the work at a location directed by the Contracting Officer. The sign, which will identify the work with the Corps of Engineers shall be 4 feet by 6 feet in size and shall conform to the requirements of the PROJECT SIGN drawing and installation instructions attached at the end of this section. The lettering for the 2 feet by 4 feet section of the sign with the Corps logo shall

be white; all other lettering shall be black. Lettering for the project name shall be Helvetica Bold, all other lettering shall be Helvetica Regular. The sign coordinator is Mary H. Ferry @ 504.862.2000. No separate payment will be made for construction and erection of the project sign and all costs in connection therewith will be considered an incidental obligation of the Contractor. Upon completion of the work, the sign shall become the property of the Contractor and shall be removed from the job site. Project sign example attached.

(g) Ground Fault Protection Equipment. Electrical equipment used on this contract shall be equipped with ground fault circuit interrupters in accordance with EM 385-1-1, Chapter 11-8.

(h) Means of Escape for Personnel Quartered, or Working on Floating Plant. Two (2) means of escape shall be provided for assembly, sleeping, and messing areas on floating plants. For areas involving 10 or more persons, both means of egress shall be through standard size doors opening to different exit routes. Where nine (9) or fewer persons are involved, one (1) of the means of escape may be a window (minimum dimensions 24 inches by 36 inches) which leads to a different exit route. Refer to Chapter 19-8.h of EM 385-1-1

(i) Emergency Alarms and Signals.

(1) Alarms. Emergency alarms shall be installed and maintained on all floating plant requiring a crew where it is possible for either a passenger or crewman to be out of sight or hearing from any other person. The alarm system shall be operated from the primary electrical system with standby batteries on trickle charge that will automatically furnish the required energy during an electrical-system failure. A sufficient number of signaling devices shall be placed on each deck so that the sound can be heard distinctly at any point above the usual background noise. All signaling devices shall be so interconnected that actuation can occur from at least one (1) strategic point on each deck.

(2) Signals.

(a) Fire Alarm Signals. The general fire alarm signal shall be in accordance with paragraph 46 CFR Ch. I; Subpart E.109.503 of the Coast Guard Rules and Regulations for Cargo and Miscellaneous Vessels, Sub-Chapter I & Ia.

(b) Abandon Ship Signals. The signal for abandon ship shall be in accordance with paragraph 109.503(b) of the reference cited in (a) above.

(c) Man-Overboard Signal. Hail and pass the word to the bridge. All personnel and vessels capable of rendering assistance shall respond.

(j) Hurricane Plan. A detailed plan for protection and evacuation of personnel and plant in the event of an impending hurricane or storm is required as an enclosure to the Contractor's Accident Prevention Plan. This plan shall be submitted to the Contracting Officer, or his/her representative, for review prior to the preconstruction conference. Work being performed to satisfy the Hurricane Plan will not be measured for payment. Payment for all work associated with the Hurricane Plan, and providing the equipment required for the duration specified, shall be distributed amongst the existing bid items. The plan shall include at least the following:

(1) The time each phase of the plan will be put in effect. The time shall be the number of hours remaining for the storm to reach the worksite if it continues at the predicted speed and direction.

(2) The safe harbor for personnel and plant specifically identified.

(3) The name of the boat(s) which will be used to move the plant, its type, capacity, speed, and availability. If the boat to be used has not yet been identified, the Contractor shall indicate (a) if the vessel will come from his own resources or from an outside source, (b) the type of boat proposed, and (c) horsepower that would be needed. Upon verifying the boat to be used, the Contractor will amend the Hurricane Plan to document the boat name and the applicable information initially requested (type, capacity, speed, and availability). Finalization of this plan shall be completed prior to mobilization of the dredge to the availability.

(4) The estimated time necessary to move the plant to the safe harbor after movement is started.

(5) The estimated time necessary to secure and evacuate the site.

(k) Hazardous Energy Protection. The Contractor shall develop, implement and maintain at the workplace, a written Control of Hazardous Energy (Lockout/Tagout) System. Refer to Chapter 12 of EM 385-1-1.

(l) Emergency Drills. The Contractor shall conduct drills in accordance with EM 385-1-1, Chapter 19-8.b.

(m) Equipment Operator Authorization. The Contractor shall submit a list of designated personnel qualified and authorized to operate machinery and mechanized equipment in accordance with Chapter 16-3 of EM 385-1-1.

(n) Dive Plan. The Contractor shall submit a Dive Plan in accordance with Chapter 30-7.c of EM 385-1-1.

(o) Radiation. If a production meter that uses nuclear materials is being used aboard the dredge, the Contractor shall perform following requirements. The production meter nuclear device system designer and installer shall be qualified in these fields of expertise by the Nuclear Regulatory Commission (NRC). The Contractor shall obtain licensing and training as required by the NRC for his/her personnel aboard the dredge for the use of those components of the production meter containing or are affected by the nuclear source. The Contractor shall implement a Nuclear Device Awareness Program as required by the NRC for all personnel aboard the dredge not directly involved in the activities of the nuclear device. The Contractor shall submit a Nuclear Device Safety Plan to the Government within 24 hours after receipt of Notice to Proceed by the Contractor. While a nuclear device is present aboard the dredge, the Contractor shall strictly adhere to all applicable NRC rules and regulations.

(p) Crane/Derrick and Dragline Certification. The Contractor shall submit a copy of the certification and performance test in accordance with Chapter 16-3 of EM-385-1-1.

(q) Safety Management Program. If the Contractor is a currently accepted participant in the Dredging Contractors of America (DCA)/United States Army Corps of Engineers (USACE) Dredging Safety Management Program (DSMP), as determined by 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 to perform the work required under this contract, the Contractor may, in lieu of the submission of an Accident Prevention Plan (APP):

(1) Make available for review, upon request, the Contractor's current Safety Management System (SMS) documentation,

(2) Submit to the Contracting Officer the current valid Company Certificate of Compliance for its SMS,

(3) Submit the current dredge(s) Certificate of Compliance based on third party audit, and

(4) Submit for review and acceptance, site-specific addenda to the SMS as specified in the solicitation.

(r) SSHO Staffing

a. Dredging contracts may include several project sites; this contract will require a minimum of one (1) full time SSHO assigned per project site. SSHO may be collateral duty in specific conditions listed below.

b. Example of one (1) 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. On individual dredging project sites with work force less than eight (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 collateral – duty SSHO instead of having a full-time SSHO if the officer meets the SSHO training and experience requirements.

(s) Site Safety and Health Officer (SSHO). The Contractor shall have a qualified Site Safety and Health Officer (SSHO) on the construction site at all times that work is being performed to manage the Contractor's Accident Prevention Plan. The SSHO shall be a full-time responsibility and shall have no other duties (see EM 385-1-1, Chapter 12-4). The person(s), as a minimum, shall have completed the 30-hour OSHA Construction Industry Safety Class (may be web based training if the student is able to directly ask questions of the instructor by chat / phone) or an equivalent course (see EM 385-1-1, Chapter 2-3) applicable to the work to be performed, and given by a qualified instructor. Such training shall have been completed within the last three (3) years. SSHO's shall maintain competency through taking 24 hours of documented formal, on-line, or self-study safety and health coursework every 3 years. For projects with multiple shifts, an alternate SSHO shall be assigned to assure coverage of the project during all working hours. Alternate SSHO's (as listed in the Contractor's APP) must meet the same requirements as the primary SSHO. Alternate SSHO's may hold other positions when not functioning as an SSHO.

3. SIGNAL LIGHTS

The Contractor shall display signal lights and conduct his/her operations in accordance with U. S. Coast Guard regulations governing lights and day signals to be displayed, as set forth in Commandant, U. S. Coast Guard Instruction M16672.2C, Navigation Rules, International - Inland (COMDTINST M16672); 33 CFR 81, Appendix A (International); and 33 CFR 84 through 33 CFR 90 (Inland) as applicable.

4. CONTINUITY OF WORK

No payment will be made for work done in any area designated by the Contracting Officer until the full dimensions required under the contract are secured in the whole of such area, nor will payment be made for excavation in any area not adjacent to and in prolongation of areas where full dimensions have been secured except by decision of the Contracting Officer. Should any such non-adjacent area be excavated to full dimensions during the operations carried on under the contract, payment for all work therein may be deferred until the required dimensions have been made in the area intervening. The Contractor may be required to suspend dredging at any time when for any reason the gages or ranges cannot be seen or properly followed.

5. INSPECTION

(a) 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 shall furnish on the request of the Contracting Officer or any inspector:

(1) The use of such boats, boatmen, laborers and material forming 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.

(2) Suitable transportation from all points on shore designated by the Contracting Officer to and from the various pieces of plant, and to and from the disposal areas.

(b) When the Contractor elects not to work on weekends, holidays or nights, notice shall be given to the Contracting Officer at least 24 hours in advance thereof. Adequate lighting for thorough inspection of night operations shall be provided by the Contractor at his/her expense.

(c) Should the Contractor refuse, neglect, or delay compliance with these requirements, the specific facilities may be furnished and maintained by the Contracting Officer, and the cost thereof will be deducted from any amounts due or to become due to the Contractor.

6. SHOALING

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

7. ACCOMMODATIONS AND MEALS FOR INSPECTORS

(a) The Contractor shall furnish regularly to inspectors on board the dredge or other craft upon which they are employed a suitable separate room approximately 150 square feet in size for a Corps of Engineers field office. The room shall be fully equipped and maintained to the satisfaction of the Contracting Officer; it shall be properly heated, ventilated, air conditioned, and lighted, shall have sufficient electrical outlets with power surge protection to power a laptop computer and printer, shall have a desk which can be locked, and a drafting table measuring at least four (4) feet by six (6) feet (subject to room size suitability), a comfortable chair for each inspector, washing conveniences and daily janitorial services. This will not be a separate cost and will be included in the price of dredging. Should the Contractor have a photocopy machine on the jobsite, the Contractor may allow the use of his own in lieu of providing a separate machine for use by the Government inspector. The entire cost to the contractor for furnishing, equipping, and maintaining the foregoing accommodations, shall be distributed amongst the existing bid items. If the Contractor fails to meet these requirements, the facilities referred to above will be secured by the Contracting Officer, and the cost thereof will be deducted from payments to the Contractor.

(b) If the Contractor maintains on this work an establishment for the subsistence of his/her own employees, he/she shall, when required, furnish to inspectors employed on the work, and to all Government agents who may visit the work on official business, meals of quality satisfactory to the Contracting Officer. All meals shall be available for purchase, by the Government's inspectors and agents, at the cost not to exceed $3.25 per person for each meal.

8. SEAWORTHINESS CERTIFICATION

EM 385-1-1, Chapter 19-5. All dredges and quarter boats not subject to USCG inspection and certification or not having a current American Bureau of Shipping (ABS) classification shall be inspected in the working mode annually by a marine surveyor accredited by the National Association of Marine Surveyors (NAMS) or Society of Accredited Marine Surveyors (SAMS) and having at least five (5) years' experience in commercial marine plant and equipment. All other plant shall be inspected annually by a qualified person. The inspection shall be documented, and a copy of the most recent inspection report shall be posted in a public area on board the vessel and a copy shall be furnished to the designated authority upon request. The inspection shall be appropriate for the intended use of the plant and shall, as a minimum, evaluate structural integrity and compliance with NFPA 302, Fire Protection Standard for Pleasure and Commercial Motor Craft.

9. 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, 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 and required by the terms of this contract. If the order is not due in any part to acts or omissions of the Contractor (or a Subcontractor at any tier) other than as required by this contract, such suspension, delay, or interruption shall be as if ordered by the Contracting Officer under the Contract Clause in Section 00700 entitled, SUSPENSION OF WORK (FAR 52.242-14). 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 in that clause, subject to all the provisions thereof.

(b) The term "environmental litigation", as used herein, means a lawsuit alleging that the work has 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.

10. STATE TAXES

(a) The bid submitted in response to this Invitation shall not include any amount whatever for payment of any of the following taxes, fees or charges:

(1) The Louisiana "Severance Tax" imposed by LSA R.S. 47:631 and made applicable to the dredging of fill material from rivers and bodies of water within the State of Louisiana by the Severance Tax Regulations promulgated by the Collector of Revenue dated 31 March 1968.

(2) Any amounts claimed by the Louisiana Department of Wildlife and Fisheries for the privilege of removing fill from the water bottoms of the State of Louisiana.

(b) If the Contractor is required to pay or bear the burden of any tax, fee or charge described in paragraphs (a)(1) and/or (a)(2) above, the contract prices shall be increased by that amount which the Contractor is required to pay to the State of Louisiana; provided, however, that no increase in contract price shall be made for any liability the Contractor may incur as a result of his fault or negligence or his failure to follow the instructions of the Contracting Officer.

(c) The Contractor shall promptly notify the Contracting Officer of all matters pertaining to taxes, fees, or charges as described herein which reasonably may be expected to affect the contract price and shall at all times follow the directions and instructions of the Contracting Officer in regard to the payment of such taxes, fees, or charges.

(d) Before any increase in contract price becomes effective in accordance with the provisions of this clause, the Contractor shall warrant in writing that no

amount of such taxes, fees or charges was included in the contract price as a contingency reserve or otherwise.

11. FUEL CONSUMPTION REPORTING REQUIREMENTS

On the first day of each month, the Contractor shall furnish, to the Government Inspector, a report of the quantities of fuel consumed during the previous month in execution of the work covered by the contract. The quantities reported shall include fuel consumed by the Contractor and all of his/her subcontractors for the main plant and all support plant during the preceding month. This information may be consolidated and shall be included in the Report of Operations-Pipelines, Dipper or Bucket Dredges, MVN Form 4267; or in the Report of Operations-Hopper Dredges, ENG Form No. 27A (costs), as applicable.

12. RIGHTS-OF-WAY

(a) The rights of entry required for the work to be constructed under this contract, within the rights-of-way limits indicated on the drawings, have been obtained by the Government and are provided without cost to the Contractor. The Contractor shall make its own investigations to determine the conditions, restrictions, and difficulties which may be encountered in the transportation of equipment and material to and from the work site. The proposed work, including rights-of-way, as defined by these specifications and as shown on the drawings, is in compliance with all applicable Federal and state environmental laws and regulations. Upon completion of the Contractor's work, rights-of-way furnished by the Government shall be returned to its original condition prior to construction unless otherwise noted.

(b) If the Contractor proposes a deviation from the Government furnished rights-of-way for his convenience, the Contractor shall notify the Contracting Officer or its representative in writing. Contractor shall not provide any permanent rights-of-way for the project. The Contractor is cautioned that any deviation to the Government furnished rights-of-way is subject to all applicable Federal and state environmental laws and regulations. Compliance with these environmental laws and regulations may require additional National Environmental Policy Act (NEPA) documents, cultural resources surveys, coordination with the Louisiana State Historical Preservation Officer, water quality certification, modification of the Federal consistency determination, etc. The Government is ultimately responsible for environmental compliance; therefore, the Government will determine the additional environmental coordination and documentation necessary for a proposed deviation to the Government furnished rights-of-way. For any environmental investigations the Government is to perform on areas outside of Government furnished rights-of-way, the Contractor shall provide sufficient rights of entry to the Government. The Contracting Officer will advise the Contractor of the additional environmental coordination and documentation that must be completed. The Government shall be responsible for any additional

environmental compliance; however, the Contractor may conduct specific tasks identified by the Government. The Government will offer advice and assistance to the Contractor in conducting these tasks. Depending on the environmental impact of the proposed deviation, obtaining the coordination and documentation may not be approved or could take as much as 180 calendar days for approval by the Government. The Government must review, approve and ensure distribution of all environmental compliance documentation and ensure all comments on the same have been resolved before any utilization of any areas outside of the Government furnished rights-of-way. The Contractor shall reimburse the Government for actual expenses incurred for assistance in completing or attempting to complete additional environmental coordination and documentation, which expenses will not exceed one hundred thousand ($100,000.00) dollars. There is no guarantee that environmental compliance will be obtained; therefore, the Contractor shall assume all risks and liabilities associated with pursuing a deviation. Any delays resulting from the deviation and/or the environmental coordination and documentation shall not be made the basis of any Contractor claim for increase in the contract cost and/or increase in contract time. Deviations will be at Contractor's sole risk and liability, including, but not limited to, such liabilities associated with items such as hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601 et. seq.), and at no cost to the Government. Government assistance in obtaining additional environmental clearances does not relieve the Contractor of responsibility for complying with other Federal, state or local licenses and permits.

(c) The Contractor shall not utilize the Corps of Engineers Venice Sub-office or harbor for parking and/or getting on and off of boats.

13. CONTRACT COORDINATION

The Contractor shall assist the Government with available on-site plant and manpower in monitoring the water quality aspects of the dredging and disposal operations. This assistance shall consist of, but not be limited to, furnishing boat transportation, temporary storage of samples, etc.

14. CONTRACTOR'S RESPONSIBILITY

The Contractor shall be responsible for ensuring that all its employees strictly comply with all laws that may apply to operations under this contract. The Contractor assumes full responsibility for the safety of its employees, plant, and materials and for any damage or injury done by or to them from any source or cause, except damage caused by acts of the Government, its officers, agents or employees. Such damages will be the responsibility of the Government in accordance with applicable Federal laws. The terms "officer", "agent", and "employee" of the Government do not include persons in the employment of the Contractor and whose services have been furnished to the Government.

15. MOBILIZATION OF ATTENDANT PLANT

Pursuant to the Contract Clause in Section 00700 entitled, COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK (FAR 52.211-10), mobilization of all attendant plant, if required, shall be concurrent with dredge mobilization. Failure to timely mobilize such auxiliary/attendant plant may result in one (1) or more of the following actions by the Contracting Officer: reasonable suspension (without Government cost) of work until required plant is provided; formulation of credit to offset deficient plant; imposition of liquidated damages for late overall completion of the contract after excusable delays, if any. The Government's rights under any other Contract Clause are preserved.

16. ACCESS PLAN

The Contractor shall submit an Access Plan to be reviewed and approved by the Contracting Officer to include, as a minimum, the following:

(a) Layout drawings showing the location of all equipment, office structures, toilets, and storage areas for materials.

(b) Show mobilization and demobilization routing and locations of large equipment, such as draglines, cranes, and etc. while on the jobsite.

(c) Show waterway channels or canals used to mobilize and demobilize equipment and materials and show access routes and docking areas of all marine equipment with respect to the jobsite.

(d) Airboats and small outboards shall be used whenever practical to reduce the usage of marsh buggies. Existing trails and canals shall be utilized whenever possible. Marsh buggy use shall be limited to the construction limits of the project features.

17. SUPERVISION

At all times during performance of this contract and until the work is completed and accepted by the Government, the Contractor shall have on the worksite a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor. Inspectors appointed by the Contracting Officer will enforce strict compliance with the terms of the contract. The inspectors will keep a record of the work done, but neither the presence nor absence of inspectors shall relieve the Contractor of responsibility for the proper execution of the work in accordance with the contract and directives issued by the Contracting Officer.

18. PRE-BID SITE VISIT

Prior to the submission of any bids, all bidders are highly encouraged to visit the project site location to become familiar with the project requirements. Failure to visit the project site will not disqualify a bid; however, the bidder is required to comply with the terms and conditions of any resultant contract by reason of such failure. In no event will a failure to inspect the site constitute grounds for a claim after contract award.

19. AERIAL PHOTOGRAPHY DOCUMENTATION

The Contractor shall provide aerial photography documentation of the worksite and construction activities during the contract duration. At a minimum, the proposed disposal areas shall be flown three (3) times; namely: prior to initiation of dredging, at the approximate mid-point of the dredging operations, and upon completion of disposal activities. During the mid-point flight(s), in addition to a general overview, the significant features of work (dredge plant, discharge site, working equipment, etc.) shall be captured. In general, sufficient images shall be taken to thoroughly cover the project. All images must be sharp, clear, relevant and available in full JPEG format. The Contractor shall document/monitor all construction activities, before, during, and after construction using aerial photography at oblique angles. The deliverables shall be still photos that cover the extent of the contract operations. All photographs provided shall be labeled with (1) date of photography, (2) Photographic company name, and (3) Contract Number. Photographer shall have a minimum of 3 years' experience. The Government shall be granted unlimited use of all images without further costs. No measurement will be made for aerial photography documentation. Payment will be made at the contract job price for "Aerial Photography Documentation – OW", if Optional Work is exercised. Price and payment shall constitute full compensation for furnishing all plant, labor, materials and equipment for furnishing aerial photography documentation; including licensing and insurance; as specified herein.

20. WORK IN THE VICINITY OF OTHER GOVERNMENT CONTRACTORS

The Contractor shall coordinate his/her operations, through the Contracting Officer's Representative, with any other Government Contractors who may be working in the vicinity. The contractor shall coordinate his staging operations, access routes, and construction requirements with any contractor currently performing work in the general vicinity. Any disputes or disagreements arising from area use shall be brought to the attention of the Contracting Officer, who will then make a determination for operational procedures. Determinations made by the Contracting Officer shall be binding on all parties concerned.

21. CONTRACTOR PERFORMANCE EVALUATIONS – CONSTRUCTION

In accordance with the provisions of Subpart 36.201 (Evaluation of Contractor Performance) of the Federal Acquisition Regulation (FAR), construction contractor's performance shall be evaluated throughout the performance of the contract. The United States Army Corps of Engineers (USACE) follows the procedures outlined in Engineering Regulation 415-1-17 to fulfill this FAR requirement. For construction contracts awarded at or above the Simplified Acquisition Threshold, the USACE will evaluate contractor's performance and prepare a performance report using the Contractor Performance Assessment Reporting System **(**CPARS), which is now a web-based system. After an evaluation (interim or final) is written up by the USACE, the Contractor will have the ability to access, review and comment on the evaluation for a period of 30 days. Accessing and using CPARS requires specific software, called PKI certification, which is installed on the user's computer. The certification is a Department of Defense requirement and was implemented to provide security in electronic transactions. The certification software could cost approximately $110 - $125 per certificate per year and is purchased from an External Certificate Authorities (ECA) vendor. Current information about the PKI certification process and for contacting vendors can be found on the web site: http://www.cpars.gov. If the Contractor wishes to participate in the performance evaluation process, access to CPARS and PKI certification is the sole responsibility of the Contractor.

22. SECURITY REQUIREMENTS

a. Suspicious Activity Reporting Training (e.g. iWATCH, CorpsWatch, or See Something, Say Something). The Contractor will not have access to the CORPS network. This is an unclassified contract and the Contractor will not have access to critical information. The Contractor and all associated sub-contractors shall receive locally developed training provided by the New Orleans District Security Office on the Local Suspicious Activity Reporting Program. This training will be used to inform employees of the types of behavior to watch for and instruct employees to report suspicious activity relating to the project manager, security representative or law enforcement entity. The Contractor shall provide local background checks to New Orleans District Security Office before performing work. Point of contact is Joseph Ricchiazzi, 504.862.2953. This training shall be completed within 30 calendar days of contract award and within 30 calendar days of new employees commencing performance. The results of this training shall be reported to the COR within 5 calendar days after the completion of the training.

b. Pre-Screen Candidates Using E-Verify Program. The Contractor shall pre-screen Candidates using the E-verify Program (https://www.uscis.gov/e-verify) website to meet the established employment eligibility requirements. The Contractor shall ensure that the Candidate has two valid forms of Government issued identification prior to enrollment to ensure the correct information is entered into the E-verify system. An initial list of verified/eligible Candidates shall be provided to the COR no later than 3 business days after the initial contract

award. When contracts are with individuals, the individuals shall complete a Form I-9, Employment Eligibility Verification, with the designated Government representative. The completed Form I-9 shall be provided to the Contracting Officer and shall become part of the official contract file.

23. REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this contract and the requirements as defined within USACE EM 385-1-1, the Contractor shall comply with all pertinent federal, state, and local laws, ordinances, criteria, rules, 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 shall apply.

24. EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE

(a) This clause does not apply to terminations.

(b) Allowable costs for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a Contractor or Subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the Contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the Contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of Engineering Pamphlet (EP) 1110-1-8, "Construction Equipment Ownership and Operating Expense Schedule," Region III. 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 a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(2) (ii) and FAR 31.205-36, Rental Costs. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the simplified acquisition threshold (SAT), the Contracting Officer will request the Contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

NOTE: A copy of the "EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE" for Region III can be obtained from the following website:
https://www.publications.usace.army.mil/Portals/76/Users/182/86/2486/EP%201110-1-8_RV1-12.pdf?ver=x6psY-gBPGg5dSOqQdjEMg%3d%3d

25. DATUM RELATIONSHIPS

The following information is provided for informational use only and is not to be used for this contract. The purpose of this paragraph is to provide datum relationships between Mean Low Low Water (MLLW) datum and the currently used Mean Low Gulf (MLG) datum. This information is provided to comply with the requirements outlined in Engineering Manual, EM 1110-2-6056, Standards and Procedures for Referencing Project Elevation Grades to Nationwide Vertical Datums. This engineering manual was released in response to IPET Lessons Learned, in order to address datum and project control issues.

This datum relationship must be identified on the plans, in order to identify the adjustment from MLG to NAVD88 and Mean Lower Low Water (MLLW).

→ Baptiste Collette (at staff gage)
0.0' MLLW (2002-2006) = 0.0' NAVD88 (2009.55) = 3.5' MLG

→ Venice
0.0' MLLW (2002-2006) = 0.0' NAVD88 (2009.55) = 3.0' MLG

PROJECT CONTROL POINTS

The following information describing the project control points (PCPs) must be included in the specifications. These benchmarks have been incorporated in the NSRS database as required by EM 1110-2-6056.

→ **DESIGNATION:** **876 0849A TIDAL**
PID: AT1390

STATE/COUNTY: LA/PLAQUEMINES
LAT/LON: N 29°16'00.52795" W 089°21'10.35485"
NAD83 (2011)
NORTH/EAST: N 284,325.15' E 3,912,287.82' SPC LA S (US feet)

ELEVATION: 1.77 feet NAVD88 (2009.55)
ELEVATION: 4.77 feet MLG (2002-2006)
MARKER: BENCH MARK DISK
STAMPING: 0849 A 1985

DESCRIPTION: This monument is tied to the OD Venice staff gage. It is located in Venice, at the end of Hwy 23, 80 feet north from the north 1 of 2 yellow keypad support posts, 45 feet east from a red fire hydrant, 26 feet northeast from the center of a gravel road, 3.3 feet northeast from a metal post with witness sign attached, 1.6 feet from a carsonite witness post, and one (1) foot below the level of the ground.

→ **DESIGNATION: TBM BCWJ**
PID: BBCV45

STATE/COUNTY: LA/PLAQUEMINES
LAT/LON: N 29°21'45.64116" W 089°18'11.51033"
NAD83 (2011)
NORTH/EAST: N 319,458.07' E 3,927,508.33' SPC LA S (US feet)
ELEVATION: 0.88 feet NAVD88 (OPUS 2012)
ELEVATION: 4.38 feet MLG (2002-2006)
MARKER: BENCH MARK DISK
STAMPING: TBM BCWJ 2010 10-178C

DESCRIPTION: The monument is located in Plaquemines Parish, 7.1 miles northeast of Venice. To reach from the intersection of the Mississippi River and the Jump in Venice, travel upstream (north) on the Mississippi River 1.2 miles to the mouth of the Baptiste Collette Bayou on the right, turn into the Baptiste Collette Bayou and travel northeast for 6.2 miles to the monument on the right. It is an aluminum COE disk set flush with the ground, located 5.0 feet landside of the west rock jetty, 63 feet west of red day marker 16, and surrounded by three (3) witness posts.

Form A-02
U.S. Army Corps of Engineers
Accident Prevention Plan Checklist

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 30 Nov 2014. 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)
a. Signature sheet				
1. Includes the name, title, signature, telephone number, and qualifications of the Plan Preparer (*Qualified person, i.e. corporate safety staff person, QC*)				
2. Includes the name, title, signature, telephone number, and qualifications of the Plan Approver (*e.g. owner, company president, regional vice president*) (HTRW activities require approval of a Certified Industrial Hygienist, a Certified Safety Professional may approve the plan for operations involving UST removal where contaminants are known to be petroleum, oils, or lubricants).				
3. Includes the name(s), title(s), signature(s), telephone number(s), and qualifications 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.*)				
b. Background information				
1. Includes the Contractor Name.				
2. Includes the Contract Number.				
3. Includes the Project Name.				
4a. Includes the Brief Project Description.				
4b. Includes a Discription of the Work to be Performed.				
4c. Includes the Location of the Project (map).				
4d. Includes the Equipment to be Used.				
4e. Includes the Anticipated High Risk Activities.				
5. Includes the Major Phases of Work Anticipated. *(Within these major phases of work identified, activities [includes Definable features of Work (DFOWs) and tasks] to be performed that will require an AHA shall be specifically highlighted. This information can then be used by QC, QA and Safety personnel to track AHA submittals. The AHAs for these activities, tasks of DFOWs are NOT submitted at this time (AHAs created/submitted at this time would not be activity-specific as they are intended to be). > See Sections 01.A.14 and 01.A.15.)*				

Form A-02
U.S. Army Corps of Engineers
Accident Prevention Plan Checklist (cont'd)

Date of Inspection

Item Description	Yes	No	N/A	Remarks (Any NO or N/A item)
c. Statement of Safety and Health Policy.				
1. Provide a copy of current corporate/company Safety and Health Policy Statement, detailing commitment to providing a safe and healthful workplace for all employees. (*In addition to the corporate policy statement, a copy of the corporate safety program may provide a portion of the information required by the accident prevention plan*.)				
2. Includes Contractor's written safety program goals.				
3. Includes Contractor's written safety program objectives.				
4. Includes the Contractor Accident Experience (*Copy of OSHA 300 Forms, or equivalent documentation*).				
d. Responsibilities and Lines of Authority.				
1. Includes statement of the employer's ultimate responsibility for the implementation of his SOH program for his own employees, all sub-contractors and all others on the worksite (includes the strict enforcement of the program).				
2. Includes the identification and accountability of personnel responsible for safety and health at both the corporate and project level – including their resumes. Qualifications shall be in accordance with Section 01.A.17. *(Only official OSHA 30-Hour cards will be accepted or, if equivalent training is provided, appropriate instructor qualifications.)*				
3. Includes equivalent training to the OSHA 30-Hour classes is being presented as qualification, the training shall cover, as a minimum, the areas discussed in Appendix A, Section 3.d.3.(a-d).				
4. Includes the names of Competent (CP) and/or Qualified Person(s) (QP) and proof of competency/qualification to meet specific OSHA CP/QP requirements. *(Must include copies of proof of CP/QP).*				
5. Includes requirements and details of the employer's Risk Management Process. *(USACE uses the Activity Hazard Analysis (AHA) as part of a total risk management process. Contractors and other individual employer's may use the AHAs or their own version [Job Safety Analyses (JSAs), Job Hazard Analyses (JHAs), or similar Risk Management assessment tools]. These documents are considered equivalent to, and acceptable substitutes for, the USACE's AHA provided the data collected is the same as that required by the AHA.)*				
6. Includes requirements for initial activity-specific AHAs to be submitted and accepted at preparatory meetings, prior to work being performed;				
7. Includes requirements that no work by the Contractor shall be performed unless a designated Competent Person/SSHO is present on the job site.				
8. Includes policies and procedures regarding non-compliance with safety requirements (to include disciplinary actions for violation of safety requirements).				
9. Lines of authority.				
10. Includes written company procedures for holding managers and supervisors accountable for safety.				

Form A-02
U.S. Army Corps of Engineers
Accident Prevention Plan Checklist (cont'd)

Date of Inspection

Item Description	Yes	No	N/A	Remarks (Any NO or N/A item)
e. Subcontractors and Suppliers.				
1. Includes the list of subcontractors and suppliers. *(If not known at the time of initial APP submittal, the contractor shall include the following statement in their initial APP: "The subcontractors for the following DFOWs/activities are not known at this time, but additional information will be submitted to the APP for acceptance prior to the start of any activities listed")*				
2. Includes safety responsibilities of subcontractors and suppliers.				
f. Training				
1. Includes requirements for new hire SOH orientation training at the time of initial hire of each new employee.				
2. Includes 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.				
3. Includes procedures for periodic safety and health training for supervisors and employees.				
4. Includes the requirements for emergency response training.				
g. Safety and Health Inspections				
1. Includes specific assignment of responsibilities for a minimum daily jobsite SOH inspection during periods of work activity.				
1a. Includes the name(s) of individual(s) responsible for conducting safety inspections. (*e.g., PM, safety professional, QC, supervisors, employees*)				
1b. Includes proof of inspector's training / qualifications.				
1c. Indicates when inspections will be conducted.				
1d. Indicates procedures for documentation. *(Furnished sample forms upon which inspections will be recorded.)*				
1e. Indicates deficiency tracking system and follow-up procedures.				
2. Includes any external inspections / certifications which may be required. (*e.g., US Coast Guard*)				
h. Mishap Reporting and Investigation				
1. The plan identifies how, when, and who shall complete the Exposure data (man-hours worked).				
2a. The plan identifies how, when, and who shall complete mishap investigations, reports, and logs. *(The contractor shall report, thoroughly investigate, and analyze all mishaps occurring incidentally to an operation, project or facility for which this manual is applicable.)*				
2b. The plan identifies how, when, and who shall make immediate notification of major mishaps. *(Mishaps shall be reported as soon as possible but not more than 24 hours afterwards to the KO/COR.)*				
2c. Includes how, when, and who will provide notice to the KO/COR when corrective actions are completed. *(Implement corrective actions as soon as reasonably possible.)*				

Form A-02
U.S. Army Corps of Engineers
Accident Prevention Plan Checklist (cont'd)

Date of Inspection

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

(1)Include a project-specific compliance plan, as applicable to the work being performed, and as identified below. The plans shall incorporate project-wide procedures to control hazards to which the employees of all project employers may be exposed.

(2) These procedures shall be coordinated with all project employers and shall include project-specific, project-wide emergency response and evacuation procedures, PPE requirements, recordkeeping and reporting requirements, and training requirements.

(3) The plans shall be prepared prior to the start of any work activities on the job site (as much as the information can be known at that point in time). The plans shall be updated throughout the life of the project to include changes in personnel, equipment, conditions, etc. Additional revisions shall be incorporated as necessary to reflect changing site conditions, construction methods, personnel roles and responsibilities and construction schedules.

(4) No activity (DFOW) shall be started on site until the APP is revised and submitted to the GDA for acceptance, with the site-specific plans, programs and procedures required to complete the project.

Item Description	Yes	No	N/A	Remarks (Any NO or N/A item)
i. Plans (Programs, Procedures, Assessments, and Evaluations) required by the Safety Manual				
1. Fatigue Management Plan (01.A.20)				
2. Emergency Plans (01.E):				
(a) Procedures & Test (01.E.01)				
(b) Spill Plans (01.E.01, 06.A.02)				
(c) Fire Fighting Plan (01.E.01; 19.A)				
(d) Posting of Emergency Telephone Numbers (01.E.05)				
(e) Man overboard/abandon ship (19.A.04)				
(f) Plan for prevention of alcohol and drug abuse (01.C.02 & Specs)				
3. Site Sanitation/Housekeeping Plan (02.B)				
4. Medical Support Agreement. 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 (03.A.01, 03.A.03)				
5. Blood-borne Pathogen Program (03.A.05)				
6. Exposure Control Plan (03.A.05)				
7. Automatic External Defibrillator (AED) Program (03.B.04)				
8. Site Layout Plan (04.A)				
9. Access/Haul Road Plan (04.B)				
10. Hearing Conservation Program (05.C)				
11. Respiratory Protection Plan (05.G)				
12. Health Hazard Control Program (06.A)				
13. Hazard Communication Program (06.B.01)				
14. Process Safety Management Plan (06.B.04)				
15. Lead Compliance Plan (06.C.02 & Specifications)				
16. Asbestos Abatement Plan (06.C.03 & Specifications)				

Form A-02
U.S. Army Corps of Engineers
Accident Prevention Plan Checklist (cont'd)

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, programs, procedures (assessments and evaluations), may include but not be limited to:*

Item Description	Yes	No	N/A	Remarks (Any NO or N/A item)
i. Plans (Programs, Procedures) continued.				
17. Radiation Safety Program (06.F)				
18. Abrasive Blasting Plan (06.I)				
19. Heat Stress Monitoring Plan (HSMP) (06.J.02)				
20. Cold Stress Monitoring Plan (CSMP) (06.J.04)				
21. Indoor Air Quality Management Plan (06.L)				
22. Mold Remediation Plan (06.L.04)				
23. Chromium (VI) Exposure Evaluation (06.M)				
24. Crystalline Silica Assessment (06.N.02)				
25. Lighting Plan for Night Operations (07.A.06)				
26. Traffic Control Plan (08.C.05)				
27. Fire Prevention Plan (09.A.01)				
28. Wild Land Fire Management Plan (09.L)				
29. Arc Flash Hazard Analysis (11.B)				
30. Assured Equipment Grounding Control Program (AEGCP), (11.D.05, Appendix E)				
31. Hazardous Energy Control Program and Procedures (12.A.01)				
32. Standard Pre-Lift Plan – LHE (16.A.03)				
33. Critical Lift Plan – LHE (16.H)				
34. Naval Architectural Analysis – LHE (Floating) (16.L)				
35. Floating Plant Inspection and Certification (19.A.01)				
36. Severe Weather Plan for Marine Activities (19.A.03)				
37. Emergency Plan for Marine Activities (19.A.04)				
38. Man Overboard/Abandon Ship Procedures (19.A.04)				
39. Float Plan for Launches, Motorboats, Skiffs (19.F.04)				
40. Fall Protection and Prevention Plan (21.D)				
41. Demolition/Renovation Plan (to include engineering survey) (23.A)				
42. Rope Access Work Plan (24.H)				
43. Excavation/Trenching Plan (25.A.01)				
44. Fire Prevention and Protection Plan for Underground Construction (26.D.01)				
45. Compressed Air Work Plan for Underground Construction (26.I.01)				
46. Erection and Removal Plan for Formwork and Shoring (27.C)				
47. Precast Concrete Plan (27.D)				

Form A-02
U.S. Army Corps of Engineers
Accident Prevention Plan Checklist (cont'd)

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, programs, procedures (assessments and evaluations), may include but not be limited to:*

Item Description	Yes	No	N/A	Remarks (Any NO or N/A item)
i. Plans (Programs, Procedures) continued.				
48. Lift-slab Plans (27.E)				
49. Masonry Bracing Plan (27.F.01)				
50. Steel Erection Plan (28.B)				
51. Explosives Safety Site Plan (ESSP) (29.A)				
52. Blasting Plan (29.A; 26.J)				
53. Dive Operations Plan (30.A.14, 30.A.16)				
54. Safe Practices Manual for Diving Activities (30.A.15)				
55. Emergency Management Plan for Diving (30.A.18)				
56. Tree Felling/Maintenance Program (31.A.01)				
57. Aircraft/Airfield Construction Safety & Phasing Plan (CSPP) (32.A.02)				
58. Aircraft/Airfield Safety Plan Compliance Document (SPCD) (32.A.02)				
59. Site Safety and Health Plan (HTRW) (33.B)				
60. Confined Space Entry Procedures (34.A.05)				
61. Confined Space Program (34.A.06)				
j. Risk Management Processes (AHAs). Detailed project-specific hazards and controls shall be provided by Activity Hazard Analysis for each activity (DFOW). No work will begin on an activity (DFOW) until the initial AHA has been accepted by the GDA addressing the project-specific hazards. (01.A.14 & 01.A.15) *Note: USACE uses the Activity Hazard Analysis (AHA) as part of a total risk management process. Contractors and other individual employer's may use the AHAs or their own version [Job Safety Analyses (JSAs), Job Hazard Analyses (JHAs), or similar Risk Management assessment tools]. These documents are considered equivalent to, and acceptable substitutes for, the USACE's AHA provided the data collected is the same as that required by the AHA.*				

Remarks:

Form A-02 U.S. Army Corps of Engineers Accident Prevention Plan Checklist (cont'd)	Date of Inspection
Other Remarks:	

Activity Hazard Analysis (AHA)

Activity/Work Task:	Overall Risk Assessment Code (RAC) (Use highest code)
Project Location:	**Risk Assessment Code (RAC) Matrix**
Contract Number:	
Date Prepared:	
Prepared by (Name/Title):	
Reviewed by (Name/Title):	
Notes: (Field Notes, Review Comments, etc.)	

Severity	**Probability**				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	**E**	**E**	**H**	**H**	**M**
Critical	**E**	**H**	**H**	**M**	**L**
Marginal	**H**	**M**	**M**	**L**	**L**
Negligible	**M**	**L**	**L**	**L**	**L**

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

- **E = Extremely High Risk**
- **H = High Risk**
- **M = Moderate Risk**
- **L = Low Risk**

Job Steps	Hazards	Controls	RAC

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements

ACCIDENT PREVENTION PLAN

FUEL OIL TRANSFER -- FLOATING PLANT

U.S. Army Engineer District, New Orleans

EM 385-1-1, Section 19.A.06

1) Contractor	2) Contract Name & Number	3) Date	
4) Officer in Charge of Fuel Transfer	4a) Name of Vessel	4b) Fuel to be Transferred	
5) Name of Vessel	5a) Names of Qualified Tankermen	5b) Type of Certification and expiration date	

6) Name of Vessel	6a) Type of fill nozzle or connection on Vessel	6b) Location of fill pipes openings	6c) Location of vents openings	
7) Type, number, and size of fire fighting equipment to be available during fuel transfer operations.				
8) Sequential steps to be followed when taking on fuel.				
Contractor's Signature	Date	C.O. or C.O.R. Signature	Date	

Below are two samples of the construction project identification sign showing how this panel is adaptable for use to identify either military (top), or civil works projects (bottom). 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 on 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.

This sign is to be placed with the Safety Performance Sign shown on the following page. Mounting and fabrication details are provided on page 16.4.

Special applications or situations not covered in these guidelines should be referred to the District/Division sign coordinator.

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). Placed below 10.5″ Reverse Signature (6″ Castle).
Color: White
Typeface: 1.25″ Helvetica Regular

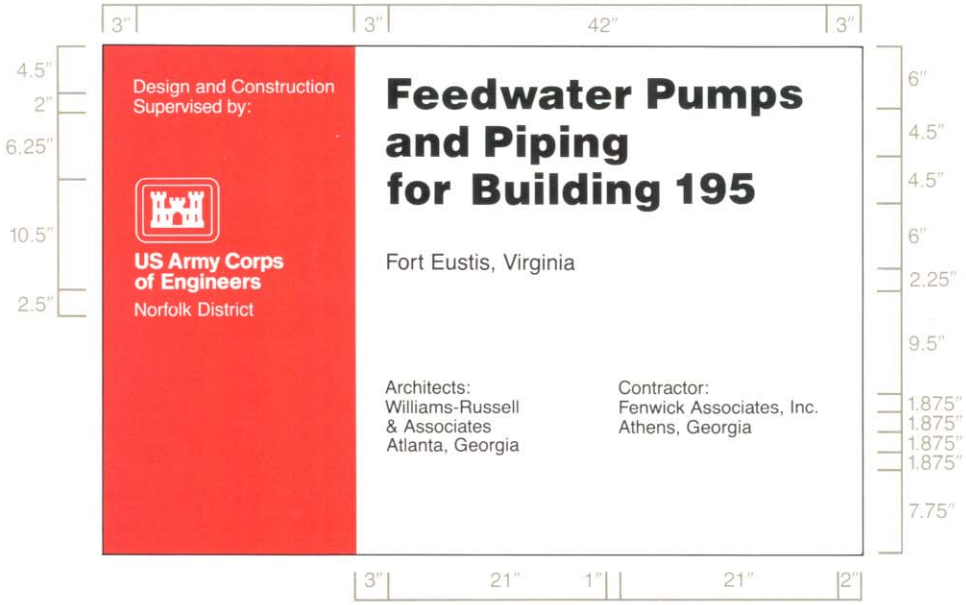
Legend Group 3: One- to three-line project title legend describes the work being done under this contract.
Color: Black
Typeface: 3″ Helvetica Bold
Maximum line length: 42″

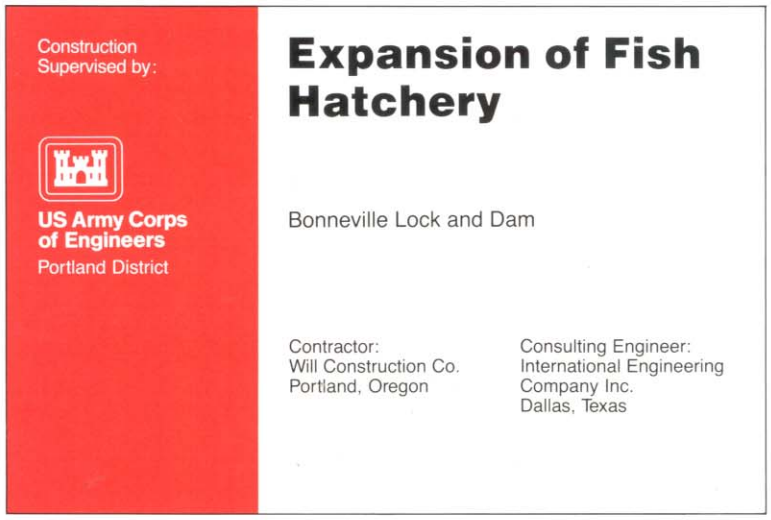
Legend Group 4: One- to two-line identification of project or facility (civil works) or name of sponsoring department (military).
Color: Black
Typeface: 1.5″ Helvetica Regular
Maximum line length: 42″

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

Legend Groups 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 as specified in Appendix D.





Sign Type	Legend Size	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

Each contractor's safety record is to be posted on Corps managed or supervised construction projectgs and mounted with the construction project identification sign specified on page 16.2.

The graphic format, color, size and typefaces 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 Groups 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.

Special applications or situations not covered in these guidelines should be referred to the District/Division sign coordinator.

Legend Group 1: 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: Black

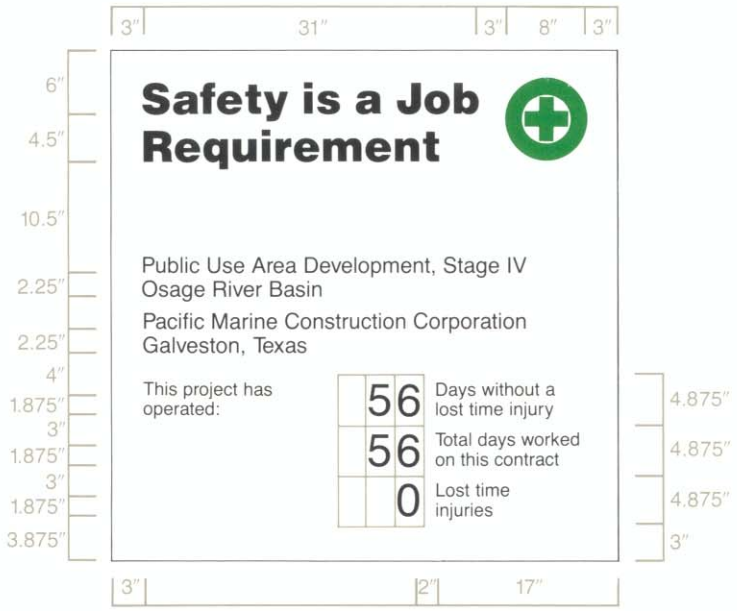
Legend Group 2: One- to two-line project title legend describes the work being done under this contract and name of host project.
Color: Black
Typeface: 1.5" Helvetica Regular
Maximum line length: 42"

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"

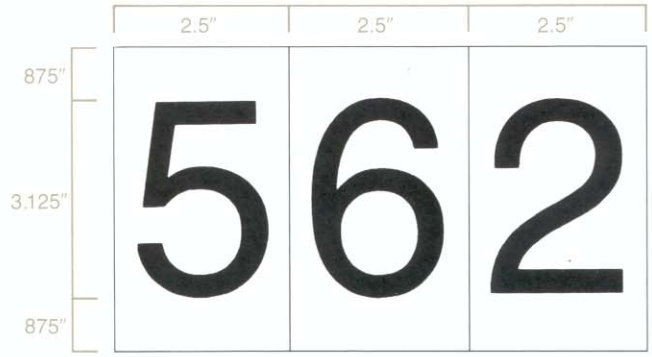
Legend Group 4: Standard safety record captions as shown.
Color: Black
Typeface: 1.25" Helvetica Regular

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 as specified in Appendix D.



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



All 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 shown on pages 16.2-3. Detailed specifications for HDO 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.

For additional information on the proper method to prepare sign panel graphics, contact the District sign coordinator.

The sign panels are to be fabricated from .75″ High Density Overlay Plywood. Panel preparation to follow HDO specifications provided in Appendix B.

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 pages 16.2-3.

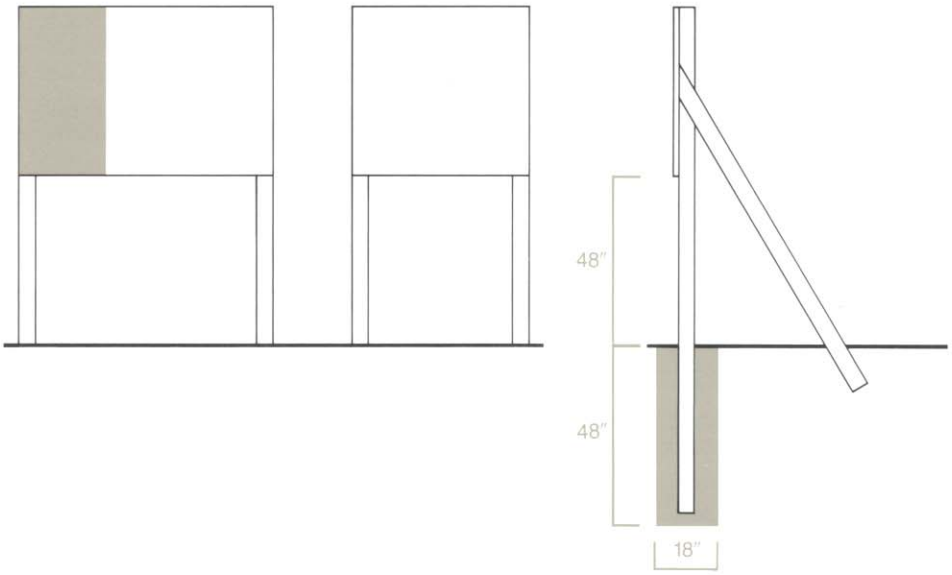
The 2′ x 4′ Communications Red panel (to match PMS-032) with full Corps signature (reverse version) is to be screen printed on the white background. Identification of the District or Division may be applied under the signature with white cut vinyl letters prepared to Corps standards. Large scale reproduction 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 HDO sign panel. Position holes as shown. Flange of T-nut to be flush with sign face.

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

Sign uprights to be structural grade 4″ x 4″ 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″ x 4″ struts on inside face of uprights to reinforce installation as shown.



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. _____

3″ 21″ 3″ 42″ 3″

Design and Construction
Supervised by:

US Army Corps
of Engineers

New Orleans District

U.S.ARMY

Replacement of North Spillway Gates

Vertically center the featured text group for the project location (below), depending on the number of text lines in the above project title.

Lock and Dam 12
Mississippi River

Contractor:
Oscar Construction Co.
Kansas City, Missouri

Consulting Engineer:
Wilmington, Rotheau, and
Eddings Engineering, Inc.
Chicago, Illinois

21″ 1″ 21″ 2″

3” | 31” | 3” | 8” | 3”

6” | 4.5” | 10.5” | 2.25” | 3” | 2.25” | 3” | 4.875” | 4.875” | 5”

Safety is a Job Requirement

Gap Closures at Pump Station #3,
Interim Protection Plan, Phase 1

U.D.H. Builders, Inc.
Baton Rouge, Louisiana

Example

This project started	3	5	04
Date since last Lost time accident			
Total lost time injuries			0

4.875” | 4.875” | 4.5” | 3”

3” | 21” | 24”

.75” | 3” | .75”

5 | 0 | 4

2.5” | 1.25” | 2.5” | 2.5”

(NOT TO SCALE)

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 33 00

SUBMITTAL PROCEDURES

04/30

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-- End of Section Table of Contents --

SECTION 01 33 00

SUBMITTAL PROCEDURES
04/30

PART 1 GENERAL

1.1 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for submittal requirements as specified herein. Payment for the work covered under this section shall be distributed throughout the existing bid items. Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

1.2 DEFINITIONS

1.2.1 Submittal Descriptions (SD)

Submittals requirements are specified in the technical sections. Submittals are identified by SD numbers and titles as follows.

SD-01 Preconstruction Submittals

Certificates of insurance.
Surety bonds.
List of proposed subcontractors.
List of proposed products.
Construction Progress Schedule.
Submittal register.
Schedule of prices.
Accident Prevention Plan.
Work Plan.
Quality Control Plan.
Environmental Protection Plan.
Traffic Control Plan.

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-05 Design Data

Design calculations, mix designs, analyses or other data pertaining to a part of work.

SD-07 Certificates

Statements printed on the manufacturer's letterhead and signed by

responsible officials of manufacturer of product, system or material attesting 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-09 Manufacturer's Field Reports

Documentation of the testing and verification actions taken by manufacturer's representative at the job site, in the vicinity of the job site, or on a sample taken from the job site, on a portion of the work, during or after installation, to confirm compliance with manufacturer's standards or instructions. The documentation must be signed by an authorized official of a testing laboratory or agency and must state the test results; and indicate whether the material, product, or system has passed or failed the test.

Factory test reports.

SD-11 Closeout Submittals

Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

1.2.2 Approving Authority

Office or designated person authorized to approve submittal.

1.2.3 Work

As used in this section, on-site and off-site construction required by contract documents, including labor necessary to produce submittals, 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. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Submittal Register; G

1.4 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.4.1 Government Approved

Governmental approval is required for 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 in Section 00700 entitled, SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FAR 52.236-21), they are considered to be "shop drawings." Any reference to Government approval by the Contracting Officer (CO) includes the approving authority of the CO, the Administrative Contracting Officer (ACO), or the Contracting Officer's representative (COR).

1.4.2 Information Only

They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.5 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that. 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 or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.6 DISAPPROVED SUBMITTALS

The Contractor shall respond to all concerns expressed by the Contracting Officer and promptly make any corrections necessary to address those concerns. The Contractor shall 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 in Section 00700 entitled, CHANGES (FAR 52.243-4), shall be given promptly to the Contracting Officer.

1.7 GENERAL

The Contractor shall submit all items listed on the Submittal Register (ENG Form 4288) or specified in the other sections of these specifications. The Contractor shall make submittals as required by the 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 on all 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 and each item shall be stamped, signed, and dated by the CQC representative indicating action taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include 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 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 manufacturer's Safety Data Sheets (SDS) and in compliance with existing laws and regulations.

1.8 SUBMITTAL REGISTER

1.9 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 30 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals.

1.10 TRANSMITTAL FORM (ENG FORM 4025-R)

The transmittal form (ENG Form 4025-R) attached to this section shall be used for submitting both Government-approved and information-only submittals in accordance with the instructions on the reverse side of the form. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall be exercised to ensure proper listing of the contract specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item. In order to expedite review of submittals, an electronic copy of all submittals shall be sent to the Contracting Officer's Representative along with the hard copies. Each submittal shall be submitted in electronic (.pdf) form. Electronic files shall be .pdf, .dgn, .doc, .do
or other format acceptable to the Contracting Officer's Representative.

1.11 SUBMITTAL PROCEDURES

Submittals shall be made as follows:

1.11.1 Procedures

Procedures for submittal will be stipulated by the Contracting Officer at the preconstruction conference.

1.11.2 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 writing 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.

1.12 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."

1.13 GOVERNMENT APPROVED SUBMITTALS

All submittals shall be received through RMS, including any attachments. Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. The Contractor shall provide at least one (1) hard copy to the Government Inspector of all submittals. This copy will be retained by the Contracting Officer. If the Contractor required the return of any hard copies for their records, these copies shall be provided in addition to the one (1) Government copy at the time of submittal.

1.14 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to 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. The Contractor shall also submit electronic copies (i.e., .pdf files) of all submittals to expedite the review and approval process.

1.15 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

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 --

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
Baptiste Collette 24-2

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					
							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	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		01 33 00	SD-01 Preconstruction Submittals															
			Submittal Register	1.7	G													
		01 45 04.00 10	SD-01 Preconstruction Submittals															
			Contractor Quality Control Plan		G CD													
		01 57 20.01 12	SD-01 Preconstruction Submittals															
			Environment Pollution Control															
			Plan															
			SD-02 Shop Drawings															
			Bird Nesting Prevention Plan	3.3.1.3	G ODT													
		01 78 02.00 10	SD-02 Shop Drawings															
			As-Built Drawings	1.3.1	G EDC													
			As-Built Drawings	1.3.1	G EDC													
		02 21 10.00 12	SD-02 Shop Drawings															
			Preliminary Field Surveys		G CD													
			Before and After Dredging Cross															
			Sections															
			Disposal Area Surveys															
			SD-05 Design Data															
			Compiled Survey Data CD Disk															
			Preliminary Field Surveys		G ED													
			Before and After Dredging Cross		G ED													
			Sections															
			Disposal Area Surveys		G ED													
			SD-09 Manufacturer's Field															
			Reports															
			Calibration checks															

SUBMITTAL REGISTER

CONTRACT NO.

TITLE AND LOCATION
Baptiste Collette 24-2

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	CLASSIFICATION	GOVT OR A/E REVWR	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY					
							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	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	REMARKS
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		35 20 23.00 12	SD-01 Preconstruction Submittals															
			Dredge Plant Data	1.7.2														
			Plan of Operation	3.2.2														
			Disposal of Dredged Material		G EDC													
			Access Plan		G EDC													
			Construction Schedule		G CDT													
			SD-07 Certificates															
			Certified Letters		G EDC													
			SD-11 Closeout Submittals															
			Report of Operations		G EDC													
		35 20 23.33	SD-01 Preconstruction Submittals															
			Dredge Plant Instrumentation		G OM													
			Plan Revisions															
			SD-07 Certificates															
			Letter of National Dredging		G EDC													
			Quality Management Program															
			Certification															

U.S. Army Corps of Engineers (USACE)

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

For use of this form, see ER 415-1-10; the proponent agency is CECW-CE.

DATE	TRANSMITTAL NO.

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (*This section will be initiated by the contractor*)

TO:	FROM:	CONTRACT NO.	CHECK ONE: ☐ THIS IS A NEW TRANSMITTAL ☐ THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SEC. NO. (*Cover only one section with each transmittal*)	PROJECT TITLE AND LOCATION	THIS TRANSMITTAL IS FOR: (*Check one*) ☐ FIO ☐ GA ☐ DA ☐ CR ☐ DA/CR ☐ DA/GA

ITEM NO. (*See Note 3*)	**DESCRIPTION OF SUBMITTAL ITEM** (*Type size, model number/etc.*)	**SUBMITTAL TYPE CODE** (*See Note 8*)	**NO. OF COPIES**	**CONTRACT DOCUMENT REFERENCE**		**CONTRACTOR REVIEW CODE**	**VARIATION** Enter "Y" if requesting a variation (*See Note 6*)	**USACE ACTION CODE** (*Note 9*)
				SPEC. PARA. NO.	**DRAWING SHEET NO.**			
a.	**b.**	**c.**	**d.**	**e.**	**f.**	**g.**	**h.**	**i.**

REMARKS

I certify that the above submitted items had been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.

NAME OF CONTRACTOR	SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (*List by item No.*)	NAME AND TITLE OF APPROVING AUTHORITY	SIGNATURE OF APPROVING AUTHORITY	DATE

INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.

2. Each Transmittal shall be numbered consecutively. The Transmittal Number typically includes two parts separated by a dash (-). The first part is the specification section number. The second part is a sequential number for the submittals under that spec section. If the Transmittal is a resubmittal, then add a decimal point to the end of the original Transmittal Number and begin numbering the resubmittal packages sequentially after the decimal.

3. The "Item No." for each entry on this form will be the same "Item No." as indicated on ENG FORM 4288-R.

4. Submittals requiring expeditious handling will be submitted on a separate ENG Form 4025-R.

5. Items transmitted on each transmittal form will be from the same specification section. Do not combine submittal information from different specification sections in a single transmittal.

6. If the data submitted are intentionally in variance with the contract requirements, indicate a variation in column h, and enter a statement in the Remarks block describing he detailed reason for the variation.

7. ENG Form 4025-R is self-transmitting - a letter of transmittal is not required.

8. When submittal items are transmitted, indicate the "Submittal Type" (*SD-01 through SD-11*) in column c of Section I.
   Submittal types are the following:
   SD-01 - Preconstruction SD-02 - Shop Drawings SD-03 - Product Data SD-04 - Samples SD-05 - Design Data SD-06 - Test Reports
   SD-07 - Certificates SD-08 - Manufacturer's Instructions SD-09 - Manufacturer's Field Reports SD-10 - O&M Data SD-11 - Closeout

9. For each submittal item, the Contractor will assign Submittal Action Codes in column g of Section I. The U.S. Army Corps of Engineers approving authority will assign Submittal Action Codes in column i of Section I. The Submittal Action Codes are:

   A -- Approved as submitted.
   B -- Approved, except as noted on drawings. Resubmission not required.
   C -- Approved, except as noted on drawings. Refer to attached comments. Resubmission required.
   D -- Will be returned by separate correspondence.
   E -- Disapproved. Refer to attached comments.
   F -- Receipt acknowledged.
   X -- Receipt acknowledged, does not comply with contract requirements, as noted.
   G -- Other action required *(Specify)*
   K -- Government concurs with intermediate design. (*For D-B contracts*)
   R -- Design submittal is acceptable for release for construction. (*For D-B contracts*)

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract.

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RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE(RMS CM)

11/16

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RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE(RMS CM)
11/16

PART 1 GENERAL

1.1 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for Resident Management System requirements as specified herein. Payment shall be distributed throughout the existing bid items.

1.2 REFERENCES

The publications listed below form a part of this section 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	(2024) Safety and Occupational Health Requirements
RMS CM Guide	(2021) Resident Management System (RMS) User Manual For Contractors

1.3 CONTRACT ADMINISTRATION

The Government will use the Resident Management System (RMS) to assist in its monitoring and administration of this contract. The Government accesses the system using the Government Mode of RMS (RMS GM) and the Contractor accesses the system using the Contractor Mode (RMS CM). The term RMS will be used in the remainder of this section for both RMS GM and RMS CM. The joint Government-Contractor use of RMS facilitates electronic exchange of information and overall management of the contract. The Contractor accesses RMS to record, maintain, input, track, and electronically share information with the Government throughout the contract period in the following areas:

Administration
Finances
Quality Control
Submittal Monitoring
Scheduling
Closeout
Import/Export of Data

For assistance in providing contract-required data to the Government, the Contractor is directed to the following website for guidance: https://rms.usace.army.mil/datafiles/rms_qcs_manuals/qcs_manual_2_38.pdf

1.3.1 Correspondence and Electronic Communications

For ease and speed of communications, exchange correspondence and other documents in electronic format to the maximum extent feasible. Some

correspondence, including pay requests and payrolls, are also to be provided in paper format with original signatures. Paper documents will govern, in the event of discrepancy with the electronic version.

1.3.2 Other Factors

Other portions of this document have a direct relationship to the reporting accomplished through RMS. Particular attention is directed to Contract Clause, 52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS; Contract Clause, 52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS; Contract Clause, 52.232-15 PAYMENTS UNDER FIXED-PRICED CONSTRUCTION CONTRACTS; Section 01 33 00 SUBMITTAL PROCEDURES; and Section 01 45 04.00 10 CONTRACTOR QUALITY CONTROL.

1.4 RMS SOFTWARE

RMS is a Windows-based program that can be run on a Windows-based PC meeting the requirements as specified in Paragraph: SYSTEM REQUIREMENTS. Download, install and be able to utilize the latest version of the RMS software within seven (7) calendar days of receipt of the Notice to Proceed. RMS software, user manuals (RMS CM Guide), access and installation instructions, program updates and training information are available from the RMS website https://rms.usace.army.mil/datafiles/rmsdocwebsite/default.html). The Government and the Contractor will have different access authorities to the same contract database through RMS. The common database will be updated automatically each time a user finalizes an entry or change.

1.5 SYSTEM REQUIREMENTS

The following is the recommended system configuration to run the Contractor Mode RMS for full utilization of all features for all types and sizes of contracts. Smaller, less complicated, projects may not require the configuration levels described below. Required configuration also noted below.

Minimum RMS System Requirements	
Hardware	
Windows-based PC	1.7 GHz i3; AMD A6 3650 GHz or higher processor (REQUIRED)
RAM	8 GB
Hard drive disk	100 GB space for sole use by RMS system
Monitor	Screen resolution 1366 x 768
Mouse or other pointing device	
Windows compatible printer	Laser printer must have 4 MB+ of RAM
Connection to the Internet	minimum 10 Mbs per user
Software	

Minimum RMS System Requirements	
MS Windows	Windows 10 Windows 8 x 64 bit (RMS requires 64 bit O/S) or newer (REQUIRED)
Word Processing software	Viewer for MS Word 2013, MS Excel 2013 or newer (REQUIRED)
E-mail	MAPI compatible (REQUIRED)
Virus protection software	Regularly upgraded with all issued Manufacturer's updates and is able to detect most zero day viruses (REQUIRED)

1.6 CONTRACT DATABASE - GOVERNMENT

The Government will enter the basic contract award data in RMS prior to granting the Contractor access. The Government entries into RMS will generally be related to submittal reviews, correspondence status, and Quality Assurance(QA)comments, as well as other miscellaneous administrative information.

1.7 CONTRACT DATABASE - CONTRACTOR

Contractor entries into RMS establish, maintain, and update data throughout the duration of the contract. Contractor entries generally include prime and subcontractor information, daily reports, submittals, RFI's, schedule updates and payment requests. RMS includes the ability to import attachments and export reports in many of the modules, including submittals. The contractor responsibilities for entries in RMS typically include the following items:

1.7.1 Administration

1.7.1.1 Contractor Information

Enter all current Contractor administrative data and information into RMS within seven (7) calendar days of receiving access to the contract in RMS. This includes, but is not limited to, Contractor's name, address, telephone numbers, management staff, and other required items.

1.7.1.2 Subcontractor Information

Enter all missing subcontractor administrative data and information into RMS CM within seven (7) calendar days of receiving access to the contract in RMS or within seven (7) calendar days of the signing of the subcontractor agreement for agreements signed at a later date. This includes name, trade, address, phone numbers, and other required information for all subcontractors. A subcontractor is listed separately for each trade to be performed.

1.7.1.3 Correspondence

Identify all Contractor correspondence to the Government with a serial number. Prefix correspondence initiated by the Contractor's site office with "S". Prefix letters initiated by the Contractor's home (main) office

with "H". Letters are numbered starting from 0001. (e.g., H-0001 or S-0001). The Government's letters to the Contractor will be prefixed with "C" or "RFP".

1.7.1.4 Equipment

Enter and maintain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates.

1.7.1.5 Reports

Track the status of the project utilizing the reports available in RMS. The value of these reports is reflective of the quality of the data input. These reports include the Progress Payment Request worksheet, Quality Control (QC) comments, Submittal Register Status, and Three-Phase Control worksheets.

1.7.1.6 Request For Information (RFI)

Create and track all Requests For Information (RFI) in the RMS Administration Module for Government review and response.

1.7.2 Finances

1.7.2.1 Pay Activity Data

Develop and enter a list of pay activities in conjunction with the project schedule. The sum of pay activities equals the total contract amount, including modifications. Each pay activity must be assigned to a Contract Line Item Number (CLIN). The sum of the activities assigned to a CLIN equals the amount of each CLIN.

1.7.2.2 Payment Requests

Prepare all progress payment requests using RMS. Update the work completed under the contract at least monthly, measured as percent or as specific quantities. After the update, generate a payment request and prompt payment certification using RMS. Submit the signed prompt payment certification and payment request as well as supporting data either electronically or by hard copy. Unless waived by the Contracting Officer, a signed paper copy of the approved payment certification and request is also required and will govern in the event of discrepancy with the electronic version.

1.7.3 Quality Control (QC)

Enter and track implementation of the 3-phase QC Control System, QC testing, transferred and installed property and warranties in RMS. Prepare daily reports, identify and track deficiencies, document progress of work, and support other Contractor QC requirements in RMS. Maintain all data on a daily basis. Ensure that RMS reflects all quality control methods, tests and actions contained within the Contractor Quality Control (CQC) Plan and Government review comments of same within seven (7) calendar days of Government acceptance of the CQC Plan.

1.7.3.1 Quality Control (QC) Reports

The Contractor's Quality Control (QC) Daily Report in RMS is the official

report. The Contractor can use other supplemental formats to record QC data, but information from any supplemental formats are to be consolidated and entered into the RMS QC Daily Report. Any supplemental information may be entered into RMS as an attachment to the report. QC Daily Reports must be finalized and signed in RMS within 24 hours after the date covered by the report. Provide the Government a printed signed copy of the QC Daily Report, unless waived by the Contracting Officer.

1.7.3.2 Deficiency Tracking.

Use the QC Daily Report Module to enter and track deficiencies. Deficiencies identified and entered into RMS by the Contractor or the Government will be sequentially numbered with a QC or QA prefix for tracking purposes. Enter each deficiency into RMS the same day that the deficiency is identified. Monitor, track and resolve all QC and QA entered deficiencies. A deficiency is not considered to be corrected until the Government indicates concurrence in RMS.

1.7.3.3 Three-Phase Control Meetings

Maintain scheduled and actual dates and times of preparatory and initial control meetings in RMS. Worksheets for the three-phase control meetings are generated within RMS.

1.7.3.4 Labor and Equipment Hours

Enter labor and equipment exposure hours on a daily basis. Roll up the labor and equipment exposure data into a monthly exposure report.

1.7.3.5 Accident/Safety Reporting

Both the Contractor and the Government enter safety related comments in RMS as a deficiency. The Contractor will monitor, track and show resolution for safety issues in the QC Daily Report area of the RMS QC Module. In addition, follow all reporting requirements for accidents and incidents as required in EM 385-1-1 and as required by any other applicable Federal, State or local agencies.

1.7.3.6 Definable Features of Work

Enter each feature of work, as defined in the approved CQC Plan, into the RMS QC Module. A feature of work may be associated with a single or multiple pay activities, however a pay activity is only to be linked to a single feature of work.

1.7.3.7 Activity Hazard Analysis

Import activity hazard analysis electronic document files into the RMS QC Module utilizing the document package manager.

1.7.4 Submittal Management

Enter all current submittal register data and information into RMS within seven (7) calendar days of receiving access to the contract in RMS. The information shown on the submittal register following the specification section 01 33 00 SUBMITTAL PROCEDURES will already be entered into the RMS database when access is granted. Group electronic submittal documents into transmittal packages to send to the Government, except very large electronic files, samples, spare parts, mock ups, color boards, or where

hard copies are specifically required. Track transmittals and update the submittal register in RMS on a daily basis throughout the duration of the contract. Submit hard copies of all submittals unless waived by the Contracting Officer.

1.7.5 Schedule

Enter and update the contract project schedule in RMS by either manually entering all schedule data or by importing the Standard Data Exchange Format (SDEF) file.

1.7.6 Closeout

Closeout documents, processes and forms are managed and tracked in RMS by both the Contractor and the Government. Ensure that all closeout documents are entered, completed and documented within RMS.

1.8 IMPLEMENTATION

Use of RMS as described in the preceding paragraphs is mandatory. Ensure that sufficient resources are available to maintain contract data within the RMS system. RMS is an integral part of the Contractor's required management of quality control.

1.9 NOTIFICATION OF NONCOMPLIANCE

Take corrective action within seven (7) calendar days after receipt of notice of RMS non-compliance by the Contracting Officer.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section --

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CONTRACTOR QUALITY CONTROL

04/06

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SECTION 01 45 04.00 10

CONTRACTOR QUALITY CONTROL
04/06

PART 1 GENERAL

1.1 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable contract unit or job prices contained in the Bidding Schedule.

1.2 ELECTRONIC TEST REPORT DATA

As part of the Contractor's Quality Control Program, his/her selected QC laboratory shall provide to the Government electronic transmission of test data in the prescribed formats in addition to the original test report data. Test results shall be emailed to mvn-cd-q-testresults@usace.army.mil and also to the Government's Inspector and Project Engineer (email addresses will be given at the Preconstruction Conference). In addition, all test results shall be uploaded into RMS. The New Orleans District Construction Control Manual (NODCC Manual) specifies the minimum number of tests to be made and includes forms which shall be used to report test data. The Technical Specification sections may include testing and/or frequency requirements other than those listed in the NODCC Manual. The more comprehensive requirements shall govern in case of conflict. A copy of the NODCC Manual is attached at the end of this section.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation. 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

Contractor Quality Control Plan; G, CD

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause in Section 00700 CONTRACT CLAUSES, entitled INSPECTION OF CONSTRUCTION (FAR 52.246-12). The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the

proposed construction sequence. The site project superintendent and Quality Control Manager will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with the quality requirements specified in the contract. The site project superintendent in this context shall be the highest level manager responsible for the overall construction activities at the site, including quality and production. The site project superintendent shall maintain a physical presence at the site at all times, except as otherwise acceptable to the Contracting Officer, and shall be responsible for all construction and construction related activities at the site.

3.2 CONTRACTOR QUALITY CONTROL PLAN

The Contractor shall furnish for review by the Government, not later than 15 days after receipt of notice of award, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of the Contract Clause in Section 00700 Contract Clauses, entitled INSPECTION OF CONSTRUCTION (FAR 52.246-12) The plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used. The Government will consider an interim plan for the first 30 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started. A sample CQC Plan is attached at the end of the section.

3.2.1 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the Three (3)-Phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the project superintendent.

b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.

c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.

d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with Section 01 33 00 SUBMITTAL PROCEDURES.

e. Control, verification, and acceptance testing procedures for each

specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities approved by the Contracting Officer shall be used.)

f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.

g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.

h. Reporting procedures, including proposed reporting formats.

i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one (1) definable features under a particular section. This list will be agreed upon during the coordination meeting.

3.2.2 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in his/her CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

3.2.3 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

3.3 COORDINATION MEETING

After the Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. The CQC Plan shall be submitted for review a minimum of 14 calendar days prior to the Coordination Meeting. During the Coordination Meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

3.4 QUALITY CONTROL ORGANIZATION

3.4.1 Personnel Requirements

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure safety and contract compliance. The Safety and Health Manager shall serve as a member of the CQC staff. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization. The Contractor's CQC staff shall maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff shall be subject to acceptance by the Contracting Officer. The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Complete records of all letters, material submittals, shop drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to the Contracting Officer.

3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall be a construction person with a minimum of three (3) years (full time) experience in related work. This CQC System Manager shall be on the site at all times during construction and shall be employed by the prime Contractor. The CQC System Manager may not have any other duties than quality control. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager if he is called upon to act in that capacity.

3.4.3 CQC Personnel

In addition to CQC personnel specified elsewhere in the contract, the Contractor shall provide as part of the CQC organization specialized personnel to assist the CQC System Manager for the following areas: civil, environmental, submittals clerk. These individuals may be employees of the prime or subcontractor; be responsible to the CQC System Manager; be physically present at the construction site during work on their areas of responsibility; have the necessary education and/or experience in accordance with the experience matrix listed herein. These individuals may perform other duties but must be allowed sufficient time to perform their assigned quality control duties as described in the Quality Control Plan. A single person may cover more than one (1) area provided that they are qualified to perform QC activities in each designated and that workload allows.

Experience Matrix

	Area	Qualifications
a.	Civil	Graduate Civil Engineer or Construction Manager with two (2) years experience in the type of work being performed on this project or technician with five (5) years related experience
b.	Environmental	A Construction Manager or Technician with three (3) years experience
c.	Submittals	Submittal Clerk with one (1) year experience

3.4.4 Additional Requirement

In addition to the above experience and education requirements the CQC System Manager and his alternate shall have completed the course entitled "Construction Quality Management For Contractors" within the last three (3) years. This course is periodically offered at the New Orleans District and other Corps of Engineers districts.

3.4.5 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

3.5 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall be made as specified in Section 01 33 00 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three (3) phases of control shall be conducted by the CQC System Manager for each definable feature of the construction work as follows:

3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

a. A review of each paragraph of applicable specifications

b. A review of the contract drawings.

c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.

d. Review of provisions that have been made to provide required control inspection and testing.

e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.

f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.

g. A review of the appropriate activity hazard analysis to assure safety requirements are met.

h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.

i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.

j. Discussion of the initial control phase.

k. The Government Quality Assurance personnel shall be notified at least 48 hours in advance of beginning the preparatory control phase. The Contractor shall submit a written agenda of the topics to be discussed at the preparatory meeting 48 hours in advance of the meeting date. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), Government Quality Assurance personnel, and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.

b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.

c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.

d. Resolve all differences.

e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.

f. The Government shall be notified at least 24 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the daily CQC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.

g. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

3.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if: the quality of on-going work is unacceptable; if there are changes in the applicable CQC staff, onsite production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

3.7 COMPLETION INSPECTION

3.7.1 Punch-Out Inspection

Near the end of the work, or any increment of the work established by a time stated in the Special Contract Requirement provision in Section 00700 Contract Clauses, entitled COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK or stated elsewhere in the specifications, the CQC Manager shall conduct an inspection of the work. A punch list of items which do not conform to the approved drawings and specifications shall be prepared and included in the CQC documentation, as required by paragraph in this Section entitled DOCUMENTATION. The list of deficiencies shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final inspection.

3.7.2 Pre-Final Inspection

The Government will perform the pre-final inspection to verify that the work is complete. A Government Pre-Final Punch List may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the

Government, so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment of the work if the project is divided into increments by separate completion dates.

3.7.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at this inspection. Additional Government personnel including, but not limited to, those from the New Orleans District, Mississippi Valley Division, and local interest may also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. 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 in Section 00700 Contract Clauses entitled, INSPECTION OF CONSTRUCTION (FAR 52.246-12).

3.8 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

a. Contractor/subcontractor and their area of responsibility.

b. Operating plant/equipment with hours worked, idle, or down for repair.

c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.

d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.

e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.

f. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.

g. Offsite surveillance activities, including actions taken.

h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.

i. Instructions given/received and conflicts in plans and/or specifications.

j. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one (1) copy of these records in report form shall be furnished to the Government daily within 12 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one (1) report shall be prepared and submitted for every seven (7) days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

3.9 SAMPLE FORMS

Sample forms for guidance in preparing the CQC Plan are enclosed at the end of this section.

3.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall 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 shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

-- End of Section --

US Army Corps of Engineers ®
New Orleans District

Construction Control Manual

Sampling & Testing Construction Materials
Reporting Test Results

CEMVN CD 415-Q-11
14 March 2016

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
7400 LEAKE AVENUE
NEW ORLEANS, LOUISIANA 70118

CEMVDN-CD

Pamphlet
Number CEMVN-CD-415-Q-11 14 March 2016

Construction

CONSTRUCTION CONTROL MANUAL

1. Purpose. This manual describes the means and methods for the Contractor Quality Control (QC) and Government Quality Assurance (QA) testing of some of the more common construction materials incorporated into New Orleans District projects. Information is given on sampling, the test required, testing frequency, reporting requirements, and database maintenance. This manual only describes a minimum testing program on a limited number of common construction materials and the specifications may require additional tests that demonstrate compliance with the contract documents.

2. Applicability. This manual applies to all New Orleans District elements having responsibility for the design and construction of assigned projects.

3. Scope of the Manual. This manual is intended to guide the Quality Control and Quality Assurance process and provide for the construction of a project whose quality and durability is a direct reflection of the Contractor's and the Government's efforts in meeting the project's goals and objectives. If there is a conflict between this manual and the technical specification sections, the most stringent requirements shall govern.

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS

Number CEMVN-CD-415-Q-11

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Chapter 1 Introduction

1. General:

This manual describes the means and methods for the Contractor Quality Control and Government Quality Assurance testing of construction materials incorporated into the New Orleans District (CEMVN) projects. Information is given on sampling, the test required, testing frequency, reporting requirements, and database maintenance. This manual only describes a minimum testing program on a limited number of common construction materials and the specifications may require additional tests that demonstrate compliance with the contract documents. If there is a conflict between this manual and the technical specification sections, the most stringent requirements shall govern. The most recent version of this manual at the time of contract solicitation will supplement the construction material control requirements for a specific contract unless noted otherwise.

The Contractor shall only use those laboratories, including his own that have been validated by an inspection or audit performed by the USACE Materials Testing Center, Vicksburg, MS.

2. Definitions:

a. Quality Management System. Quality management is defined as all control, inspection, and other assurance activities instituted to achieve the product quality established by the contract plans and specifications.

b. Contractor Quality Control. Contractor Quality Control (QC) is that part of the system by which the Contractor regulates, tests and inspects their own, suppliers, and sub-Contractors procedures, equipment, materials, and personnel so that the completed product will comply with the requirements of the project's contract documents.

c. Government Quality Assurance. Government Quality Assurance (QA) is that part of the system by which the Government verifies or assures that the Contractor's Quality Control system is performing properly and the completed product conforms to the contract documents. The number of QC test observed by QA personnel should be generally related to the consistency in QC and QA test results.

3. Responsibility, Compilation, and Submittal of Test Results:

a. The Contractor is responsible for complying with the contract documents in the performance of all required tests and the preparation, submittal, and maintenance of those test reports outlined in this manual and the contract specifications. The test results from QC and QA testing shall be compiled separately as outlined in this manual.

b. The Contractors' QC Laboratory shall appoint a Registered Professional Civil Engineer to certify QC inspections and test results prior to the start of work. The certification shall state that the tests and observations were performed by or under the direct supervision of the Registered Professional Civil Engineer and that the results are representative of the

materials and conditions being certified by the tests. The certification shall be submitted within two weeks after final inspections and testing is complete. The certification shall be submitted to USACE for the referenced project in accordance with the New Orleans Construction Control Manual, Appendix A. Failure to submit certifications as stated may result in nonpayment for related work performed and disapproval of the QC test facility for this contract.

c. Acceptance of the Contractors' QC plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes to the QC Plan and operations including removal of personnel and QC Laboratory, as necessary, to obtain the quality specified.

d. All test results will be entered into the CEMVN Quality Assurance Control Center (QACC) construction material testing database as described in Appendix A by the QC laboratory performing the testing. Test results will be entered into the testing database within 48 hours from sampling. Payment for any material placed, as well as for any subsequent construction, will not be made until test results are entered into the database and analyzed by Quality Assurance personnel. The Contractor shall maintain a hard copy of the materials testing log, test reports and control charts at the Contractor's field office. These records will be available at all times for review by Government personnel. The original test report will be distributed to the Administrative Contracting Officer (ACO) within 48 of completion of the test. This original test report (supporting documentation) submission is in addition to any required electronic submission.

e. Any tests not conforming to the contract documents will be immediately reported to the Administrative Contracting Officer along with the recommended corrective action to bring the work into complete compliance with the specifications. The Administrative Contracting Officer may designate additional re-sampling or retesting to verify the work represented by the failing test. This testing is at the Contractor's expense.

f. Reference to standard test methods and testing procedures for sampling and testing of common construction materials are given in each chapter of this manual. Additional testing may also be required in the contract documents.

g. Laboratory Facilities. For work that involves aggregates, concrete, masonry, rock or soil the QC Laboratory shall, at its own expense, obtain and maintain validation as an approved testing laboratory by the Materials Testing Center (MTC) of the Engineering Research and Development Center (ERDC). This shall be done in accordance with ER 1110-1- 8100 and ER 1110-1-261. Appendix B further describes this requirement. Refer to Chapter 4 for welding laboratories.

   For work that involves vibration, steel, steel reinforcing bars, coatings inspections and other specialized construction material testing and inspection the QC Laboratory shall maintain personnel, procedures and equipment that meet applicable industry standards.

h. Field sampling and testing locations shall be recorded using Latitude/Longitude coordinates reported in decimal degree format to the millionth decimal and be surveyed using techniques to achieve ±10 feet accuracy.
   Report Form input example: 29.934003, -90.133745

Chapter 2 Soils

1. Scope:

This chapter specifies methods and procedures for the Contractor Quality Control (QC) and Government Quality Assurance (QA) testing of materials used, but not limited to, compacted levee embankments, compacted berms, un-compacted berms, ramps, and structural backfill. The Government will also perform checks, and assurance testing of control testing required by the Contractor.

2. Samples:

Samples shall be collected and secured in accordance applicable ASTM testing procedures.

3. Testing Personnel:

The individuals who inspect, monitor, sample and test Embankment construction as required in this specification shall meet the following minimum criteria of certification and/or documented experience. Work experience shall be related to the field for which the inspector is being qualified and may be obtained by working either for an inspection/testing agency or engineering firm as a technician, inspector or engineer.

- Current NICET Level II certification in Geotechnical Engineering technology/construction, or
- Current ICC Soils Special Inspector with one year related experience, or
- Geologist-in-Training with one year related experience, or
- Engineer Intern with one year related experience, or
- Registered Geologist, or
- Registered Professional Engineer.

The Contractors' QC laboratory shall submit certification and/or documentation to provide evidence of qualification. The appointed Registered Professional Civil Engineer, identified in Chapter 1, Section 3.b to certify inspections and test results, remains responsible for compliance of all inspection and testing activities.

All Laboratory facilities, personnel and equipment used to test soils as required in this specification shall be part of a Laboratory that has been validated by the USACE Materials Testing Center, Vicksburg, MS.

4. Typical Test Requirements:

Testing and reporting shall be performed in accordance with the latest American Society of Testing and Materials (ASTM) Standard, as indicated in Table 2-1.

Table 2-1
ASTM References

Gradation	
ASTM C 117	Materials Finer than No. 200 Sieve in Mineral Aggregates by Washing
ASTM C 136	Sieve Analysis of Fine and Course Aggregates
ASTM D 1140	Amount of Material in Soils Finer than No. 200 (75-µm) Sieve
ASTM D 6913	Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis
Moisture Content	
ASTM D 2216	Laboratory Determination of Water, (Moisture) Content of Soil and Rock by Mass (Method B)
ASTM D 4643	Determination of Water (Moisture) Content of Soil by Microwave Method
Moisture/Density Relationship	
ASTM D 698	Laboratory Compaction Characteristics of Soil Using Standard Efforts (12,400ft lbs/ft^3 (6000KN))
ASTM D 1557	Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3))
Field Density	
ASTM D 1556	Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D 6938	In-Place Density and Water Content of Soil and Soil-Aggregate Nuclear Methods (Shallow Depth)
Materials Classification	
ASTM D 2487	Classification of Soils for Engineering Purposes
ASTM D 4318	Liquid Limit (One-Point Method B), Plastic Limit, and Plasticity Index of Soils
Organic Content	
ASTM D 2974	Moisture, Ash, and Organic Matter of Peat and Other Organic Soils (Method C)
Unconfined Compressive Strength	
ASTM D 1633	Compressive Strength of Molded Soil-Cement Cylinders
ASTM D 2166	Unconfined Compressive Strength of Cohesive Soil

5. Sampling and Testing of Compacted Fill:

This sampling and testing shall be in accordance with the standard procedures referred to in this manual. The minimum number of QC tests to be performed shall be as indicated in Table 2-2. The Government will also perform checks, and assurance testing of the other control testing required by the Contractor.

Table 2-2
Type of Tests and Frequency of Testing
Compacted Embankments and Berms, Ramps, and Structural Backfill Material

Property	Form	Minimum Frequency	Standard
Nuclear Field Density	MVNQS11	One test per 1,500 cubic yards of compacted fill placed per lift, but not less than one density test per 500 linear feet per lift. A lift placed on any one side of an existing embankment will be considered as a separate lift. At least one test shall be performed in any shift that compacted fill is placed.	ASTM D 1556 or ASTM D 6938
Nuclear Field Density Relative Density	MVNQS12	Used to record test results from testing uncohesive material. One density test per lift per 150 linear feet of the base course. Isolated repairs (less than 150 linear feet) must have at least one density test per isolated area per lift.	ASTM D 6938
Sand Cone Field Density	MVNQS03	One test to be obtained for every ten (10) Nuclear Field Density locations to verify Nuclear Field Density.	ASTM D 1556
Compaction Control Curve	MVNQS02	Control Compaction Curves shall be established in accordance with ASTM D 698 - Laboratory Compaction Characteristics of Soil Using Standard Effort. A Compaction Control Curve will be required for each type of material from each source or a minimum of one Compaction Control Curve every 25,000 cubic yards of compacted fill placement. Where construction operations result in the blending of material, two representative Compaction Control Curves will be required for each resulting blend of material. The samples collected for the resultant blended material shall be collected from separate locations. If the borrow or source of fill material changes, new Compaction Control Curves shall be performed. Material test samples for Compaction Control Curve shall be prepared by air-dry, rewet, and cured.	ASTM D 698
One-Point Proctor Verification	MVNQS02	One test to be obtained for every five (5) field density locations.	ASTM D 698 (modified)
Moisture Content	MVNQS11	One test at each field density test location.	ASTM D 2216 or ASTM D 4643
Organic Content	MVNQS07	One test at each field density test location.	ASTM D 2974 (Method C)
Materials Classification	MVNQS06	One test obtained for each Control Compaction Curve and one test for each field density test. Determine Atterberg Limits (LL One-Point Method B), minus #200 and Sand Content.	ASTM D 2487 ASTM D 1140 ASTM D 4318
Unconfined Compressive (UC) Strength	MVNQS05	For Deep Soil Mixing (DSM) QC operations a minimum of three percent of the DSM columns per site will be drilled and three UC strength samples collected and tested at each test column.	ASTM D 2166 ASTM D 1633

6. Sampling and Testing of Un-Compacted Berm Material:

This sampling and testing shall be in accordance with the standard procedures referred to in this manual. The minimum number of QC tests to be performed shall be as indicated in Table 2-3. The Government will also perform check and assurance testing of the other control testing required by the Contractor.

Table 2-3
Type of Tests and Frequency of Testing
Un-Compacted Berm Material

Property	Form	Frequency	Standard
Organic Content	MVNQS07	One test at materials classification test location.	ASTM D 2974 (Method C)
Materials Classification	MVNQS06	One test per 3,000 cubic yards of un-compacted fill placed, but not less than one test per 1,000 linear feet of un-compacted fill placed. At least one test shall be performed in any shift that un-compacted fill is placed. Determine Atterberg Limits (LL One-Point Method B), minus #200 and Sand Content.	ASTM D 2487 ASTM D 1140 ASTM D 4318

7. Compilation of Test Data for Submittal:

The results of the test and inspections shall be recorded in the MVN database as directed in Appendix. Samples of the reporting forms and instruction for each form are provided on the MVN SharePoint site; **Test Form Examples** and are described as follows. The latest forms should be referenced on the MVN SharePoint site and described in Appendices. All data is to be submitted electronically **within 24 hours of completion of the tests by the laboratory performing the testing.**

a. **MVNQS01** Sieve Analysis – ASTM C 117, ASTM C 136 and ASTM D 1140. This form is to be used in reporting the material finer than No 200 sieve and a sieve analysis of coarse grain material.

b. **MVNQS02 (**Compaction Control Curve) ASTM D 698. This form is to be used in reporting the determination of the optimum moisture content and the maximum dry density. The moisture-density curve shall be plotted based on a minimum of five compaction test specimens. A one-point Proctor test – ASTM D 698 (modified, Figure 2-2) shall be obtained for every five (5) field density test locations, and reported with same. The soil One-Point proctor result obtained from the in-place density test location will serve as the basis for determining the applicable compaction control curve.

c. **MVNQS03 (**Field Density Sand Cone Method) ASTM D 1556. This form is to be used in reporting the determination of the degree of compaction and moisture content. Contract specifications shall govern the required compaction effort.

d. **MVNQS05** (Unconfined Compressive Strength) ASTM D 2166. This form is to be used to report the compressive strength of an intact, remolded or reconstituted cohesive soil, using a strain-controlled application of the axial load. Contract specifications shall govern the acceptable strength requirements.

e. **MVNQS06** (Unified Soil Classification System) ASTM D 2487. This form is to be used to report the determination of the liquid limit (One-point Method B), plastic limit, plasticity index, % sand content and % fines. MVNQS01 Sieve Analysis – ASTM C 117 and ASTM C 136 is to be used to report the results of gradation tests of the material if a granular material is specified. The final soil classification in accordance with ASTM D 2487 shall be stated on the same forms. Contract specifications shall govern the acceptable Atterberg limits, gradation limits, and material classification. If the Nuclear Method (ASTM D 6938) is used for field density determinations, the soil sample utilized for material classification shall come from within a radius of 12 inches of the center of the in-place density test site. The soil classification obtained from in-place density test location will serve as a basis for determining the applicable compaction control curves.

f. **MVNQS07 (**Moisture, Ash, and Organic Content Determination) ASTM D 2974 (Method C). This form is to be used in reporting the determination of the organic content of the material. Determination of organic content shall be performed in accordance with ASTM D 2974; Method C. Contract specifications shall govern the acceptable limits of organic content.

g. **MVNQS09 (**Moisture Content Determination) ASTM D 2216, ASTM D 4643 and ASTM D 6938. This form is to be used in reporting the determination of the moisture content of the in-place material when ASTM D 2216, ASTM D 4643 or ASTM D 6938 is the test method utilized. This form is not to be used when performing Field Density Test Nuclear Method with Moisture Content Determination. Contract specifications shall govern the acceptable limits of moisture content.

h. **MVNQS11** (Field Density Test Nuclear Method). This form is to be used in reporting the determination of the degree of compaction and moisture content by oven, microwave or nuclear gauge. Contract specifications shall govern the required compaction effort and moisture range. If the nuclear method is selected for field density testing, the Sand-Cone Method shall be used to confirm the accuracy of the Nuclear Method. This shall be accomplished by performing an initial comparison test of the two methods when a nuclear gage is brought on-site for the first time. If the Nuclear Method wet density is within 3 percent of the Sand Cone Method, no correction of the Nuclear Method wet density will be required and the testing may continue with the Nuclear Method. The Nuclear Method wet density shall be verified throughout the project at a rate of one Sand-Cone test for every ten nuclear tests per nuclear gage thereafter. If the variance at any time between the Nuclear Method and the Sand Cone Method exceeds 3 percent, testing

with the Nuclear Method shall stop until the Contractor provides a Root Cause Analysis and five consecutive comparison tests are performed as evidence that Corrective Actions will provide results within 3 percent. For comparison purposes, the nuclear and sand-cone wet densities should represent the same layer thickness within the testing area selected. When a nuclear density result is in doubt, the sand-cone density test shall be used for acceptance.

i. **MVNQS12** (Field Density (Relative Density) Nuclear Method). This form is to be used in reporting the determination of the Relative degree of compaction as determined based on relationship of the Minimum Dry density and Maximum Dry density. Contract specifications shall govern the required Relative Density.

8. Soil Electronic Conductivity (EC) and Total Soluble Salt Analysis:

The following test method shall be used for determining the Total Soluble Salt (Total Salinity) of Embankment soils. This method shall be followed when testing embankment soil salinity levels. Sampling of materials shall be performed by a USACE Validated Laboratory.

A. Sampling; Sampling shall consist of one 12,500 gram composite sample per 1,000 linear feet per lift. A Composite soil sample is defined as 5 separate representative 2,500 gram samples taken randomly at relatively evenly spaced intervals within the 1,000 linear foot. A lift on any one side of the levee will be considered one lift. The locations of the samples shall be as directed by the Contracting Officer. When a composite soil sample is collected, it should be handled in accordance with ASTM D 4220, Group B Standard Practices for Preserving and Transporting Soil Samples.

   As directed by the Contracting Officer, when samples are to be split for replicate testing, the entire composite sample shall be processed over a No. 4 (4.75 mm) sieve by the contractors QC laboratory. The material passing the No. 4 sieve shall be thoroughly mixed and split in accordance with ASTM C 702 Standard Practice for Reducing Samples of Aggregate to Testing Size.

B. Sample Preparation; Composite soil samples passing a No. 4 sieve are to be thoroughly remixed and reduced to a minimum 200 g sample for testing in accordance with ASTM C 702 Standard Practice for Reducing Samples of Aggregate to Testing Size.

   The reduced composite soil sample is air dried at a temperature not to exceed 140° F for a minimum of 18 hours. After the sample is air dried, process and collect material passing No. 10 (2 mm) sieve. Material retained on the No. 10 sieve will be discarded.

C. Procedure; (EC 1:2 preparation) To determine soil EC, collect a representative 20 gram sample from the sieved air-dried material and mix with 40 mL deionized water in a 125 mL Erlenmeyer flask.

   The container is sealed and the mixture is either agitated for 1 hour in a mechanical shaker or mixed by hand every 30 minutes for 3 hours.

The mixture is filtered through a Whatman 42 filter paper. EC (dS/m) of the filtrate is determined immediately using a standard conductivity meter. Follow manufacture's direction for standard conductivity meter operations and temperature corrections.

D. Reporting; The directly-measured EC 1:2 is converted to Saturated Extract-Equivalent EC (EC_e) by multiplying by a factor of 2. (Southern Cooperative Series Bulletin No. 419 ISBN# 1581614195 January, 2014)

Total soluble salts (TSS) concentration in ppm (mg/L) is calculated by multiplying EC_e (dS/m) by 640 for EC readings <5.0 dS/m or by 800 for EC readings >5.0 dS/m. (Rhoades, 1996)

The report shall include at a minimum;

1. All sample identifications documented during sampling that at a minimum include, sample date, received date, test/sample number, location of composite sample (GPS, station, lift, , elevation, offset)
2. USCS visual description
3. Make/Model and Serial # of conductivity meter
4. Notes should include any deviations from this test method.
5. The Soil Electronic Conductivity (EC) shall be reported in decisiemens per metre (dS/m).
6. Total Soluble Salt shall be reported as Total Salinity in parts per million (ppm).

9. Field and Laboratory Determination of Non-Soil Volume for Levee Fill:

A. The field excavation testing shall be performed by excavating a 10' wide x 10' long and to a depth of the lift thickness for each lift that is in question. The volume of the excavation shall be verified using the end area method through measuring the dimensions of the excavation with the use of survey equipment at each corner of the hole. A difference of +/- 10% of the theoretical excavation is allowed. The Contractor shall bring all material excavated to the lab in sealed airtight containers. All excavations shall be completely backfilled by the Contractor within 72 hours of inspection unless directed otherwise by the COR. All backfill shall be in accordance with the existing contract documents, especially EMBANKMENT.

B. The unit weight of the soil shall be determined by ASTM D 6938 Field Density – Nuclear Method, ASTM D 1556 Field Density – Sand Cone Method, or ASTM D 698 Compaction Characteristics of Soil. All material testing shall be performed by a Corps validated lab.

C. Once all the excavated material is delivered to a Corps validated lab, any clay pieces adhering to the non-soil pieces that can be removed by hand without damaging the non-soil piece shall be removed.

D. All non-soil pieces shall be weighed in their existing conditions immediately prior to testing (wet weight as excavated). If all non-soil pieces do not fit in the Measure Box, then the non-soil pieces may be split into smaller sampling sizes for testing purposes and the cumulative volume reported.

E. Sturdy Measure Box containers shall be used for the non-soil volume determination processes. The minimum volume of the Measure Box is 0.8 cubic feet. This volume dimension is a minimum and may be enlarged if desired. The weight of the empty containers shall be determined using a calibrated scale and with the weight recorded to the nearest 0.1 lb. The container shall be filled in two layers with silica sand. The first layer of sand shall be densified by use of a Shake Table and vibrated such that the Silica sand achieves its maximum density. The second layer of silica sand shall be added and vibrated, with additional sand added as needed to "top off" the container as the sand achieves a greater density. The weight of the container filled with densified Silica sand shall be recorded to the nearest 0.1 lb using a calibrated scale. Determine the weight of the measure container plus sand three times to determine the average value. The maximum unit weight of the silica sand is the weight of the measure plus sand minus the weight of the measure divided by the known volume of the container and reported to the nearest 0.1 lb/ft3.

F. The volume of the non-soil shall be determined by the following USACE MVN developed procedure, Non-Soil Volume Determination.

1) **Volume and Weight Determination of Measures (annual):** The volume of the Measure Box shall be determined and verified on an annual basis by the water filled method as specified in ASTM C29/C29M paragraph 8 and recorded to the nearest 0.1 ft^3.

2) **Density Sand**: Obtain silica sand also known as US Silica Sand. Verify that the quality of the silica or "Silica" sand meets the requirements specified in ASTM D1556 paragraph 6.2. The sand can be re-used, but it should be cleaned to comply with the previously referenced standard by sieving and/or rinsing, and oven drying prior to reuse.

3) **Determining Densified Sand within a Measure Box**: Before any tests determining non-soil volume content, a calibration test shall be run each day that testing is to be performed, to determine the standard weight of the sand in the Measure Box as discussed in section E. The three repeated determinations of densified sand weight per unit volume shall be within 2.0 pcf of each other.

   A Measure Box shall be used to determine the densified sand and will be based upon use of a Shake Table and placement within layers. Clean and dry silica sand is placed loosely within each layer using a large scoop or the edge of a bucket by flowing and distributing the sand evenly across the surface area. The Shake Table is then to be used. The number and duration of vibrations will be determined as noted in the following trial. These times are approximate and should be modified by each laboratory to fit the Shake Table being used to achieve a consistent sand weight per unit volume.

MEASURE BOX – (1) Position measure over a large catch pan for collecting excess sand. Place loose Silica sand in one layer (half height of measure); (2) Using the Shake Table, vibrate the sand for 4-8 seconds; (3) Place loose silica sand in a second layer (full height of measure); (4) Vibrate the sand for 4-8 seconds. The sand should consolidate below the top rim of the measure; (5) Place additional (excess) sand above the top of the measure. It should appear to overflow. Vibrate for the sand for an additional 3-4 seconds. It is desired to have excess sand above the top of the rim after vibration of about 1/8 inch; (6) Using a straight metal bar, strike off the excess sand, leaving the sand flush with the top rim of the measure; (7) Weigh the measure and densified sand recorded to the nearest 0.1 lb; (8) Determine the weight per unit volume of the measure by subtracting the weight of the measure plus sand minus the weight of the measure then dividing by the known volume of the container and report to the nearest 0.1 lb/ft3; (9) Repeat steps 1 thru 8 for a total of three determinations of densified sand weight per unit volume, and calculate the average weight per unit volume to the nearest 0.1 lb/ft3.

4) **Standard Wood or Metal for Verification (annual)**: Eight pieces of wood or metal, labeled A thru G, measuring 5 inches by 1 inch by 2 inches are to be used to verify the volume determination by the densified sand method as detailed in 5) below. Determine the weight and linearly measured volume of the eight standard pieces of wood or metal to verify the calculated non-soil content from the use of densified silica sand within Measure Boxes of known volume.

5) **Non-soil Verification (annual)**: Wood or metal pieces measured in Step 4) above will be used in each measure by densifying sand and four wood or metal pieces in each layer, for a total of eight wood or metal pieces within each measure. The same procedures outlined in Step 4) above are used to place and densify the sand and wood or metal within the measures. The wood or metal is placed within each layer with at least ½ inch of loose sand beneath and around the wood or metal pieces. The weight of the densified sand, measure, and wood or metal is used to determine the density and subsequent volume of the wood or metal. The calculated volumes shall be compared to the known volumes of the wood or metal pieces to see if any change in shaking time or sand type is needed. If the calculated and known volumes are within +/- 2% of each other, the test verification is successful. See below for the step by step procedures for this:

MEASURE BOX - (1) Determine the volume and weight of the measure as noted in Step 1) above; (2) Determine the average densified sand weight per unit volume as noted in Step 3) above; (3) Determine volume and weight of pre-cut pieces of wood or metal as noted in Step 4) above; (4) Densify wood or metal in layers following the similar method noted in Step 3) above; (5) Determine the densified sand and wood or metal weight in the unit measure; (6) Calculate the volume of wood or metal as shown below:

(a) Volume of Measure Box (ft^3)
(b) Weight of Measure Box (lb)

(c) Average weight per unit volume of densified sand (lb/ft^3)
(d) Wood or metal Pieces total weight (lb)
(e) Wood or metal Pieces total volume (ft^3)
(f) Average determined densified sand, wood or metal, & measure weight (lb)
(g) Densified sand only weight (no wood or metal) = (c) x (a)
(h) Densified sand only weight (with wood or metal) = (f) – (b) – (d)
(i) Volume of wood or metal (from densified sand test) = [(g) – (h)] / (c)
(j) % actual volume wood or metal = 100 x (e) / (a)
(k) % tested volume wood or metal = 100 x (i) / (a)

6) **Non-soil Volume Determination**: Determination of non-soil volume for a test sample is as follows. Determine the wet weight of the sample prior to placement into the loose sand layers. Cleaned non-soil pieces from a sample are placed in one of the tested measures above by following procedures as outlined in Step 3). The non-soil pieces are placed within each layer of loose sand with at least ½ inch of loose sand beneath and around the various non-soil pieces. The non-soil piece may be cut to fit into the measure but care should be used to ensure that all pieces of the sample are measured. The weight of the combined densified sand, measure, and non-soil shall be recorded to the nearest 0.1 lb. To determine the density and subsequent volume of the non-soil pieces, see calculations below.

MEASURE BOX - (1) Determine the volume and weight of the measure as noted in Step 1) above; (2) Determine the average densified sand weight per unit volume as noted in Step 3) above; (3) Determine weight of sample pieces of non-soil; (4) Densify non-soil pieces in layers following the similar method noted in Step 3) above; Determine the densified sand and non-soil pieces weight in the unit measure; (5) Calculate the volume of non-soil pieces as shown below:

(a) Volume of Measure Box (ft3)
(b) Weight of Measure Box (lb)
(c) Average weight per unit volume of densified sand (lb/ft3)
(d) Weight of Sample Non-soil Pieces (lb)
(e) Determined densified sand, non-soil pieces, & measure weight (lb)
(f) Densified sand only weight (no non-soil pieces) = (c) x (a)
(g) Densified sand only weight (with non-soil pieces) = (e) – (b) – (d)
(h) Volume of non-soil pieces (from densified sand test) = [(f) – (g)] / (c)
(i) Volume of excavation (ft3)
(j) % tested volume non-soil pieces = 100 x (h) / (i)

7) **Documentation**: As a minimum, calibrations of Measure Boxes should be documented annually on the Unit Weight Measure Volume Determination Record. The Densified Sand unit weight shall be documented on the Densified Sand Calibration Record. Test records for samples shall be documented on the Non-soil pieces Volume Determination Record. Contact MVN-CD-Q for latest test forms.

G. The percent volume determined in Step 6) (j) above shall be compared versus the acceptable value listed in the specifications. If the test shows the percent volume is greater than the acceptable value, the Contractor shall follow the corrective actions as noted in the contract specifications.

10. Additional Testing:

In addition to the above frequency of tests, additional tests may be required as follows:

a. Where the Administrative Contracting Officer (ACO) or Contracting Officer's Representative (COR) has reason to doubt the adequacy of the compaction, moisture content, or organic content control.

b. Where the Contractor is concentrating fill operations over a relatively small area.

c. When embankment materials change substantially, the Administrative Contracting Officer or Contracting Officer's Representative (COR) may direct additional testing.

d. Where special compaction procedures are being used.

e. When the contract specifications require additional testing.

f. When areas are found not meeting the specified in-place density, Atterberg limits, moisture content, and/or in-place organic content requirements; the Contractor shall retest, at no additional costs to the Government, after corrective measures have been applied.

Chapter 3 Concrete

1. Scope:

This chapter specifies methods and procedures for the Contractor Quality Control (QC) and Government Quality Assurance (QA) methods and procedures for the testing of fresh concrete and concrete aggregate. The Government will also perform checks, and assurance testing of control testing required by the Contractor.

2. Samples:

Fresh concrete samples shall be secured in accordance with ASTM C 172. Concrete aggregates shall be sampled in accordance with ASTM D 75. Sampling locations shall be randomly selected.

3. Testing Personnel:

The individuals who inspect, monitor, sample and test Concrete construction as required in this specification shall meet the following minimum criteria of certification and/or documented experience. Work experience shall be related to the field for which the inspector is being qualified and may be obtained by working either for an inspection/testing agency or engineering firm as a technician, inspector or engineer.

- Current ICC Reinforced Concrete Certificate with 1 year related experience, or
- ACI Concrete Construction Special Inspector Certificate, or
- Engineer Intern with one year related experience, or
- Registered Professional Engineer.

The individuals who perform testing of concrete or the constituents of concrete as required in this specification shall have an applicable and current ACI certification for testing being performed; ACI Concrete Strength Testing, ACI Concrete Laboratory Testing – Level 1, ACI Aggregate Testing Technician – Level 1, ACI Concrete Field Grade I.

The Contractors' QC laboratory shall submit certification and/or documentation to provide evidence of qualification. The appointed Registered Professional Civil Engineer, identified in Chapter 1, Section 3.b to certify inspections and test results, remains responsible for compliance of all inspection and testing activities.

All Laboratory facilities, personnel and equipment used to test soils as required in this specification shall be part of a Laboratory that has been validated by the USACE Materials Testing Center, Vicksburg, MS.

4. Typical Test Requirements:

Test requirements specified in the contracts documents may be more stringent than those listed below in Tables 3-2, 3-3 and 3-4. All test results will be entered into the MVN material testing database as described in Appendices by the laboratory performing the testing. Acceptable test values are contained in the contract documents.

The laboratory performing the tests shall be validated by the Materials Testing Center, Vicksburg, MS. and conform to ASTM C 1077.

Table 3-1
ASTM References

Concrete Lab Testing	
ASTM C 33	Specification for Concrete Aggregates
ASTM C 39	Compressive Strength of Cylindrical Concrete Specimens
ASTM C 117	Materials Finer than No. 200 Sieve in Mineral Aggregates by Washing
ASTM C 136	Sieve Analysis of Fine and Course Aggregates
ASTM C 511	Mixing Rooms, Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the Testing of Hydraulic Cements and Concretes
ASTM C 566	Total Evaporable Moisture Content of Aggregate by Drying
ASTM C 617	Capping Cylindrical Concrete Specimens
ASTM C 702	Reducing Samples of Aggregate to Testing Size
ASTM C 1231	Practice for Use of Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders
CRD-C 104	Calculation of Fineness Modulus of Aggregate
Concrete Field Testing	
ASTM C 31	Making and Curing Concrete Test Specimens in the Field
ASTM C 138	Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
ASTM C 143	Slump of Hydraulic-Cement Concrete
ASTM C 172	Sampling Freshly Mixed Concrete
ASTM C 173	Air Content of Freshly Mixed Concrete by the Volumetric Method
ASTM C 231	Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C 1064	Temperature of Freshly Mixed Hydraulic-Cement Concrete
ASTM D 75	Sampling Aggregates

5. Compilation of Test Data for Submittal:

The results of the test and inspections shall be recorded in the MVN database as directed in Appendix. Samples of the reporting forms and instruction for each form are provided on the MVN SharePoint site; **Test Form Examples** and are described as follows. The latest forms should be referenced on the MVN SharePoint site and described in Appendices. All data is to be submitted electronically **within 24 hours of completion of the tests by the laboratory performing the testing.**

a. **MVNQC01** (Concrete Compression Test Data – ASTM C 39). This form is to be used in reporting the results of laboratory concrete compression testing. Contract specifications shall govern the required concrete compressive strength.

b. **MVNQC02** (Concrete Field Data). This form is to be used in reporting the data collected by the laboratory while monitoring and testing concrete during placement. Contract specifications shall govern the required concrete properties during placement.

c. **LMN FORM 853-R** (Concrete Compression Test Specimen Data). This form is to be filled out and provided to the QA laboratory for each set of cylinders delivered. This form should be filled out with information documented during concrete placement. The information on this form should match the information provided on the associated MVNQC01 and MVNQC02 test forms. The Order number on this form shall match the Batch Ticket number on the associated concrete supplier batch ticket, the MVNQC01 and the MVNQC02 test form for sample tracking purposes. The form also serves as a bill of lading for the delivered concrete samples.

Table 3-2
Test Requirements
AGGREGATE, FINE

Property	Method	Frequency	Remarks
Deleterious Substances	ASTM C 33	1 per week	
Fineness Modulus	CRD-C 104	1 per shift per batch plant when concrete plant is operating	Calculation based on gradation test results
Gradation	ASTM C 117 ASTM C 136	1 per shift per batch plant when concrete plant is operating.	Tests selected randomly.
Moisture Content	ASTM C 566	If moisture meter is working properly, 2 per week to verify	Tests selected randomly for each aggregate size.
		If moisture meter is not working, 4 every 8 hours of mixing plant operation	
		Additional tests if slump is out of control or variability is excessive	
Sampling Method	ASTM D 75	As specified for the individual material property.	

Table 3-3
Test Requirements
AGGREGATE, COURSE

Property	Method	Frequency	Remarks
Deleterious Substances	ASTM C 33	1 per week per batch plant, or as directed by COR	
Gradation	ASTM C 117 ASTM C 136	1 per shift per batch plant when concrete plant is operating	Tests selected randomly.
Moisture Content	ASTM C 566	If moisture meter is working properly, 2 per week to verify	Tests selected randomly for each aggregate size.
		If moisture meter is not working, 4 every 8 hours of mixing plant operation	
		Additional tests if slump is out of control or variability is excessive	
Sampling Method	ASTM D 75	As specified for the individual material property.	

Table 3-4
Test Requirements
FRESH CONCRETE

Property	Form	Method	Frequency	Remarks
Compression Cylinders (Quality Assurance)	MVNQC01 MVN 835	ASTM C 31 ASTM C 39	To be molded by the Contractor Quality Control Laboratory and tested by the Quality Assurance Laboratory. Mold one set of cylinders per 8 hour shift or for every 150 cubic yards placed.	Quality Assurance Cylinders shall be molded from the same sample of concrete that the Quality Control cylinders are molded.
Compression Cylinders (Quality Control)	MVNQC01 MVNQC02	ASTM C 31 ASTM C 39	To be molded and tested by the Contractor Quality Control Laboratory. Mold one set of cylinders per 8 hour shift or for every 150 cubic yards placed. As a minimum; A set of test specimens for concrete with a 28-day specified strength shall consist of two cylinders to be tested at 7 days and two 6-inch by 12-inch cylinders or three 4-inch by 8-inch cylinders at 28 days. A set of test specimens for concrete with a 56-day or 90-day specified strength shall consist of two cylinders to be tested at 7 days, two 6-inch by 12-inch cylinders or three 4-inch by 8-inch cylinders at 28 days and two 6-inch by 12-inch cylinders or three 4-inch by 8-inch cylinders at 90 days. Additional sets when mix proportions change or low strengths are detected.	On randomly selected batches for each separate concrete mix produced. Cylinders used shall conform to paragraph 6.1 of ASTM C 31. Initial Cure in accordance with paragraph 10.1.2 of ASTM C 31.
Compression Cylinders (QC- for putting concrete into service or other purposes indicated in paragraph 4.3 of ASTM C 31)	MVNQC01 MVNQC02	ASTM C 31 ASTM C 39	1 set of multiple pairs of QC cylinders per item to be evaluated.	Cylinders used shall conform to paragraph 6.1 of ASTM C 31. Initial Cure in accordance with paragraph 10.1.2 of ASTM C 31. Cylinders to be field cured shall conform to 10.2 of ASTM C 31.
Air Content Slump Temperature	MVNQC01 MVNQC02	ASTM C 231 ASTM C 143 ASTM C 1064	1 every time concrete cylinders are molded Plus 2 additional during each 8 hours of concrete production Additional tests if workability variation is excessive.	On randomly selected batches for each separate concrete mix produced

Chapter 4 Welding Inspection

1. Scope:

This chapter specifies methods and procedures for the Contractor Quality Control (QC) weld inspection for Group 1 and Group 2 carbon steels as defined by AWS D1.1, Table 3.1 and their ASTM A709 counterparts. Welding of sheet metal, reinforcement bars, castings, stainless steel, aluminum and other non ferrous metals are not included in this document and should reference the appropriate AWS or ASME Code. An approved schedule of welding procedures (WPS) is required before fabrication commences (Section 05 50 03.00 12). The Government will also perform checks, and assurance testing of control testing required by the Contractor.

2. Definitions:

a. **Fracture Critical Welds**. Fracture critical members or member component welds as defined by ER 1110-2-8157 are tension members or tension components of bending members (including those subject to reversal of stress), the failure of which would be expected to result in collapse of the hydraulic steel structure. The designation "FCM" shall mean fracture critical member or member component. Members and components that are not subject to tensile stress under any condition of live load shall not be defined as fracture critical. FCMs, in general, are dewatering components (needle girders, bulkheads, needles), lifting eyes, or other tension members. This includes any members welded to these members as cracks could propagate to these members and cause failures also. These welds should either be shown on the drawings or called out in the specifications. Tubular welds are not applicable to AWS D1.5. AWS D1.5, Section 12 is the applicable code for these welds.

b. **Other Welds**. These welds are the remaining welds that are not considered Fracture Critical Welds. AWS D1.1 is the applicable code for these welds.

3. Testing Personnel:

a. **Visual Inspection**. Visual inspection shall be performed by Certified Welding Inspectors (CWI) that are qualified and certified in accordance with the provisions of AWS QC1. Verification of documentation may be obtained from the AWS web site. Note: Certification number is required for this verification.

b. **Nondestructive Testing Technicians**. All ASNT Level III personnel shall be qualified in accordance with ASNT CP-189. Only individuals qualified for NDT Level II or individuals qualified for Level I and working under the direct supervision of a Level II shall perform nondestructive testing. Level I and Level II personnel shall be qualified in accordance with either ASNT CP-189 or ASNT SNT-TC-1A. Level III NDT Inspectors shall posses a currently valid ASNT Level III certificate in each of the processes they are qualifying inspectors to. Copies of the certifications, including the Level III NDT Technician that certified the Level I and Level II Technicians shall be included in the submittals. Verification of Level III documentation may be obtained from the ASNT web site. Note: Either Certification number or name is required for this verification.

4. Visual Inspection Requirements:

Visual inspection of welds shall conform to the requirements of AWS D1.1, Section 6, or AWS D1.5, Section 12, as applicable.

5. Nondestructive Testing Requirements:

a. **Ultrasonic Testing**. Ultrasonic testing of welds shall conform to the requirements of AWS D1.1, Section 6, Part F or AWS D1.5, Subsection 12.16, as applicable.

b. **Radiographic Testing**. Radiographic testing of welds shall conform to the requirements of AWS D1.1, Section 6, Part E or AWS D1.5, Subsection 12.16, as applicable. Only film types designated as "fine grain" or "extra fine" shall be employed.

c. **Magnetic Particle, Liquid Penetrant Testing**. Magnetic particle and liquid penetrant testing of welds shall conform to the applicable provisions of ASTM E 709 or AWS D1.5 Subsection 12.16, as applicable and in addition all magnetic particle testing of welds shall be made using the Wet Contrasting Black on White Method.

6. Acceptance Criteria:

a. **Visual, Magnetic Particle and Liquid Penetrant Testing**. Welds shall be unacceptable if shown to have defects prohibited by AWS D 1.1/D 1.1M, Section 6, Part C. Visual, magnetic particle and liquid penetrant testing acceptance criteria shall be for the applicable criteria for either "Cyclically Loaded Nontubular Connections" or "Tubular Connections" per AWS D 1.1/D 1.1M, Table 6.1. Fracture critical welds shall be unacceptable if shown to have defects prohibited by AWS D 1.5/D 1.5M, Section 12. All welds shall be assumed in tension for the acceptance criteria for visual and the appropriate nondestructive testing method.

b. **Ultrasonic Testing**. Ultrasonic acceptance criteria shall be the applicable criteria for either "Cyclically Loaded Nontubular Connections" or "Tubular Connections, Class R". Fracture critical welds shall be unacceptable if shown to have defects prohibited by AWS D 1.5/D 1.5M, Section 12. All welds shall be assumed in tension for the acceptance criteria for visual and the appropriate nondestructive testing method.

c. **Radiographic Testing**. Radiographic acceptance criteria shall be the applicable criteria for either "Cyclically Loaded Nontubular Connections (Tensile Stress)" or "Tubular Connections". Fracture critical welds shall be unacceptable if shown to have defects prohibited by AWS D 1.5/D 1.5M, Section 12. All welds shall be assumed in tension for the acceptance criteria for visual and the appropriate nondestructive testing method.

7. Frequency of Testing:

The frequency specified is the minimum required. The design engineer shall determine the required frequency and include this information in the specifications and/or drawings. The design engineer shall also specify the locations of radiographic testing.

a. **Visual Inspection**. All welds shall be visually inspected by a CWI to insure compliance with the requirements of the applicable AWS Welding Code. Prior to any welding, a CWI shall visually inspect the preparation of material for welding to assure compliance with the applicable AWS Code (D1.1 or D1.5) and approved WPS. The CWI shall also perform VT inspection throughout the welding process to assure compliance with the applicable AWS Code (D1.1 or D1.5) and approved WPS. All completed welds shall be cleaned free of oxide, flux, scale, or other foreign matter before inspection.

b. **Full Penetration Welds**. Full penetration welds shall be examined by the Contractor using ultrasonic testing (UT) procedures described above. In additional to the full penetration welds specified for testing, a randomly chosen twenty-five percent (25%) of the remaining full penetration welds shall be ultrasonically tested to ensure the quality of the procedure and process. The random testing shall include a representative sample of welds from all welders and each of the processes each welder used. The random testing shall be spread throughout the project.

c. **Full Penetration Butt Splice Welds**. All full penetration butt splices shall be examined using ultrasonic testing (UT) and radiographic testing (RT) procedures described above. These welds shall be defined in the specification or noted on the drawings.

d. **Fillet Welds and Partial Penetration Groove Welds**. Fillet welds and partial penetration groove welds shall be examined by the Contractor using magnetic particle testing (MT) procedures described above. In additional to the fillet and partial penetration welds specified for testing, a randomly chosen twenty-five percent (25%) of the remaining fillet and partial penetration welds shall be magnetic particle tested to ensure the quality of the procedure and process. The random testing shall include a representative sample of welds from all welders and each of the processes each welder used. The random testing shall be spread throughout the project.

8. Compilation of Test Data for Submittal:

The results of the test and inspections shall be recorded in the MVN database as directed in Appendix. Samples of the reporting forms and instruction for each form are provided on the MVN SharePoint site; **Test Form Examples** and are described as follows. The latest forms should be referenced on the MVN SharePoint site and described in Appendices. All data is to be submitted electronically **within 24 hours of completion of the tests by the laboratory performing the testing.**

a. **MVNQW06** (Combined Weld Examinations). This form is to be used in reporting the inspection and testing of welded steel connections. Contract specifications shall govern the required compaction effort. The results shall be submitted electronically within 24 hours of the test.

Appendix A – Test Form Management

1. Report Numbering:

Each soil sample (location) is identified with a unique Test ID created by concatenating the Report No and Test No.

All soil sample locations will be reported on test forms with the same Report No and Test No throughout entire range of tests performed on that sample location. This is particularly important when reporting tests that contain 1 test per test form such as MVNQS03 (Sand Cone tests) and MVNQS02 (Compaction-Moisture Density Relationship).

It is also necessary to give the same Report No and Test No to each sample location for test form MVNQS06 (Unified Soil Classification System), MVNQS07 (Organic Content), and MVNQS10 (Field Density-Nuclear) which allow for entry of up to 5 soil samples. The soil tests included in a suite of tests allows for entry of 5 samples.

Examples of all forms are available on the SharePoint site for review.

2. Naming the Test Form Files:

Each file shall be named using the following convention:

[Test Form Name][USACE Contract No][Report No][Test No (if necessary)]

Each part of the filename should be separated by a single space only, not a dash or other delimiter. Details of each portion of the filename convention are given below.

- **[Test Form Name]** is the name of the template MVNQ(C, S or W)##, for example MVNQS02. The variable letter are related to the type of test; C is for concrete, S is for soil and W is for Welds.

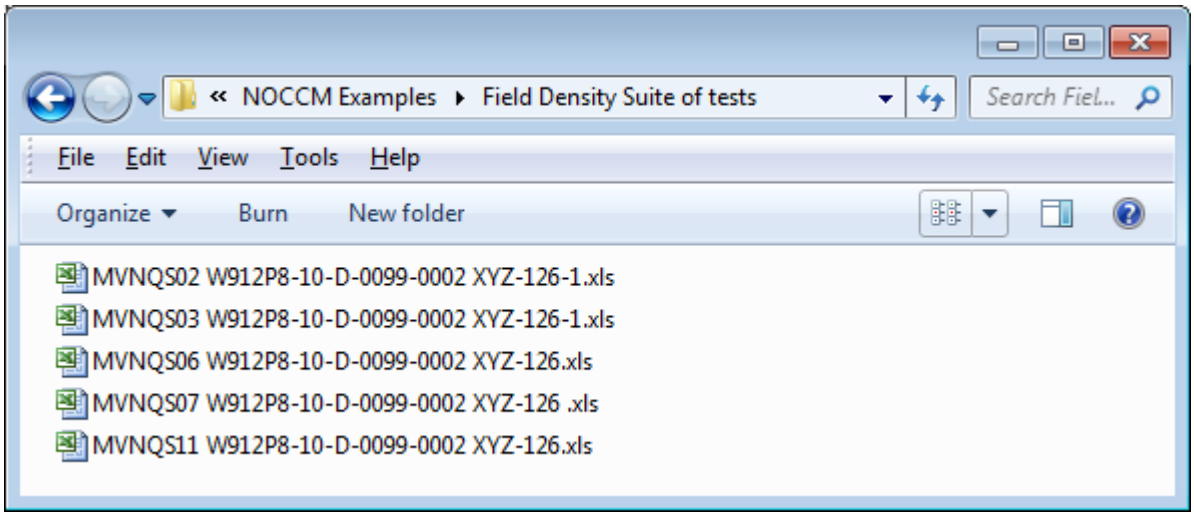
- **[USACE Contract No]** is the construction contract number. This must be the complete contract number including the task order if applicable. The contract numbers that contain a C or Z do not have task order numbers, whereas all contracts that contain a D have a task order number.

- **[Report number]** will be dependant on the labs report number system.

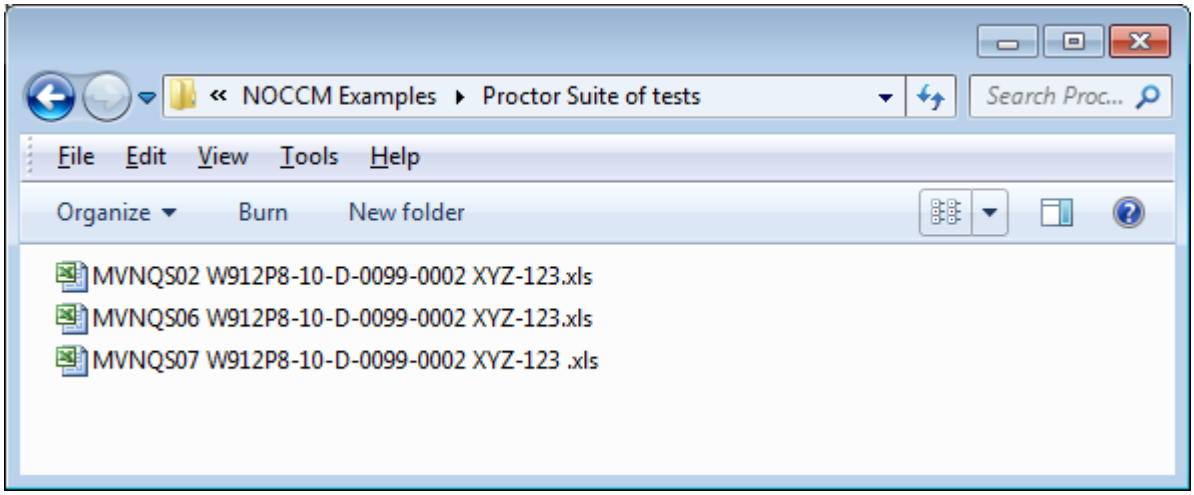
- **[Test No]** is only included in filename when necessary. This is applicable for tests reported 1 per form, as in the case of the exception listed below.

The exception to naming convention is dealing with forms that contain 1 test per test form such as MVNQS03 (Sand Cone tests), MVNQS02 (Compaction-Moisture Density Relationship) and MVNQS01 (Sieve Analysis). For these 3 Test Form types the file name will end with the Test No. The Test No is determined by the lab but should be unique to each soil sample and field location per Report No. See the Examples below for illustration of this.

Below is an example of file names for a suite of soil tests including 5 samples locations reported on a MVNQS11 (Field Density Nuclear) form, a MVNQS07 (Organic Content) form, a MVNQS06 (Unified Soil Classification System) form and a MVNQS03 (Field Density Sand Cone) form. These files are also the files included as example test forms on the SharePoint site. In this example The Report No is XYZ-126.



Below is another example for proctor data containing a MVNQS02 (Compaction-Moisture Density Relationship) test form, a MVNQS06 (Unified Soil Classification System) form and a MVNQS07 (Organic Content) form.



3. Submitting Test Forms:

All forms are to be submitted electronically **within 24 hours of completion of the tests by the laboratory performing the testing.** This is necessary since contract specifications require laboratory results to confirm compliance or failure before Contractor construction work can continue. Delays in submitting test results may result in construction delays that are to be avoided. Supporting documentation for tests should be submitted in PDF format with the same file naming convention. This completes the documentation record of data transfer to all parties.

4. How to Access USACE QACC SharePoint Site

In order to access the MVN Quality Assurance Control Center (QACC) SharePoint site each user must have an account. If a user does not have an account contact the MVN-CD Branch to receive a **USACE External Network Access Request** form. Once your account has been established you will have access to the QACC SharePoint site that contains MVNQ Test Form Templates, a QA Wiki, a QA Discussion area, a Shared Documents library, a Discrepancy Report library, and a library where completed test forms are to be uploaded; **Test Form**. The following is contact information for MVN-CD.

MVN-CD Phone;	(504) 862-2235
MVN-CD Email;	CEMVN-CD@Usace.Army.Mil
MVN-CD Public Webpage;	http://www.mvn.usace.army.mil/About/Offices/Construction.aspx
MVN QACC SharePoint;	https://partners.usace.army.mil/sites/MVN/QACC/default.aspx

5. Uploading test forms.

The exact procedure for uploading test forms to the MVN Quality Assurance Control Center (QACC) SharePoint is dependent on the computer system the user is using. Once an account has been established MVN-CD can assist each user individually by introducing the QACC system and going through the processes needed to upload test files and supporting documents. If at any point a user has questions please contact the MVN-CD-Q Branch for assistance.

Important notes before beginning the upload process; The QACC SharePoint site does have restrictions on characters (delimiters) that can be used for a file name. The following characters are not accepted by the QACC SharePoint site; \ / : * ? " < > | # { } % ~ &. If these characters are used, the QACC SharePoint site may lock up or give an error that indicates ‘a nonexistent file’. If this occurs remove the delimiters used in the file name, upload the files again and verify that all files upload because this will stop the upload process for all the files. If it is determined that certain files did not upload repeat the upload process.

The second note is that the QACC SharePoint site will time out and requires logging back in after an extended time of inactivity. The QACC SharePoint site will not indicate it timed out until attempting to perform a function on the site. The site will return to the Log in screen. If this happens, the function previously being performed may not have been performed completely.

6. Revisions and Special Naming Considerations:

When resubmitting files with revisions, the same filename is to be used if possible. If a file is to be submitted to the QACC SharePoint site it is not necessary to include a revision indication in the file name, such as R1 or R2 in the filename. The test form revision should be judicated in the appropriate revision field on the form. The QACC SharePoint site does allow files to be uploaded to the **Test Form** library when the same file name exists. In general, the idea is to keep the filename as simple as possible and the same throughout the submittal and revision process. Do not add unnecessary details to the filename.

If more information is needed, see the Wiki or Discussion board on the MVN Quality Assurance Control Center (QACC) SharePoint. The QA managers are also available if there are other questions.

Appendix B - Material Testing Laboratory Requirements

1. Purpose:

All construction material testing laboratories used in support of the Contractor's Quality Control (QC) testing and the Government's Quality Assurance (QA) testing must receive validation by the Material Testing Center (MTC), Engineering and Research Development Center (ERDC), in Vicksburg Mississippi. This includes all Contractor and government on-site laboratories or commercial laboratories used either for QC or QA testing.

2. Applicability:

This procedure applies to all projects being managed by the New Orleans District for which testing of construction materials is conducted

3. References:

ASTM E 329-06a, Agencies Engaged in the Construction Inspection and/or Testing

ER 1110-1-261 (28 April 99), Quality Assurance of Laboratory Testing Procedures

ER 1110-1-8100 (31 Dec 97), Laboratory Investigations and Testing

Corps of Engineers Validated Laboratories;

Engineering Research and Development Center - Material Testing Center
http://www.erdc.usace.army.mil/Media/FactSheets/FactSheetArticleView/tabid/9254/Article/476661/materials-testing-center.aspx

New Orleans Construction Division Operating Manual (CDOM), 1 March 2002

4. Responsibilities:

The Administrative Contracting Officer (ACO) / Contracting Officer's Representative (COR) is responsible for ensuring that all testing laboratories used for QC or QA testing are on the electronic validated list for the tests to be performed and for requesting that New Orleans District coordinate as necessary to pursue validation of a desired laboratory.

5. Procedures:

After award, the Contractor submits a QC Plan which delineates the scope of the testing program and identifies the testing laboratory (s) proposed specific tests. Contract specific Quality Assurance Plans will include requirements for QA verification testing by a Corps validated laboratory.

The Administrative Contracting Officer (ACO) / Contracting Officer's Representative (COR) will ensure that the QC laboratory is independent of the QA laboratory and will work with the Contractor if necessary to select another laboratory for QC or QA testing. The QC plan will

reflect the selected laboratories. If the laboratory proposed by the Contractor is not a currently validated lab, then the Administrative Contracting Officer (ACO) / Contracting Officer's Representative (COR) will notify the Contractor and request an inspection of the selected laboratory coordinated by MVN-CD-Q in accordance with the procedures described in Construction Division's Operating Manual (CDOM). For planning purposes, the validation process may require a period of six months to complete.

Briefly, the MTC validation process is described as follows:

Validation of a laboratory may consist of either (1) an inspection of the laboratory and their processes or (2) an audit of inspection reports and other documentation furnished by other validating agencies or organizations.

MTC will perform inspections in accordance with ASTM E 329 and applicable tests in ER 1110-2-1906 or tests required by project specifications.

The MTC may validate a laboratory if it has been accredited by the Concrete and Cement Reference Laboratory (CCRL) or AASHTO Materials Reference Laboratory (AMRL) within the past two years using ASTM E 329. Inspection by the MTC may be required after auditing if one or more of the critical testing procedures required in the project specifications were not included in the CCRL or AMRL inspection report or if there is any question that the laboratory may not be able to provide the required services for the specified tests.

More information about the validation process is available at the following:
Phone; (601) 634-3123
Email; MTC-info@usace.army.mil
Public Website;
http://www.erdc.usace.army.mil/Media/FactSheets/FactSheetArticleView/tabid/9254/Article/476661/materials-testing-center.aspx

6. Records:

Records demonstrating laboratory validation will be maintained by MTC web site for the most current laboratory listing.

Appendix C - Filling Out Test Form Templates

1. Test Form Templates:

The latest Construction Material Testing report forms are located at the following locations:

Navigate to the **MVNQ Test Form Template** library to download the most up to date forms.

https://partners.usace.army.mil/sites/MVN/QACC/TFT/Forms/AllItems.aspx

For access to the Extranet SharePoint site, follow procedures in Appendix A or contact the MVN Construction Division Quality Branch. Once access is granted, reference the Extranet SharePoint site to download the latest test form templates in the MVNQ Test Form Template library, as they are periodically updated and/or revised. Failure to submit the latest version of the test form template will prevent data from being loaded into the QACC database. The rejected form will be required to be resubmitted on the proper test form template.

The Test Form Examples library on the SharePoint site provides guidelines for completing several of the test form templates. Further information, definition and updates can be found in the MVNQTERMS documents and the QACC Wiki located on the Extranet SharePoint site.

On all forms, the Sample Date is defined as the date the test was performed in the field and not the date the sample was tested in the lab. Please use the Remarks section on each form for any comments that pertain to the tests performed. Comments may include items such as: meet specs, meet specs of xx% (for different types of material, say embankment is 90% compaction and trench is only 85%), in-situ material, failing tests reported to John Smith, etc. There is no such thing as too much detail or information.

This reporting and submittal system is to be used for all Corps of Engineers work in the MVN division.

2. MVNQ Terms Document:

The MVNQ Terms document located on the Extranet SharePoint site provides a list of terms that are referenced directly from the MVNQ Test Forms. This document will define the terms used on the MVNQ Test Forms, and in some cases, provide examples of the information needed in associated cells. If there is a term that is not provided, an error or a term that is not defined clearly please contact a QA Manager.

C-1 List of Forms

Form Name	Procedure(s)	Form ID .
Soil Testing Forms		
#200 Wash and Sieve Analysis	ASTM C 117- C136	MVNQS01
Lab Compaction of Soil Standard Effort	ASTM D 698	MVNQS02
Density by Sand Cone	ASTM D 1556	MVNQS03
Unconfined Compression Strength	ASTM D 2166	MVNQS05
Classification of Soils – USCS	ASTM D 2487	MVNQS06
Moisture, Ash and Organic Matter of Soils	ASTM D 2974	MVNQS07
Moisture Content Determination	ASTM D 2216-4643	MVNQS09
In-place Density and Moisture of Soils	ASTM D 6938	MVNQS11
Field Density (Relative Density) - Nuclear Method	ASTM D 6938	MVNQS12
Concrete Forms		
Concrete Compression Test	CCT	MVNQC01
Concrete Field Test	CFD	MVNQC02
Welding Forms		
Welds – LIQUID		MVNQW06
Welds - MAGNETIC		MVNQW06
Welds - RADIO		MVNQW06
Welds - UT		MVNQW06
Welds - VISUAL		MVNQW06

US Army Corps of Engineers ®
New Orleans District

Construction Control Manual

Sampling & Testing Construction Materials
Reporting Test Results

CEMVN CD 415-Q-11
14 March 2016

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
7400 LEAKE AVENUE
NEW ORLEANS, LOUISIANA 70118

CEMVDN-CD

Pamphlet
Number CEMVN-CD-415-Q-11 14 March 2016

Construction

CONSTRUCTION CONTROL MANUAL

1. Purpose. This manual describes the means and methods for the Contractor Quality Control (QC) and Government Quality Assurance (QA) testing of some of the more common construction materials incorporated into New Orleans District projects. Information is given on sampling, the test required, testing frequency, reporting requirements, and database maintenance. This manual only describes a minimum testing program on a limited number of common construction materials and the specifications may require additional tests that demonstrate compliance with the contract documents.

2. Applicability. This manual applies to all New Orleans District elements having responsibility for the design and construction of assigned projects.

3. Scope of the Manual. This manual is intended to guide the Quality Control and Quality Assurance process and provide for the construction of a project whose quality and durability is a direct reflection of the Contractor's and the Government's efforts in meeting the project's goals and objectives. If there is a conflict between this manual and the technical specification sections, the most stringent requirements shall govern.

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
CORPS OF ENGINEERS

Number CEMVN-CD-415-Q-11

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Chapter 1 Introduction

1. General:

This manual describes the means and methods for the Contractor Quality Control and Government Quality Assurance testing of construction materials incorporated into the New Orleans District (CEMVN) projects. Information is given on sampling, the test required, testing frequency, reporting requirements, and database maintenance. This manual only describes a minimum testing program on a limited number of common construction materials and the specifications may require additional tests that demonstrate compliance with the contract documents. If there is a conflict between this manual and the technical specification sections, the most stringent requirements shall govern. The most recent version of this manual at the time of contract solicitation will supplement the construction material control requirements for a specific contract unless noted otherwise.

The Contractor shall only use those laboratories, including his own that have been validated by an inspection or audit performed by the USACE Materials Testing Center, Vicksburg, MS.

2. Definitions:

a. Quality Management System. Quality management is defined as all control, inspection, and other assurance activities instituted to achieve the product quality established by the contract plans and specifications.

b. Contractor Quality Control. Contractor Quality Control (QC) is that part of the system by which the Contractor regulates, tests and inspects their own, suppliers, and sub-Contractors procedures, equipment, materials, and personnel so that the completed product will comply with the requirements of the project's contract documents.

c. Government Quality Assurance. Government Quality Assurance (QA) is that part of the system by which the Government verifies or assures that the Contractor's Quality Control system is performing properly and the completed product conforms to the contract documents. The number of QC test observed by QA personnel should be generally related to the consistency in QC and QA test results.

3. Responsibility, Compilation, and Submittal of Test Results:

a. The Contractor is responsible for complying with the contract documents in the performance of all required tests and the preparation, submittal, and maintenance of those test reports outlined in this manual and the contract specifications. The test results from QC and QA testing shall be compiled separately as outlined in this manual.

b. The Contractors' QC Laboratory shall appoint a Registered Professional Civil Engineer to certify QC inspections and test results prior to the start of work. The certification shall state that the tests and observations were performed by or under the direct supervision of the Registered Professional Civil Engineer and that the results are representative of the

materials and conditions being certified by the tests. The certification shall be submitted within two weeks after final inspections and testing is complete. The certification shall be submitted to USACE for the referenced project in accordance with the New Orleans Construction Control Manual, Appendix A. Failure to submit certifications as stated may result in nonpayment for related work performed and disapproval of the QC test facility for this contract.

c. Acceptance of the Contractors' QC plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes to the QC Plan and operations including removal of personnel and QC Laboratory, as necessary, to obtain the quality specified.

d. All test results will be entered into the CEMVN Quality Assurance Control Center (QACC) construction material testing database as described in Appendix A by the QC laboratory performing the testing. Test results will be entered into the testing database within 48 hours from sampling. Payment for any material placed, as well as for any subsequent construction, will not be made until test results are entered into the database and analyzed by Quality Assurance personnel. The Contractor shall maintain a hard copy of the materials testing log, test reports and control charts at the Contractor's field office. These records will be available at all times for review by Government personnel. The original test report will be distributed to the Administrative Contracting Officer (ACO) within 48 of completion of the test. This original test report (supporting documentation) submission is in addition to any required electronic submission.

e. Any tests not conforming to the contract documents will be immediately reported to the Administrative Contracting Officer along with the recommended corrective action to bring the work into complete compliance with the specifications. The Administrative Contracting Officer may designate additional re-sampling or retesting to verify the work represented by the failing test. This testing is at the Contractor's expense.

f. Reference to standard test methods and testing procedures for sampling and testing of common construction materials are given in each chapter of this manual. Additional testing may also be required in the contract documents.

g. Laboratory Facilities. For work that involves aggregates, concrete, masonry, rock or soil the QC Laboratory shall, at its own expense, obtain and maintain validation as an approved testing laboratory by the Materials Testing Center (MTC) of the Engineering Research and Development Center (ERDC). This shall be done in accordance with ER 1110-1- 8100 and ER 1110-1-261. Appendix B further describes this requirement. Refer to Chapter 4 for welding laboratories.

   For work that involves vibration, steel, steel reinforcing bars, coatings inspections and other specialized construction material testing and inspection the QC Laboratory shall maintain personnel, procedures and equipment that meet applicable industry standards.

h. Field sampling and testing locations shall be recorded using Latitude/Longitude coordinates reported in decimal degree format to the millionth decimal and be surveyed using techniques to achieve ±10 feet accuracy.
   Report Form input example: 29.934003, -90.133745

Chapter 2 Soils

1. Scope:

This chapter specifies methods and procedures for the Contractor Quality Control (QC) and Government Quality Assurance (QA) testing of materials used, but not limited to, compacted levee embankments, compacted berms, un-compacted berms, ramps, and structural backfill. The Government will also perform checks, and assurance testing of control testing required by the Contractor.

2. Samples:

Samples shall be collected and secured in accordance applicable ASTM testing procedures.

3. Testing Personnel:

The individuals who inspect, monitor, sample and test Embankment construction as required in this specification shall meet the following minimum criteria of certification and/or documented experience. Work experience shall be related to the field for which the inspector is being qualified and may be obtained by working either for an inspection/testing agency or engineering firm as a technician, inspector or engineer.

- Current NICET Level II certification in Geotechnical Engineering technology/construction, or
- Current ICC Soils Special Inspector with one year related experience, or
- Geologist-in-Training with one year related experience, or
- Engineer Intern with one year related experience, or
- Registered Geologist, or
- Registered Professional Engineer.

The Contractors' QC laboratory shall submit certification and/or documentation to provide evidence of qualification. The appointed Registered Professional Civil Engineer, identified in Chapter 1, Section 3.b to certify inspections and test results, remains responsible for compliance of all inspection and testing activities.

All Laboratory facilities, personnel and equipment used to test soils as required in this specification shall be part of a Laboratory that has been validated by the USACE Materials Testing Center, Vicksburg, MS.

4. Typical Test Requirements:

Testing and reporting shall be performed in accordance with the latest American Society of Testing and Materials (ASTM) Standard, as indicated in Table 2-1.

Table 2-1
ASTM References

Gradation	
ASTM C 117	Materials Finer than No. 200 Sieve in Mineral Aggregates by Washing
ASTM C 136	Sieve Analysis of Fine and Course Aggregates
ASTM D 1140	Amount of Material in Soils Finer than No. 200 (75-µm) Sieve
ASTM D 6913	Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis
Moisture Content	
ASTM D 2216	Laboratory Determination of Water, (Moisture) Content of Soil and Rock by Mass (Method B)
ASTM D 4643	Determination of Water (Moisture) Content of Soil by Microwave Method
Moisture/Density Relationship	
ASTM D 698	Laboratory Compaction Characteristics of Soil Using Standard Efforts (12,400ft lbs/ft^3 (6000KN))
ASTM D 1557	Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3))
Field Density	
ASTM D 1556	Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D 6938	In-Place Density and Water Content of Soil and Soil-Aggregate Nuclear Methods (Shallow Depth)
Materials Classification	
ASTM D 2487	Classification of Soils for Engineering Purposes
ASTM D 4318	Liquid Limit (One-Point Method B), Plastic Limit, and Plasticity Index of Soils
Organic Content	
ASTM D 2974	Moisture, Ash, and Organic Matter of Peat and Other Organic Soils (Method C)
Unconfined Compressive Strength	
ASTM D 1633	Compressive Strength of Molded Soil-Cement Cylinders
ASTM D 2166	Unconfined Compressive Strength of Cohesive Soil

5. Sampling and Testing of Compacted Fill:

This sampling and testing shall be in accordance with the standard procedures referred to in this manual. The minimum number of QC tests to be performed shall be as indicated in Table 2-2. The Government will also perform checks, and assurance testing of the other control testing required by the Contractor.

Table 2-2
Type of Tests and Frequency of Testing
Compacted Embankments and Berms, Ramps, and Structural Backfill Material

Property	Form	Minimum Frequency	Standard
Nuclear Field Density	MVNQS11	One test per 1,500 cubic yards of compacted fill placed per lift, but not less than one density test per 500 linear feet per lift. A lift placed on any one side of an existing embankment will be considered as a separate lift. At least one test shall be performed in any shift that compacted fill is placed.	ASTM D 1556 or ASTM D 6938
Nuclear Field Density Relative Density	MVNQS12	Used to record test results from testing uncohesive material. One density test per lift per 150 linear feet of the base course. Isolated repairs (less than 150 linear feet) must have at least one density test per isolated area per lift.	ASTM D 6938
Sand Cone Field Density	MVNQS03	One test to be obtained for every ten (10) Nuclear Field Density locations to verify Nuclear Field Density.	ASTM D 1556
Compaction Control Curve	MVNQS02	Control Compaction Curves shall be established in accordance with ASTM D 698 - Laboratory Compaction Characteristics of Soil Using Standard Effort. A Compaction Control Curve will be required for each type of material from each source or a minimum of one Compaction Control Curve every 25,000 cubic yards of compacted fill placement. Where construction operations result in the blending of material, two representative Compaction Control Curves will be required for each resulting blend of material. The samples collected for the resultant blended material shall be collected from separate locations. If the borrow or source of fill material changes, new Compaction Control Curves shall be performed. Material test samples for Compaction Control Curve shall be prepared by air-dry, rewet, and cured.	ASTM D 698
One-Point Proctor Verification	MVNQS02	One test to be obtained for every five (5) field density locations.	ASTM D 698 (modified)
Moisture Content	MVNQS11	One test at each field density test location.	ASTM D 2216 or ASTM D 4643
Organic Content	MVNQS07	One test at each field density test location.	ASTM D 2974 (Method C)
Materials Classification	MVNQS06	One test obtained for each Control Compaction Curve and one test for each field density test. Determine Atterberg Limits (LL One-Point Method B), minus #200 and Sand Content.	ASTM D 2487 ASTM D 1140 ASTM D 4318
Unconfined Compressive (UC) Strength	MVNQS05	For Deep Soil Mixing (DSM) QC operations a minimum of three percent of the DSM columns per site will be drilled and three UC strength samples collected and tested at each test column.	ASTM D 2166 ASTM D 1633

6. Sampling and Testing of Un-Compacted Berm Material:

This sampling and testing shall be in accordance with the standard procedures referred to in this manual. The minimum number of QC tests to be performed shall be as indicated in Table 2-3. The Government will also perform check and assurance testing of the other control testing required by the Contractor.

Table 2-3
Type of Tests and Frequency of Testing
Un-Compacted Berm Material

Property	Form	Frequency	Standard
Organic Content	MVNQS07	One test at materials classification test location.	ASTM D 2974 (Method C)
Materials Classification	MVNQS06	One test per 3,000 cubic yards of un-compacted fill placed, but not less than one test per 1,000 linear feet of un-compacted fill placed. At least one test shall be performed in any shift that un-compacted fill is placed. Determine Atterberg Limits (LL One-Point Method B), minus #200 and Sand Content.	ASTM D 2487 ASTM D 1140 ASTM D 4318

7. Compilation of Test Data for Submittal:

The results of the test and inspections shall be recorded in the MVN database as directed in Appendix. Samples of the reporting forms and instruction for each form are provided on the MVN SharePoint site; **Test Form Examples** and are described as follows. The latest forms should be referenced on the MVN SharePoint site and described in Appendices. All data is to be submitted electronically **within 24 hours of completion of the tests by the laboratory performing the testing.**

a. **MVNQS01** Sieve Analysis – ASTM C 117, ASTM C 136 and ASTM D 1140. This form is to be used in reporting the material finer than No 200 sieve and a sieve analysis of coarse grain material.

b. **MVNQS02 (**Compaction Control Curve) ASTM D 698. This form is to be used in reporting the determination of the optimum moisture content and the maximum dry density. The moisture-density curve shall be plotted based on a minimum of five compaction test specimens. A one-point Proctor test – ASTM D 698 (modified, Figure 2-2) shall be obtained for every five (5) field density test locations, and reported with same. The soil One-Point proctor result obtained from the in-place density test location will serve as the basis for determining the applicable compaction control curve.

c. **MVNQS03 (**Field Density Sand Cone Method) ASTM D 1556. This form is to be used in reporting the determination of the degree of compaction and moisture content. Contract specifications shall govern the required compaction effort.

d. **MVNQS05** (Unconfined Compressive Strength) ASTM D 2166. This form is to be used to report the compressive strength of an intact, remolded or reconstituted cohesive soil, using a strain-controlled application of the axial load. Contract specifications shall govern the acceptable strength requirements.

e. **MVNQS06** (Unified Soil Classification System) ASTM D 2487. This form is to be used to report the determination of the liquid limit (One-point Method B), plastic limit, plasticity index, % sand content and % fines. MVNQS01 Sieve Analysis – ASTM C 117 and ASTM C 136 is to be used to report the results of gradation tests of the material if a granular material is specified. The final soil classification in accordance with ASTM D 2487 shall be stated on the same forms. Contract specifications shall govern the acceptable Atterberg limits, gradation limits, and material classification. If the Nuclear Method (ASTM D 6938) is used for field density determinations, the soil sample utilized for material classification shall come from within a radius of 12 inches of the center of the in-place density test site. The soil classification obtained from in-place density test location will serve as a basis for determining the applicable compaction control curves.

f. **MVNQS07 (**Moisture, Ash, and Organic Content Determination) ASTM D 2974 (Method C). This form is to be used in reporting the determination of the organic content of the material. Determination of organic content shall be performed in accordance with ASTM D 2974; Method C. Contract specifications shall govern the acceptable limits of organic content.

g. **MVNQS09 (**Moisture Content Determination) ASTM D 2216, ASTM D 4643 and ASTM D 6938. This form is to be used in reporting the determination of the moisture content of the in-place material when ASTM D 2216, ASTM D 4643 or ASTM D 6938 is the test method utilized. This form is not to be used when performing Field Density Test Nuclear Method with Moisture Content Determination. Contract specifications shall govern the acceptable limits of moisture content.

h. **MVNQS11** (Field Density Test Nuclear Method). This form is to be used in reporting the determination of the degree of compaction and moisture content by oven, microwave or nuclear gauge. Contract specifications shall govern the required compaction effort and moisture range. If the nuclear method is selected for field density testing, the Sand-Cone Method shall be used to confirm the accuracy of the Nuclear Method. This shall be accomplished by performing an initial comparison test of the two methods when a nuclear gage is brought on-site for the first time. If the Nuclear Method wet density is within 3 percent of the Sand Cone Method, no correction of the Nuclear Method wet density will be required and the testing may continue with the Nuclear Method. The Nuclear Method wet density shall be verified throughout the project at a rate of one Sand-Cone test for every ten nuclear tests per nuclear gage thereafter. If the variance at any time between the Nuclear Method and the Sand Cone Method exceeds 3 percent, testing

with the Nuclear Method shall stop until the Contractor provides a Root Cause Analysis and five consecutive comparison tests are performed as evidence that Corrective Actions will provide results within 3 percent. For comparison purposes, the nuclear and sand-cone wet densities should represent the same layer thickness within the testing area selected. When a nuclear density result is in doubt, the sand-cone density test shall be used for acceptance.

i. **MVNQS12** (Field Density (Relative Density) Nuclear Method). This form is to be used in reporting the determination of the Relative degree of compaction as determined based on relationship of the Minimum Dry density and Maximum Dry density. Contract specifications shall govern the required Relative Density.

8. Soil Electronic Conductivity (EC) and Total Soluble Salt Analysis:

The following test method shall be used for determining the Total Soluble Salt (Total Salinity) of Embankment soils. This method shall be followed when testing embankment soil salinity levels. Sampling of materials shall be performed by a USACE Validated Laboratory.

A. Sampling; Sampling shall consist of one 12,500 gram composite sample per 1,000 linear feet per lift. A Composite soil sample is defined as 5 separate representative 2,500 gram samples taken randomly at relatively evenly spaced intervals within the 1,000 linear foot. A lift on any one side of the levee will be considered one lift. The locations of the samples shall be as directed by the Contracting Officer. When a composite soil sample is collected, it should be handled in accordance with ASTM D 4220, Group B Standard Practices for Preserving and Transporting Soil Samples.

   As directed by the Contracting Officer, when samples are to be split for replicate testing, the entire composite sample shall be processed over a No. 4 (4.75 mm) sieve by the contractors QC laboratory. The material passing the No. 4 sieve shall be thoroughly mixed and split in accordance with ASTM C 702 Standard Practice for Reducing Samples of Aggregate to Testing Size.

B. Sample Preparation; Composite soil samples passing a No. 4 sieve are to be thoroughly remixed and reduced to a minimum 200 g sample for testing in accordance with ASTM C 702 Standard Practice for Reducing Samples of Aggregate to Testing Size.

   The reduced composite soil sample is air dried at a temperature not to exceed 140° F for a minimum of 18 hours. After the sample is air dried, process and collect material passing No. 10 (2 mm) sieve. Material retained on the No. 10 sieve will be discarded.

C. Procedure; (EC 1:2 preparation) To determine soil EC, collect a representative 20 gram sample from the sieved air-dried material and mix with 40 mL deionized water in a 125 mL Erlenmeyer flask.

   The container is sealed and the mixture is either agitated for 1 hour in a mechanical shaker or mixed by hand every 30 minutes for 3 hours.

The mixture is filtered through a Whatman 42 filter paper. EC (dS/m) of the filtrate is determined immediately using a standard conductivity meter. Follow manufacture's direction for standard conductivity meter operations and temperature corrections.

D. Reporting; The directly-measured EC 1:2 is converted to Saturated Extract-Equivalent EC (EC_e) by multiplying by a factor of 2. (Southern Cooperative Series Bulletin No. 419 ISBN# 1581614195 January, 2014)

Total soluble salts (TSS) concentration in ppm (mg/L) is calculated by multiplying EC_e (dS/m) by 640 for EC readings <5.0 dS/m or by 800 for EC readings >5.0 dS/m. (Rhoades, 1996)

The report shall include at a minimum;

1. All sample identifications documented during sampling that at a minimum include, sample date, received date, test/sample number, location of composite sample (GPS, station, lift, , elevation, offset)
2. USCS visual description
3. Make/Model and Serial # of conductivity meter
4. Notes should include any deviations from this test method.
5. The Soil Electronic Conductivity (EC) shall be reported in decisiemens per metre (dS/m).
6. Total Soluble Salt shall be reported as Total Salinity in parts per million (ppm).

9. Field and Laboratory Determination of Non-Soil Volume for Levee Fill:

A. The field excavation testing shall be performed by excavating a 10' wide x 10' long and to a depth of the lift thickness for each lift that is in question. The volume of the excavation shall be verified using the end area method through measuring the dimensions of the excavation with the use of survey equipment at each corner of the hole. A difference of +/- 10% of the theoretical excavation is allowed. The Contractor shall bring all material excavated to the lab in sealed airtight containers. All excavations shall be completely backfilled by the Contractor within 72 hours of inspection unless directed otherwise by the COR. All backfill shall be in accordance with the existing contract documents, especially EMBANKMENT.

B. The unit weight of the soil shall be determined by ASTM D 6938 Field Density – Nuclear Method, ASTM D 1556 Field Density – Sand Cone Method, or ASTM D 698 Compaction Characteristics of Soil. All material testing shall be performed by a Corps validated lab.

C. Once all the excavated material is delivered to a Corps validated lab, any clay pieces adhering to the non-soil pieces that can be removed by hand without damaging the non-soil piece shall be removed.

D. All non-soil pieces shall be weighed in their existing conditions immediately prior to testing (wet weight as excavated). If all non-soil pieces do not fit in the Measure Box, then the non-soil pieces may be split into smaller sampling sizes for testing purposes and the cumulative volume reported.

E. Sturdy Measure Box containers shall be used for the non-soil volume determination processes. The minimum volume of the Measure Box is 0.8 cubic feet. This volume dimension is a minimum and may be enlarged if desired. The weight of the empty containers shall be determined using a calibrated scale and with the weight recorded to the nearest 0.1 lb. The container shall be filled in two layers with silica sand. The first layer of sand shall be densified by use of a Shake Table and vibrated such that the Silica sand achieves its maximum density. The second layer of silica sand shall be added and vibrated, with additional sand added as needed to "top off" the container as the sand achieves a greater density. The weight of the container filled with densified Silica sand shall be recorded to the nearest 0.1 lb using a calibrated scale. Determine the weight of the measure container plus sand three times to determine the average value. The maximum unit weight of the silica sand is the weight of the measure plus sand minus the weight of the measure divided by the known volume of the container and reported to the nearest 0.1 lb/ft3.

F. The volume of the non-soil shall be determined by the following USACE MVN developed procedure, Non-Soil Volume Determination.

1) **Volume and Weight Determination of Measures (annual):** The volume of the Measure Box shall be determined and verified on an annual basis by the water filled method as specified in ASTM C29/C29M paragraph 8 and recorded to the nearest 0.1 ft^3.

2) **Density Sand**: Obtain silica sand also known as US Silica Sand. Verify that the quality of the silica or "Silica" sand meets the requirements specified in ASTM D1556 paragraph 6.2. The sand can be re-used, but it should be cleaned to comply with the previously referenced standard by sieving and/or rinsing, and oven drying prior to reuse.

3) **Determining Densified Sand within a Measure Box**: Before any tests determining non-soil volume content, a calibration test shall be run each day that testing is to be performed, to determine the standard weight of the sand in the Measure Box as discussed in section E. The three repeated determinations of densified sand weight per unit volume shall be within 2.0 pcf of each other.

   A Measure Box shall be used to determine the densified sand and will be based upon use of a Shake Table and placement within layers. Clean and dry silica sand is placed loosely within each layer using a large scoop or the edge of a bucket by flowing and distributing the sand evenly across the surface area. The Shake Table is then to be used. The number and duration of vibrations will be determined as noted in the following trial. These times are approximate and should be modified by each laboratory to fit the Shake Table being used to achieve a consistent sand weight per unit volume.

MEASURE BOX – (1) Position measure over a large catch pan for collecting excess sand. Place loose Silica sand in one layer (half height of measure); (2) Using the Shake Table, vibrate the sand for 4-8 seconds; (3) Place loose silica sand in a second layer (full height of measure); (4) Vibrate the sand for 4-8 seconds. The sand should consolidate below the top rim of the measure; (5) Place additional (excess) sand above the top of the measure. It should appear to overflow. Vibrate for the sand for an additional 3-4 seconds. It is desired to have excess sand above the top of the rim after vibration of about 1/8 inch; (6) Using a straight metal bar, strike off the excess sand, leaving the sand flush with the top rim of the measure; (7) Weigh the measure and densified sand recorded to the nearest 0.1 lb; (8) Determine the weight per unit volume of the measure by subtracting the weight of the measure plus sand minus the weight of the measure then dividing by the known volume of the container and report to the nearest 0.1 lb/ft3; (9) Repeat steps 1 thru 8 for a total of three determinations of densified sand weight per unit volume, and calculate the average weight per unit volume to the nearest 0.1 lb/ft3.

4) **Standard Wood or Metal for Verification (annual)**: Eight pieces of wood or metal, labeled A thru G, measuring 5 inches by 1 inch by 2 inches are to be used to verify the volume determination by the densified sand method as detailed in 5) below. Determine the weight and linearly measured volume of the eight standard pieces of wood or metal to verify the calculated non-soil content from the use of densified silica sand within Measure Boxes of known volume.

5) **Non-soil Verification (annual)**: Wood or metal pieces measured in Step 4) above will be used in each measure by densifying sand and four wood or metal pieces in each layer, for a total of eight wood or metal pieces within each measure. The same procedures outlined in Step 4) above are used to place and densify the sand and wood or metal within the measures. The wood or metal is placed within each layer with at least ½ inch of loose sand beneath and around the wood or metal pieces. The weight of the densified sand, measure, and wood or metal is used to determine the density and subsequent volume of the wood or metal. The calculated volumes shall be compared to the known volumes of the wood or metal pieces to see if any change in shaking time or sand type is needed. If the calculated and known volumes are within +/- 2% of each other, the test verification is successful. See below for the step by step procedures for this:

MEASURE BOX - (1) Determine the volume and weight of the measure as noted in Step 1) above; (2) Determine the average densified sand weight per unit volume as noted in Step 3) above; (3) Determine volume and weight of pre-cut pieces of wood or metal as noted in Step 4) above; (4) Densify wood or metal in layers following the similar method noted in Step 3) above; (5) Determine the densified sand and wood or metal weight in the unit measure; (6) Calculate the volume of wood or metal as shown below:

(a) Volume of Measure Box (ft^3)
(b) Weight of Measure Box (lb)

(c) Average weight per unit volume of densified sand (lb/ft^3)
(d) Wood or metal Pieces total weight (lb)
(e) Wood or metal Pieces total volume (ft^3)
(f) Average determined densified sand, wood or metal, & measure weight (lb)
(g) Densified sand only weight (no wood or metal) = (c) x (a)
(h) Densified sand only weight (with wood or metal) = (f) – (b) – (d)
(i) Volume of wood or metal (from densified sand test) = [(g) – (h)] / (c)
(j) % actual volume wood or metal = 100 x (e) / (a)
(k) % tested volume wood or metal = 100 x (i) / (a)

6) **Non-soil Volume Determination**: Determination of non-soil volume for a test sample is as follows. Determine the wet weight of the sample prior to placement into the loose sand layers. Cleaned non-soil pieces from a sample are placed in one of the tested measures above by following procedures as outlined in Step 3). The non-soil pieces are placed within each layer of loose sand with at least ½ inch of loose sand beneath and around the various non-soil pieces. The non-soil piece may be cut to fit into the measure but care should be used to ensure that all pieces of the sample are measured. The weight of the combined densified sand, measure, and non-soil shall be recorded to the nearest 0.1 lb. To determine the density and subsequent volume of the non-soil pieces, see calculations below.

MEASURE BOX - (1) Determine the volume and weight of the measure as noted in Step 1) above; (2) Determine the average densified sand weight per unit volume as noted in Step 3) above; (3) Determine weight of sample pieces of non-soil; (4) Densify non-soil pieces in layers following the similar method noted in Step 3) above; Determine the densified sand and non-soil pieces weight in the unit measure; (5) Calculate the volume of non-soil pieces as shown below:

(a) Volume of Measure Box (ft3)
(b) Weight of Measure Box (lb)
(c) Average weight per unit volume of densified sand (lb/ft3)
(d) Weight of Sample Non-soil Pieces (lb)
(e) Determined densified sand, non-soil pieces, & measure weight (lb)
(f) Densified sand only weight (no non-soil pieces) = (c) x (a)
(g) Densified sand only weight (with non-soil pieces) = (e) – (b) – (d)
(h) Volume of non-soil pieces (from densified sand test) = [(f) – (g)] / (c)
(i) Volume of excavation (ft3)
(j) % tested volume non-soil pieces = 100 x (h) / (i)

7) **Documentation**: As a minimum, calibrations of Measure Boxes should be documented annually on the Unit Weight Measure Volume Determination Record. The Densified Sand unit weight shall be documented on the Densified Sand Calibration Record. Test records for samples shall be documented on the Non-soil pieces Volume Determination Record. Contact MVN-CD-Q for latest test forms.

G. The percent volume determined in Step 6) (j) above shall be compared versus the acceptable value listed in the specifications. If the test shows the percent volume is greater than the acceptable value, the Contractor shall follow the corrective actions as noted in the contract specifications.

10. Additional Testing:

In addition to the above frequency of tests, additional tests may be required as follows:

a. Where the Administrative Contracting Officer (ACO) or Contracting Officer's Representative (COR) has reason to doubt the adequacy of the compaction, moisture content, or organic content control.

b. Where the Contractor is concentrating fill operations over a relatively small area.

c. When embankment materials change substantially, the Administrative Contracting Officer or Contracting Officer's Representative (COR) may direct additional testing.

d. Where special compaction procedures are being used.

e. When the contract specifications require additional testing.

f. When areas are found not meeting the specified in-place density, Atterberg limits, moisture content, and/or in-place organic content requirements; the Contractor shall retest, at no additional costs to the Government, after corrective measures have been applied.

Chapter 3 Concrete

1. Scope:

This chapter specifies methods and procedures for the Contractor Quality Control (QC) and Government Quality Assurance (QA) methods and procedures for the testing of fresh concrete and concrete aggregate. The Government will also perform checks, and assurance testing of control testing required by the Contractor.

2. Samples:

Fresh concrete samples shall be secured in accordance with ASTM C 172. Concrete aggregates shall be sampled in accordance with ASTM D 75. Sampling locations shall be randomly selected.

3. Testing Personnel:

The individuals who inspect, monitor, sample and test Concrete construction as required in this specification shall meet the following minimum criteria of certification and/or documented experience. Work experience shall be related to the field for which the inspector is being qualified and may be obtained by working either for an inspection/testing agency or engineering firm as a technician, inspector or engineer.

- Current ICC Reinforced Concrete Certificate with 1 year related experience, or
- ACI Concrete Construction Special Inspector Certificate, or
- Engineer Intern with one year related experience, or
- Registered Professional Engineer.

The individuals who perform testing of concrete or the constituents of concrete as required in this specification shall have an applicable and current ACI certification for testing being performed; ACI Concrete Strength Testing, ACI Concrete Laboratory Testing – Level 1, ACI Aggregate Testing Technician – Level 1, ACI Concrete Field Grade I.

The Contractors' QC laboratory shall submit certification and/or documentation to provide evidence of qualification. The appointed Registered Professional Civil Engineer, identified in Chapter 1, Section 3.b to certify inspections and test results, remains responsible for compliance of all inspection and testing activities.

All Laboratory facilities, personnel and equipment used to test soils as required in this specification shall be part of a Laboratory that has been validated by the USACE Materials Testing Center, Vicksburg, MS.

4. Typical Test Requirements:

Test requirements specified in the contracts documents may be more stringent than those listed below in Tables 3-2, 3-3 and 3-4. All test results will be entered into the MVN material testing database as described in Appendices by the laboratory performing the testing. Acceptable test values are contained in the contract documents.

The laboratory performing the tests shall be validated by the Materials Testing Center, Vicksburg, MS. and conform to ASTM C 1077.

Table 3-1
ASTM References

Concrete Lab Testing	
ASTM C 33	Specification for Concrete Aggregates
ASTM C 39	Compressive Strength of Cylindrical Concrete Specimens
ASTM C 117	Materials Finer than No. 200 Sieve in Mineral Aggregates by Washing
ASTM C 136	Sieve Analysis of Fine and Course Aggregates
ASTM C 511	Mixing Rooms, Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the Testing of Hydraulic Cements and Concretes
ASTM C 566	Total Evaporable Moisture Content of Aggregate by Drying
ASTM C 617	Capping Cylindrical Concrete Specimens
ASTM C 702	Reducing Samples of Aggregate to Testing Size
ASTM C 1231	Practice for Use of Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders
CRD-C 104	Calculation of Fineness Modulus of Aggregate
Concrete Field Testing	
ASTM C 31	Making and Curing Concrete Test Specimens in the Field
ASTM C 138	Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
ASTM C 143	Slump of Hydraulic-Cement Concrete
ASTM C 172	Sampling Freshly Mixed Concrete
ASTM C 173	Air Content of Freshly Mixed Concrete by the Volumetric Method
ASTM C 231	Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C 1064	Temperature of Freshly Mixed Hydraulic-Cement Concrete
ASTM D 75	Sampling Aggregates

5. Compilation of Test Data for Submittal:

The results of the test and inspections shall be recorded in the MVN database as directed in Appendix. Samples of the reporting forms and instruction for each form are provided on the MVN SharePoint site; **Test Form Examples** and are described as follows. The latest forms should be referenced on the MVN SharePoint site and described in Appendices. All data is to be submitted electronically **within 24 hours of completion of the tests by the laboratory performing the testing.**

a. **MVNQC01** (Concrete Compression Test Data – ASTM C 39). This form is to be used in reporting the results of laboratory concrete compression testing. Contract specifications shall govern the required concrete compressive strength.

b. **MVNQC02** (Concrete Field Data). This form is to be used in reporting the data collected by the laboratory while monitoring and testing concrete during placement. Contract specifications shall govern the required concrete properties during placement.

c. **LMN FORM 853-R** (Concrete Compression Test Specimen Data). This form is to be filled out and provided to the QA laboratory for each set of cylinders delivered. This form should be filled out with information documented during concrete placement. The information on this form should match the information provided on the associated MVNQC01 and MVNQC02 test forms. The Order number on this form shall match the Batch Ticket number on the associated concrete supplier batch ticket, the MVNQC01 and the MVNQC02 test form for sample tracking purposes. The form also serves as a bill of lading for the delivered concrete samples.

Table 3-2
Test Requirements
AGGREGATE, FINE

Property	Method	Frequency	Remarks
Deleterious Substances	ASTM C 33	1 per week	
Fineness Modulus	CRD-C 104	1 per shift per batch plant when concrete plant is operating	Calculation based on gradation test results
Gradation	ASTM C 117 ASTM C 136	1 per shift per batch plant when concrete plant is operating.	Tests selected randomly.
Moisture Content	ASTM C 566	If moisture meter is working properly, 2 per week to verify	Tests selected randomly for each aggregate size.
		If moisture meter is not working, 4 every 8 hours of mixing plant operation	
		Additional tests if slump is out of control or variability is excessive	
Sampling Method	ASTM D 75	As specified for the individual material property.	

Table 3-3
Test Requirements
AGGREGATE, COURSE

Property	Method	Frequency	Remarks
Deleterious Substances	ASTM C 33	1 per week per batch plant, or as directed by COR	
Gradation	ASTM C 117 ASTM C 136	1 per shift per batch plant when concrete plant is operating	Tests selected randomly.
Moisture Content	ASTM C 566	If moisture meter is working properly, 2 per week to verify	Tests selected randomly for each aggregate size.
		If moisture meter is not working, 4 every 8 hours of mixing plant operation	
		Additional tests if slump is out of control or variability is excessive	
Sampling Method	ASTM D 75	As specified for the individual material property.	

Table 3-4
Test Requirements
FRESH CONCRETE

Property	Form	Method	Frequency	Remarks
Compression Cylinders (Quality Assurance)	MVNQC01 MVN 835	ASTM C 31 ASTM C 39	To be molded by the Contractor Quality Control Laboratory and tested by the Quality Assurance Laboratory. Mold one set of cylinders per 8 hour shift or for every 150 cubic yards placed.	Quality Assurance Cylinders shall be molded from the same sample of concrete that the Quality Control cylinders are molded.
Compression Cylinders (Quality Control)	MVNQC01 MVNQC02	ASTM C 31 ASTM C 39	To be molded and tested by the Contractor Quality Control Laboratory. Mold one set of cylinders per 8 hour shift or for every 150 cubic yards placed. As a minimum; A set of test specimens for concrete with a 28-day specified strength shall consist of two cylinders to be tested at 7 days and two 6-inch by 12-inch cylinders or three 4-inch by 8-inch cylinders at 28 days. A set of test specimens for concrete with a 56-day or 90-day specified strength shall consist of two cylinders to be tested at 7 days, two 6-inch by 12-inch cylinders or three 4-inch by 8-inch cylinders at 28 days and two 6-inch by 12-inch cylinders or three 4-inch by 8-inch cylinders at 90 days. Additional sets when mix proportions change or low strengths are detected.	On randomly selected batches for each separate concrete mix produced. Cylinders used shall conform to paragraph 6.1 of ASTM C 31. Initial Cure in accordance with paragraph 10.1.2 of ASTM C 31.
Compression Cylinders (QC- for putting concrete into service or other purposes indicated in paragraph 4.3 of ASTM C 31)	MVNQC01 MVNQC02	ASTM C 31 ASTM C 39	1 set of multiple pairs of QC cylinders per item to be evaluated.	Cylinders used shall conform to paragraph 6.1 of ASTM C 31. Initial Cure in accordance with paragraph 10.1.2 of ASTM C 31. Cylinders to be field cured shall conform to 10.2 of ASTM C 31.
Air Content Slump Temperature	MVNQC01 MVNQC02	ASTM C 231 ASTM C 143 ASTM C 1064	1 every time concrete cylinders are molded Plus 2 additional during each 8 hours of concrete production Additional tests if workability variation is excessive.	On randomly selected batches for each separate concrete mix produced

Chapter 4 Welding Inspection

1. Scope:

This chapter specifies methods and procedures for the Contractor Quality Control (QC) weld inspection for Group 1 and Group 2 carbon steels as defined by AWS D1.1, Table 3.1 and their ASTM A709 counterparts. Welding of sheet metal, reinforcement bars, castings, stainless steel, aluminum and other non ferrous metals are not included in this document and should reference the appropriate AWS or ASME Code. An approved schedule of welding procedures (WPS) is required before fabrication commences (Section 05 50 03.00 12). The Government will also perform checks, and assurance testing of control testing required by the Contractor.

2. Definitions:

a. **Fracture Critical Welds**. Fracture critical members or member component welds as defined by ER 1110-2-8157 are tension members or tension components of bending members (including those subject to reversal of stress), the failure of which would be expected to result in collapse of the hydraulic steel structure. The designation "FCM" shall mean fracture critical member or member component. Members and components that are not subject to tensile stress under any condition of live load shall not be defined as fracture critical. FCMs, in general, are dewatering components (needle girders, bulkheads, needles), lifting eyes, or other tension members. This includes any members welded to these members as cracks could propagate to these members and cause failures also. These welds should either be shown on the drawings or called out in the specifications. Tubular welds are not applicable to AWS D1.5. AWS D1.5, Section 12 is the applicable code for these welds.

b. **Other Welds**. These welds are the remaining welds that are not considered Fracture Critical Welds. AWS D1.1 is the applicable code for these welds.

3. Testing Personnel:

a. **Visual Inspection**. Visual inspection shall be performed by Certified Welding Inspectors (CWI) that are qualified and certified in accordance with the provisions of AWS QC1. Verification of documentation may be obtained from the AWS web site. Note: Certification number is required for this verification.

b. **Nondestructive Testing Technicians**. All ASNT Level III personnel shall be qualified in accordance with ASNT CP-189. Only individuals qualified for NDT Level II or individuals qualified for Level I and working under the direct supervision of a Level II shall perform nondestructive testing. Level I and Level II personnel shall be qualified in accordance with either ASNT CP-189 or ASNT SNT-TC-1A. Level III NDT Inspectors shall posses a currently valid ASNT Level III certificate in each of the processes they are qualifying inspectors to. Copies of the certifications, including the Level III NDT Technician that certified the Level I and Level II Technicians shall be included in the submittals. Verification of Level III documentation may be obtained from the ASNT web site. Note: Either Certification number or name is required for this verification.

4. Visual Inspection Requirements:

Visual inspection of welds shall conform to the requirements of AWS D1.1, Section 6, or AWS D1.5, Section 12, as applicable.

5. Nondestructive Testing Requirements:

a. **Ultrasonic Testing**. Ultrasonic testing of welds shall conform to the requirements of AWS D1.1, Section 6, Part F or AWS D1.5, Subsection 12.16, as applicable.

b. **Radiographic Testing**. Radiographic testing of welds shall conform to the requirements of AWS D1.1, Section 6, Part E or AWS D1.5, Subsection 12.16, as applicable. Only film types designated as "fine grain" or "extra fine" shall be employed.

c. **Magnetic Particle, Liquid Penetrant Testing**. Magnetic particle and liquid penetrant testing of welds shall conform to the applicable provisions of ASTM E 709 or AWS D1.5 Subsection 12.16, as applicable and in addition all magnetic particle testing of welds shall be made using the Wet Contrasting Black on White Method.

6. Acceptance Criteria:

a. **Visual, Magnetic Particle and Liquid Penetrant Testing**. Welds shall be unacceptable if shown to have defects prohibited by AWS D 1.1/D 1.1M, Section 6, Part C. Visual, magnetic particle and liquid penetrant testing acceptance criteria shall be for the applicable criteria for either "Cyclically Loaded Nontubular Connections" or "Tubular Connections" per AWS D 1.1/D 1.1M, Table 6.1. Fracture critical welds shall be unacceptable if shown to have defects prohibited by AWS D 1.5/D 1.5M, Section 12. All welds shall be assumed in tension for the acceptance criteria for visual and the appropriate nondestructive testing method.

b. **Ultrasonic Testing**. Ultrasonic acceptance criteria shall be the applicable criteria for either "Cyclically Loaded Nontubular Connections" or "Tubular Connections, Class R". Fracture critical welds shall be unacceptable if shown to have defects prohibited by AWS D 1.5/D 1.5M, Section 12. All welds shall be assumed in tension for the acceptance criteria for visual and the appropriate nondestructive testing method.

c. **Radiographic Testing**. Radiographic acceptance criteria shall be the applicable criteria for either "Cyclically Loaded Nontubular Connections (Tensile Stress)" or "Tubular Connections". Fracture critical welds shall be unacceptable if shown to have defects prohibited by AWS D 1.5/D 1.5M, Section 12. All welds shall be assumed in tension for the acceptance criteria for visual and the appropriate nondestructive testing method.

7. Frequency of Testing:

The frequency specified is the minimum required. The design engineer shall determine the required frequency and include this information in the specifications and/or drawings. The design engineer shall also specify the locations of radiographic testing.

a. **Visual Inspection**. All welds shall be visually inspected by a CWI to insure compliance with the requirements of the applicable AWS Welding Code. Prior to any welding, a CWI shall visually inspect the preparation of material for welding to assure compliance with the applicable AWS Code (D1.1 or D1.5) and approved WPS. The CWI shall also perform VT inspection throughout the welding process to assure compliance with the applicable AWS Code (D1.1 or D1.5) and approved WPS. All completed welds shall be cleaned free of oxide, flux, scale, or other foreign matter before inspection.

b. **Full Penetration Welds**. Full penetration welds shall be examined by the Contractor using ultrasonic testing (UT) procedures described above. In additional to the full penetration welds specified for testing, a randomly chosen twenty-five percent (25%) of the remaining full penetration welds shall be ultrasonically tested to ensure the quality of the procedure and process. The random testing shall include a representative sample of welds from all welders and each of the processes each welder used. The random testing shall be spread throughout the project.

c. **Full Penetration Butt Splice Welds**. All full penetration butt splices shall be examined using ultrasonic testing (UT) and radiographic testing (RT) procedures described above. These welds shall be defined in the specification or noted on the drawings.

d. **Fillet Welds and Partial Penetration Groove Welds**. Fillet welds and partial penetration groove welds shall be examined by the Contractor using magnetic particle testing (MT) procedures described above. In additional to the fillet and partial penetration welds specified for testing, a randomly chosen twenty-five percent (25%) of the remaining fillet and partial penetration welds shall be magnetic particle tested to ensure the quality of the procedure and process. The random testing shall include a representative sample of welds from all welders and each of the processes each welder used. The random testing shall be spread throughout the project.

8. Compilation of Test Data for Submittal:

The results of the test and inspections shall be recorded in the MVN database as directed in Appendix. Samples of the reporting forms and instruction for each form are provided on the MVN SharePoint site; **Test Form Examples** and are described as follows. The latest forms should be referenced on the MVN SharePoint site and described in Appendices. All data is to be submitted electronically **within 24 hours of completion of the tests by the laboratory performing the testing.**

a. **MVNQW06** (Combined Weld Examinations). This form is to be used in reporting the inspection and testing of welded steel connections. Contract specifications shall govern the required compaction effort. The results shall be submitted electronically within 24 hours of the test.

Appendix A – Test Form Management

1. Report Numbering:

Each soil sample (location) is identified with a unique Test ID created by concatenating the Report No and Test No.

All soil sample locations will be reported on test forms with the same Report No and Test No throughout entire range of tests performed on that sample location. This is particularly important when reporting tests that contain 1 test per test form such as MVNQS03 (Sand Cone tests) and MVNQS02 (Compaction-Moisture Density Relationship).

It is also necessary to give the same Report No and Test No to each sample location for test form MVNQS06 (Unified Soil Classification System), MVNQS07 (Organic Content), and MVNQS10 (Field Density-Nuclear) which allow for entry of up to 5 soil samples. The soil tests included in a suite of tests allows for entry of 5 samples.

Examples of all forms are available on the SharePoint site for review.

2. Naming the Test Form Files:

Each file shall be named using the following convention:

[Test Form Name][USACE Contract No][Report No][Test No (if necessary)]

Each part of the filename should be separated by a single space only, not a dash or other delimiter. Details of each portion of the filename convention are given below.

- **[Test Form Name]** is the name of the template MVNQ(C, S or W)##, for example MVNQS02. The variable letter are related to the type of test; C is for concrete, S is for soil and W is for Welds.

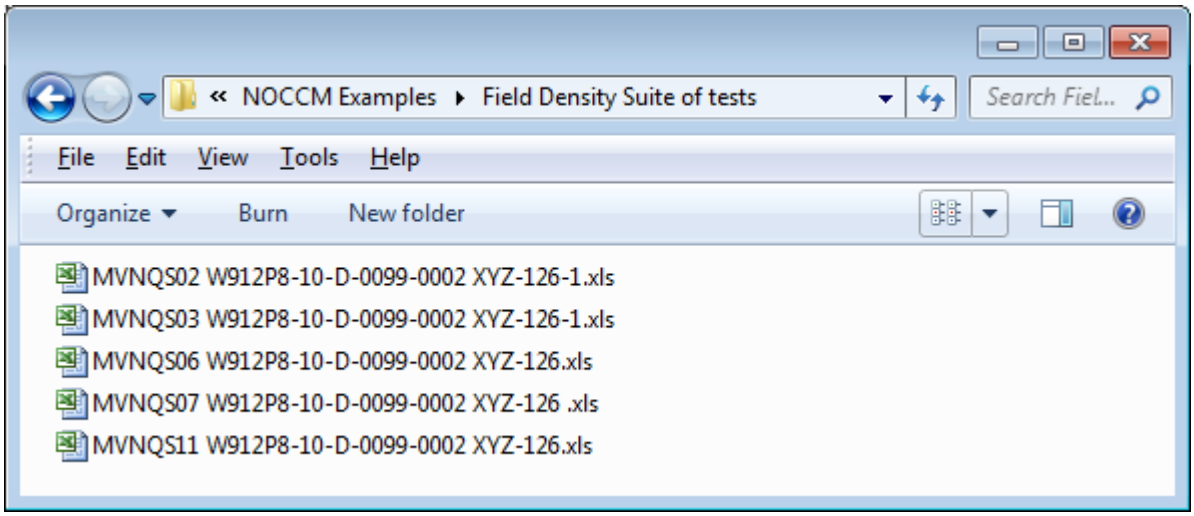
- **[USACE Contract No]** is the construction contract number. This must be the complete contract number including the task order if applicable. The contract numbers that contain a C or Z do not have task order numbers, whereas all contracts that contain a D have a task order number.

- **[Report number]** will be dependant on the labs report number system.

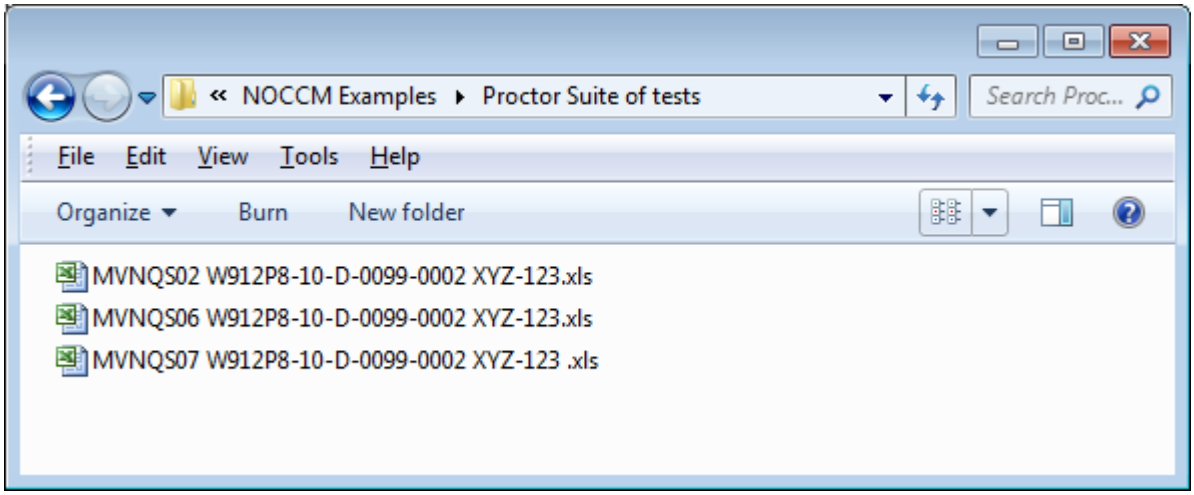
- **[Test No]** is only included in filename when necessary. This is applicable for tests reported 1 per form, as in the case of the exception listed below.

The exception to naming convention is dealing with forms that contain 1 test per test form such as MVNQS03 (Sand Cone tests), MVNQS02 (Compaction-Moisture Density Relationship) and MVNQS01 (Sieve Analysis). For these 3 Test Form types the file name will end with the Test No. The Test No is determined by the lab but should be unique to each soil sample and field location per Report No. See the Examples below for illustration of this.

Below is an example of file names for a suite of soil tests including 5 samples locations reported on a MVNQS11 (Field Density Nuclear) form, a MVNQS07 (Organic Content) form, a MVNQS06 (Unified Soil Classification System) form and a MVNQS03 (Field Density Sand Cone) form. These files are also the files included as example test forms on the SharePoint site. In this example The Report No is XYZ-126.



Below is another example for proctor data containing a MVNQS02 (Compaction-Moisture Density Relationship) test form, a MVNQS06 (Unified Soil Classification System) form and a MVNQS07 (Organic Content) form.



3. Submitting Test Forms:

All forms are to be submitted electronically **within 24 hours of completion of the tests by the laboratory performing the testing.** This is necessary since contract specifications require laboratory results to confirm compliance or failure before Contractor construction work can continue. Delays in submitting test results may result in construction delays that are to be avoided. Supporting documentation for tests should be submitted in PDF format with the same file naming convention. This completes the documentation record of data transfer to all parties.

4. How to Access USACE QACC SharePoint Site

In order to access the MVN Quality Assurance Control Center (QACC) SharePoint site each user must have an account. If a user does not have an account contact the MVN-CD Branch to receive a **USACE External Network Access Request** form. Once your account has been established you will have access to the QACC SharePoint site that contains MVNQ Test Form Templates, a QA Wiki, a QA Discussion area, a Shared Documents library, a Discrepancy Report library, and a library where completed test forms are to be uploaded; **Test Form**. The following is contact information for MVN-CD.

MVN-CD Phone;	(504) 862-2235
MVN-CD Email;	CEMVN-CD@Usace.Army.Mil
MVN-CD Public Webpage;	http://www.mvn.usace.army.mil/About/Offices/Construction.aspx
MVN QACC SharePoint;	https://partners.usace.army.mil/sites/MVN/QACC/default.aspx

5. Uploading test forms.

The exact procedure for uploading test forms to the MVN Quality Assurance Control Center (QACC) SharePoint is dependent on the computer system the user is using. Once an account has been established MVN-CD can assist each user individually by introducing the QACC system and going through the processes needed to upload test files and supporting documents. If at any point a user has questions please contact the MVN-CD-Q Branch for assistance.

Important notes before beginning the upload process; The QACC SharePoint site does have restrictions on characters (delimiters) that can be used for a file name. The following characters are not accepted by the QACC SharePoint site; \ / : * ? " < > | # { } % ~ &. If these characters are used, the QACC SharePoint site may lock up or give an error that indicates ‘a nonexistent file’. If this occurs remove the delimiters used in the file name, upload the files again and verify that all files upload because this will stop the upload process for all the files. If it is determined that certain files did not upload repeat the upload process.

The second note is that the QACC SharePoint site will time out and requires logging back in after an extended time of inactivity. The QACC SharePoint site will not indicate it timed out until attempting to perform a function on the site. The site will return to the Log in screen. If this happens, the function previously being performed may not have been performed completely.

6. Revisions and Special Naming Considerations:

When resubmitting files with revisions, the same filename is to be used if possible. If a file is to be submitted to the QACC SharePoint site it is not necessary to include a revision indication in the file name, such as R1 or R2 in the filename. The test form revision should be judicated in the appropriate revision field on the form. The QACC SharePoint site does allow files to be uploaded to the **Test Form** library when the same file name exists. In general, the idea is to keep the filename as simple as possible and the same throughout the submittal and revision process. Do not add unnecessary details to the filename.

If more information is needed, see the Wiki or Discussion board on the MVN Quality Assurance Control Center (QACC) SharePoint. The QA managers are also available if there are other questions.

Appendix B - Material Testing Laboratory Requirements

1. Purpose:

All construction material testing laboratories used in support of the Contractor's Quality Control (QC) testing and the Government's Quality Assurance (QA) testing must receive validation by the Material Testing Center (MTC), Engineering and Research Development Center (ERDC), in Vicksburg Mississippi. This includes all Contractor and government on-site laboratories or commercial laboratories used either for QC or QA testing.

2. Applicability:

This procedure applies to all projects being managed by the New Orleans District for which testing of construction materials is conducted

3. References:

ASTM E 329-06a, Agencies Engaged in the Construction Inspection and/or Testing

ER 1110-1-261 (28 April 99), Quality Assurance of Laboratory Testing Procedures

ER 1110-1-8100 (31 Dec 97), Laboratory Investigations and Testing

Corps of Engineers Validated Laboratories;

Engineering Research and Development Center - Material Testing Center
http://www.erdc.usace.army.mil/Media/FactSheets/FactSheetArticleView/tabid/9254/Article/476661/materials-testing-center.aspx

New Orleans Construction Division Operating Manual (CDOM), 1 March 2002

4. Responsibilities:

The Administrative Contracting Officer (ACO) / Contracting Officer's Representative (COR) is responsible for ensuring that all testing laboratories used for QC or QA testing are on the electronic validated list for the tests to be performed and for requesting that New Orleans District coordinate as necessary to pursue validation of a desired laboratory.

5. Procedures:

After award, the Contractor submits a QC Plan which delineates the scope of the testing program and identifies the testing laboratory (s) proposed specific tests. Contract specific Quality Assurance Plans will include requirements for QA verification testing by a Corps validated laboratory.

The Administrative Contracting Officer (ACO) / Contracting Officer's Representative (COR) will ensure that the QC laboratory is independent of the QA laboratory and will work with the Contractor if necessary to select another laboratory for QC or QA testing. The QC plan will

reflect the selected laboratories. If the laboratory proposed by the Contractor is not a currently validated lab, then the Administrative Contracting Officer (ACO) / Contracting Officer's Representative (COR) will notify the Contractor and request an inspection of the selected laboratory coordinated by MVN-CD-Q in accordance with the procedures described in Construction Division's Operating Manual (CDOM). For planning purposes, the validation process may require a period of six months to complete.

Briefly, the MTC validation process is described as follows:

Validation of a laboratory may consist of either (1) an inspection of the laboratory and their processes or (2) an audit of inspection reports and other documentation furnished by other validating agencies or organizations.

MTC will perform inspections in accordance with ASTM E 329 and applicable tests in ER 1110-2-1906 or tests required by project specifications.

The MTC may validate a laboratory if it has been accredited by the Concrete and Cement Reference Laboratory (CCRL) or AASHTO Materials Reference Laboratory (AMRL) within the past two years using ASTM E 329. Inspection by the MTC may be required after auditing if one or more of the critical testing procedures required in the project specifications were not included in the CCRL or AMRL inspection report or if there is any question that the laboratory may not be able to provide the required services for the specified tests.

More information about the validation process is available at the following:
Phone; (601) 634-3123
Email; MTC-info@usace.army.mil
Public Website;
http://www.erdc.usace.army.mil/Media/FactSheets/FactSheetArticleView/tabid/9254/Article/476661/materials-testing-center.aspx

6. Records:

Records demonstrating laboratory validation will be maintained by MTC web site for the most current laboratory listing.

Appendix C - Filling Out Test Form Templates

1. Test Form Templates:

The latest Construction Material Testing report forms are located at the following locations:

Navigate to the **MVNQ Test Form Template** library to download the most up to date forms.

https://partners.usace.army.mil/sites/MVN/QACC/TFT/Forms/AllItems.aspx

For access to the Extranet SharePoint site, follow procedures in Appendix A or contact the MVN Construction Division Quality Branch. Once access is granted, reference the Extranet SharePoint site to download the latest test form templates in the MVNQ Test Form Template library, as they are periodically updated and/or revised. Failure to submit the latest version of the test form template will prevent data from being loaded into the QACC database. The rejected form will be required to be resubmitted on the proper test form template.

The Test Form Examples library on the SharePoint site provides guidelines for completing several of the test form templates. Further information, definition and updates can be found in the MVNQTERMS documents and the QACC Wiki located on the Extranet SharePoint site.

On all forms, the Sample Date is defined as the date the test was performed in the field and not the date the sample was tested in the lab. Please use the Remarks section on each form for any comments that pertain to the tests performed. Comments may include items such as: meet specs, meet specs of xx% (for different types of material, say embankment is 90% compaction and trench is only 85%), in-situ material, failing tests reported to John Smith, etc. There is no such thing as too much detail or information.

This reporting and submittal system is to be used for all Corps of Engineers work in the MVN division.

2. MVNQ Terms Document:

The MVNQ Terms document located on the Extranet SharePoint site provides a list of terms that are referenced directly from the MVNQ Test Forms. This document will define the terms used on the MVNQ Test Forms, and in some cases, provide examples of the information needed in associated cells. If there is a term that is not provided, an error or a term that is not defined clearly please contact a QA Manager.

C-1 List of Forms

Form Name	Procedure(s)	Form ID .
Soil Testing Forms		
#200 Wash and Sieve Analysis	ASTM C 117- C136	MVNQS01
Lab Compaction of Soil Standard Effort	ASTM D 698	MVNQS02
Density by Sand Cone	ASTM D 1556	MVNQS03
Unconfined Compression Strength	ASTM D 2166	MVNQS05
Classification of Soils – USCS	ASTM D 2487	MVNQS06
Moisture, Ash and Organic Matter of Soils	ASTM D 2974	MVNQS07
Moisture Content Determination	ASTM D 2216-4643	MVNQS09
In-place Density and Moisture of Soils	ASTM D 6938	MVNQS11
Field Density (Relative Density) - Nuclear Method	ASTM D 6938	MVNQS12
Concrete Forms		
Concrete Compression Test	CCT	MVNQC01
Concrete Field Test	CFD	MVNQC02
Welding Forms		
Welds – LIQUID		MVNQW06
Welds - MAGNETIC		MVNQW06
Welds - RADIO		MVNQW06
Welds - UT		MVNQW06
Welds - VISUAL		MVNQW06

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SECTION 01 57 20.01 12

ENVIRONMENTAL PROTECTION
04/08

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all labor, materials and equipment, and performing all work required for the prevention of environmental pollution during and as the result of construction operations under this contract except for those measures set forth in other provisions of these specifications. For the purpose of this specification, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to man; or degrade the utility of the environment for esthetic and recreational purposes. The control of environmental pollution requires consideration of air, water, and land, and involves noise, solid waste-management and management of radiant energy and radioactive materials, as well as other pollutants.

1.2 APPLICABLE REGULATIONS

In order to prevent, and to provide for abatement and control of any environmental pollution arising from construction activities in the performance of this contract, the Contractor and his/her subcontractors shall comply with all applicable Federal, State, and Local laws, and regulations concerning environmental pollution control and abatement.

1.3 MEASUREMENT AND PAYMENT

1.3.1 Environmental Protection

No separate measurement or payment will be made for environmental protection including protection of fish and wildlife. Payment for the work covered under this section shall be distributed throughout the existing bid items.

1.3.2 Bird Nesting Prevention and Avoidance Measures

Measurement for providing bird nesting prevention and avoidance measures will be per day satisfactorily performed. Payment will be made at the contract unit price per day for “Bird Nesting Prevention and Avoidance Measures - OW”, if Optional Work is exercised. Price and payment will constitute full compensation for furnishing all plant, labor, materials and equipment for providing bird nesting prevention and avoidance measures; and all operations incidental thereto.

1.3.3 Non-Regulated Waste

No separate measurement or payment will be made for the work associated with and the disposal of non-regulated debris not specifically covered elsewhere. Payment for the work associated with the disposal of non-regulated debris not specifically covered elsewhere shall be distributed throughout the existing bid items.

1.3.4 Hazardous/Regulated Waste

If the Contractor uncovers an existing hazardous/regulated waste not Contractor generated, not shown on the drawings, and not specified herein, the Contractor shall notify the Contracting Officer's Representative immediately. Payment for handling, removal, transportation and disposal of hazardous and/or regulated solid wastes not Contractor generated, not shown on the drawings, and not specified herein will be made as an equitable adjustment in contract price under the Contract Clause in Section 00700, entitled CHANGES (FAR 52.243-4).

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. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Environment Pollution Control Plan; G, CD

Environment Pollution Control Plan; G, ODT

The Contractor shall prepare and submit to the Contracting Officer's Representative, for approval, a plan, detailing the efforts that will be undertaken to prevent on-site activities that pose a risk to the environment.

SD-02 Shop Drawings

Bird Nesting Prevention Plan; G, ODT

1.5 QUALITY CONTROL

1.5.1 General

The Contractor shall establish and maintain quality control for environmental protection to assure compliance with contract specifications and maintain records of his/her quality control for all construction operations including but not limited to the following:

(1) Submit plan of Environment Pollution Control.

(2) Procure applicable Federal, State, and Local regulations on pollution control.

(3) Air Pollution - Checks made on dust, smoke, noise.

(4) Water Pollution - Checks made on disposal of water, oil, etc.

(5) Land Pollution - Checks made on disposal of materials, restoration of temporary construction sites, etc.

(6) Training course for employees.

1.5.2 Reporting

The original and two (2) copies of these records, as well as the records of corrective action taken, shall be furnished the Government daily. Format of report shall be as prescribed in Section 01 45 04.00 10 CONTRACTOR QUALITY CONTROL.

1.6 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any non-compliance with the foregoing provisions and the action to be taken. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor or his/her authorized representative at the site of the work, shall be deemed sufficient for the purpose. 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 any such stop orders shall be made the subject of a claim for extension of time or for excess cost of damages by the Contractor.

1.7 SUBCONTRACTORS

Compliance with the provisions of this section by subcontractors shall be the responsibility of the Contractor.

1.8 IMPLEMENTATION

Within 10 days after receipt of Notice of Award, the Contractor shall:

(1) Submit in writing his/her proposals for implementing environmental pollution control at the project site, disposal of debris, non-hazardous wastes and hazardous wastes generated at the project site as well as storage and management of regulated materials, substances and chemicals brought onto and used at the project site.

(2) Upon review and approval of requirements above, the Contractor shall meet with representatives of the Contracting Officer to develop mutual understandings relative to compliance with these provisions and administration of the environmental pollution control program and Environmental Protection Plan.

1.9 REFERENCES

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 153.203	Procedure for the Notice of Discharge

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2024)Safety and Occupational Health Requirements

1.10 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

The Contractor is advised that deviations from the drawings or specifications (e.g., proposed alternate borrow areas, disposal areas, staging areas, alternate access routes, etc.) could result in the requirement for the Government to reanalyze the project from an environmental standpoint. Deviations from the construction methods and

procedures indicated by the plans and specifications, which may have an environmental impact will require an extended review, processing, and approval time by the Government. 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.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 PROTECTION OF LAND RESOURCES

3.1.1 General

The land resources within the project boundaries and outside the limits of permanent work performed under this contract shall be preserved in their present condition or be restored to a condition after completion of construction that will appear to be natural and not detract from the appearance of the project. The Contractor shall confine his/her construction activities to areas defined by the plans and/or specifications. The following additional requirements are intended to supplement and clarify the requirements of the Contract Clauses in Section 00700 Contract Clauses, entitled PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (FAR 52.236-9), OPERATIONS AND STORAGE AREAS (FAR 52.236-10), and CLEANING UP (FAR 52.236-12).

3.1.2 Prevention Of Landscape Defacement

The Contractor shall not deface, injure, or destroy trees or shrubs, nor remove or cut them without the approval of the Contracting Officer. Felling of trees shall be performed in such a manner as to avoid damage to trees to be left standing. Where trees may possibly be defaced, bruised, injured, or otherwise damaged by the Contractor's operations or equipment; he/she shall protect adequately such trees. All monuments and markers shall be protected before beginning operations near them. Any trees or other landscape feature scarred or damaged by the Contractor's equipment or operations shall be restored as nearly as possible to its original condition at the Contractor's expense. Trees that are scarred shall be immediately painted with an acceptable tree wound paint. Any trees which are damaged beyond restoration shall be removed and disposed of as directed by the Contracting Officer.

3.1.3 Temporary Excavation And Embankments

If the Contractor proposes to construct temporary roads or embankments and excavation for plant and/or work areas, he shall obtain approval of the Contracting Officer prior to start of such temporary work.

3.1.4 Post-Construction Cleanup Or Obliteration

The Contractor shall obliterate all signs of temporary construction facilities such as work areas, structures, foundations of temporary structures, and stockpiles of excess or waste materials upon completion of construction. The Contractor shall be required to restore the construction area to near natural conditions which will permit the growth of vegetation.

3.1.5 Recording And Preserving Historical And Archeological Finds

All items having any apparent historical or archeological interests which are discovered in the course of any construction activities shall be carefully preserved. The Contractor shall leave the archeological find undisturbed and shall immediately report the find to the Contracting Officer so that the proper authorities may be notified.

3.2 PROTECTION OF WATER RESOURCES

3.2.1 Contamination Of Water

The Contractor shall not pollute lakes, ditches, rivers, bayous, canals, groundwater, waterways, or reservoirs with fuels, oils, bitumen, calcium chloride, insecticides, herbicides, or other similar materials harmful to fish, shellfish, or wildlife, or materials which may be a detriment to outdoor recreation.

3.2.2 Disposal Of Materials

The methods and locations of handling, transfer, and disposal of materials, wastes, effluent, trash, garbage, oil, grease, chemicals, etc., within the right-of-way limits shall be such that harmful debris will not enter lakes, ditches, rivers, bayous, canals, groundwater, waterways, or reservoirs by erosion, and thus prevent the use of the area for recreation or present a hazard to wildlife.

3.2.3 Fuel and Lubricants

Storage, fueling, and lubrication of equipment and motor vehicles must be conducted in a manner that affords the maximum protection against spill and evaporation. Manage and store fuel, lubricants, and oil in accordance with all Federal, State, and local laws and regulations. Used lubricants and used oil to be discarded must be stored in marked corrosion-resistant containers and recycled or disposed in accordance with State and local laws and regulations.

3.2.4 Erosion Control

Surface drainage from cuts and fills within the construction limits, whether or not completed, and from waste disposal areas, shall, if turbidity producing materials are present, be held in suitable sedimentation ponds or shall be graded to control erosion within acceptable limits. Temporary erosion and sediment control measures such as berms, dikes, drains, or sedimentation basins, if required to meet the above standards, shall be provided and maintained until permanent drainage and erosion control facilities are completed and operative. Waste areas shall be constructed by selective placement to eliminate silts or clays on the surface that will erode and contaminate adjacent streams.

3.3 PROTECTION OF FISH AND WILDLIFE

The Contractor shall at all times perform all work and take such steps required to prevent any interference or disturbance to fish and wildlife. The Contractor shall not be permitted to alter water flows or otherwise disturb native habitat adjacent to the project area which are critical to fish or wildlife.}

3.3.1 Nesting Birds

Colonial nesting wading birds (including, but not limited to herons, egrets, and ibis) and seabirds/waterbirds (including, but not limited to, terns, gulls, black skimmers, and brown pelicans) should be avoided to reduce the risk of injuring birds. The nesting activity period generally extends from February 15 through September 15. Presence of nesting wading birds and/or seabirds/waterbirds shall be immediately reported to Mr. Jeffrey Corbino at (504) 862-1958. If nests of these birds are present on the work area, a "no-work" distance restriction of 2000 feet for nesting brown pelicans and 1500 feet for all other colonial nesting birds shall be implemented. Coordination by New Orleans District personnel with the U.S. Fish and Wildlife Service may result in a reduction of "no-work" distance restrictions depending on the species of birds found nesting at the work site.

3.3.1.1 Reporting

The presence of nesting wading birds and/or seabirds/waterbirds within the minimum distances from the work area as specified in paragraph "No Work Distances" must be immediately reported to Mr. Jeffrey Corbino, of the U.S. Army Corps of Engineers at (504)862-1958, Email: Jeffrey.M.Corbino@usace.army.mil.

3.3.1.2 No Work Distances

No-work distance restrictions are as follows:

" Terns, gulls, and Black Skimmers - 650 feet
" Colonial nesting wading birds - 1000 feet; and,
" Brown Pelicans - 2000 feet.

Coordination by the New Orleans District personnel with the U.S. Fish and Wildlife Service may result in a reduction of these no-work distance restrictions depending on the species of birds found nesting at the work site.

3.3.1.3 Bird Nesting Prevention and Avoidance Measures

The Contractor shall prepare and submit to the Contracting Officer's Representative, for approval, a Bird Nesting Prevention Plan, detailing the efforts that will be undertaken to prevent birds from nesting within the minimum distances, as specified in paragraph "No Work Distances", from any work activity. The plan shall be submitted in accordance with paragraph IMPLEMENTATION. Additionally, one (1) copy of this plan shall be submitted to:

U.S. Army Corps of Engineers, New Orleans District
Attn: CEMVN-OD-T, Mr. Jeffrey Corbino
7400 Leake Avenue
New Orleans, LA 70118

Nest prevention measures shall be intended to deter birds from nesting on the disposal area(s) and access corridor(s) without physically harming birds during the nesting activity period, as specified in paragraph "Nesting Birds". Nest prevention measures may be used in combination and or adjusted to be most effective. The use of any harassment measures shall be in accordance with EM 385-1-1 (Safety and Occupational Health (SOH) Requirements), latest edition. At minimum, nest prevention measures shall

include the following:

Flagging/Streamers - Flagging and or streamers at least two (2) feet in length and which consist of reflective plastic/mylar type material shall be attached to the top of stakes at least three (3)_feet in height. The stakes shall be driven into the ground at approximately 20 foot intervals. Flagging and or streamers shall be placed such that the flags/streamers move in a light wind.

Vehicular/Pedestrian Traffic - At a minimum, one (1) all terrain vehicle (ATV) and/or one (1) person shall travel throughout the entire disposal area at least once per hour from dawn to dusk.

Specific nest prevention measures used during the work shall be monitored for effectiveness and may require adjustment and/or modification. All equipment/supplies used for nest prevention shall be removed from the work site upon the completion of the work and as directed by the Contracting Officer.

3.3.1.4 Discovery of Bird Nests at the Work Site

If bird nests are discovered at the work site, immediate notification shall be made, as specified in paragraph "Reporting". The Contractor shall immediately mark the bird nests with flagging on stakes three (3) feet above the ground surface and no closer than three (3) feet from the nest. The Contractor shall immediately implement safe work distances from the nest(s), as specified in the "No Work Distances" paragraph, and place flagging to create exclusion zone(s) around the nest(s), and advise all equipment operators of the bird nest(s) and exclusion zone(s)

3.3.2 Manatees

The West Indian manatee may be present in the project vicinity. The Contractor shall instruct all personnel associated with the project of the potential presence of manatees in the area, and the need to avoid collisions with these animals. All construction personnel shall be advised that there are civil and criminal penalties for harming, harassing, or killing manatees, which are protected under the Marine Mammal Protection Act of 1972 and Endangered Species Act of 1973. The Contractor shall be responsible for any manatee harmed, harassed, or killed as a result of construction activities not conducted in accordance with these specifications. All on-site personnel are responsible for observing water-related activities for the presence of manatee(s). Additionally, personnel should be instructed not to attempt to feed or otherwise interact with the animal, although passively taking pictures or video would be acceptable.

3.3.2.1 Special Operating Conditions If Manatees Are Present in the Project Area

(1) If a manatee(s) is sighted within 100 yards of the project area, all appropriate precautions shall be implemented by the Contractor to ensure protection of the manatee. These precautions shall include the operation of all moving equipment no closer than 50 feet of a manatee. If a manatee is closer than 50 feet to moving equipment or the project area, the equipment shall be shut down and all construction activities shall cease to ensure protection of the manatee. Construction activities shall not resume until the manatee has departed and the 50-foot buffer has been re-established.

(2) If a manatee(s) is sighted in the project area, all vessels associated with the project shall operate at "no wake/idle" speeds at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom, and vessels shall follow routes of deep water whenever possible. Boats used to transport personnel shall be shallow-draft vessels, preferably of the light-displacement category, where navigational safety permits.

(3) If siltation barriers are used, they shall be made of material in which manatees cannot become entangled, are properly secured, and are regularly monitored to avoid manatee entrapment.

(4) Manatee Signs. Prior to commencement of construction, each vessel involved in construction activities shall display at the vessel control station or in a prominent location, visible to all employees operating the vessel, a temporary sign at least 8-1/2-inch x 11-inch reading, "CAUTION: MANATEE HABITAT/IDLE SPEED IS REQUIRED IN CONSTRUCTION AREA." In the absence of a vessel, a temporary 3-foot x 4-foot sign reading "CAUTION: MANATEE AREA" shall be posted adjacent to the issued construction permit. A second temporary sign measuring 8-1/2-inch x 11-inch reading "CAUTION: MANATEE HABITAT. EQUIPMENT MUST BE SHUTDOWN IMMEDIATELY IF A MANATEE COMES WITHIN 50 FEET OF OPERATION" shall be posted at the dredge operator control station and at a location prominently adjacent to the issued construction permit. The Contractor shall remove the signs upon completion of construction.

3.3.2.2 Manatee Sighting Reports

Any sightings of manatees, or collisions with a manatee, shall be reported immediately to the Corps of Engineers. The point of contact within the Corps of Engineers will be Jeffrey Corbino, (504) 862-1958, Email: Jeffrey.M.Corbino@usace.army.mil

3.3.3 Gulf Sturgeon

The Contractor should induce Gulf Sturgeon to leave the immediate work area prior to any bucket dredging work regardless of water depth. The bucket will be dropped into the water and retrieved empty one (1) time. After the bucket has been dropped and retrieved, a one-minute no work period must be observed. During this no dredging period, personnel should carefully observe the work area in an effort to visually detect Gulf Sturgeon. This exercise shall also be conducted prior to each initiation of rock placement. If Gulf Sturgeon are sighted, no work should be initiated until the sturgeon have left the work area. If the water turbidity makes such visual sighting impossible, work may proceed after the one (1)-minute no work period has elapsed. If more than fifteen minutes elapses with no work, then the empty bucket drop/retrieval process shall be performed again prior to re-initiating work efforts. In the event a Gulf Sturgeon is incidentally taken or injured/killed by construction activities, it shall be immediately reported to CEMVN. The point of contact within CEMVN will be Jeffrey Corbino, (504) 862-1958.

3.4 JANITOR SERVICES

The Contractor shall furnish daily janitorial services for all the offices, shops, or other facilities being used by the Contractor or Government employees, whether existing or Contractor furnished, and perform any required maintenance of the facilities and grounds during the life of the

contract. Toilet facilities shall be kept clean and sanitary at all times. Services shall be performed at such a time and in such a manner to least interfere with the operations but will be accomplished only when the buildings are in daily use. Services shall be accomplished to the satisfaction of the Contracting Officer. The Contractor shall also provide daily trash collection and cleanup of the buildings and adjacent outside areas, and shall dispose of all discarded debris in a manner approved by the Contracting Officer.

3.5 DISPOSAL OF NON-REGULATED DEBRIS AND OTHER WASTE

All debris and other wastes resulting from construction operations on this contract shall be disposed of by removal from the site.

3.6 DISPOSAL OF REGULATED SOLID WASTES

If any hazardous or regulated solid wastes will be generated as a result of the Contractor's operations, the Contractor shall submit a plan that details the proper handling, removal, transportation and disposal of such wastes. The plan shall identify what types of hazardous and/or regulated solid wastes will be generated and shall list the hazards involved with each waste. Hazardous waste generated on-site by the Contractor shall be properly identified within 30 days of generation. No regulated wastes shall be allowed to accumulate on-site for more than 90 days. If the Contractor discovers or comes into contact with any hazardous chemicals or other materials other than those addressed in this specification, the Contractor shall immediately notify the Contracting Officer (CO) who will make a determination as to the course of action.

3.7 MAINTENANCE OF POLLUTION CONTROL FACILITIES

During the life of this contract the Contractor shall maintain all facilities constructed for pollution control under this contract as long as the operations creating the particular pollutant are being carried out or until the material concerned has become stabilized to the extent that pollution is no longer being created. Early in the construction period the Contractor shall conduct a training course that will emphasize all phases of environmental protection.

3.8 REPORTING OF POLLUTION SPILLS

In the event that an oil spill or chemical release occurs during the performance of this contract, the Contractor shall contact the National Response Center, telephone number 1-800-424-8802 as soon as possible, or if telephone communication is not possible, the nearest U.S. Coast Guard office may be contacted by radio to report the spill, (33 CFR 153.203). The Contractor shall comply with any instructions from the responding agency concerning containment and/or cleanup of the spill.

3.9 TRAINING OF CONTRACTOR PERSONNEL

Train the personnel in environmental protection and pollution control. Conduct environmental protection/pollution control meetings for personnel prior to commencing construction activities. Conduct additional meetings for new personnel and when site conditions change. Include in the training and meeting agenda:

a. methods of detecting and avoiding pollution

b. familiarization with statutory and contractual pollution standards

c. installation and care of devices, vegetation covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control

d. anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants

e. recognition and protection of archaeological sites, artifacts, and wetlands

-- End of Section --

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CLOSEOUT SUBMITTALS
04/06

PART 1 GENERAL

1.1 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for providing Closeout Submittals, including As-Built drawings required under this section. All costs associated therewith shall be included in the applicable contract unit or job prices contained in the Bidding Schedule.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation. 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-02 Shop Drawings

As-Built Drawings; G, DO

As-Built Drawings; G, EDC

Drawings showing final as-built conditions of the project. The final CADD As-Built drawings shall consist of geographically referenced (LA State Plane South 1702, NAD 83 / survey feet) CADD electronic drawing files in the specified format supplied on compact disc, read-only memory (CD-ROM), three (3) copies; three (3) sets of half-scale hard copy prints, and one (1) set of the approved working As-Built drawings.

1.3 PROJECT RECORD DOCUMENTS

1.3.1 As-Built Drawings

This paragraph covers As-Built drawings complete, as a requirement of the contract. The terms "drawings," "contract drawings," "drawing files," "working As-Built drawings" and "final As-Built drawings" refer to contract drawings which are revised to be used for final As-Built drawings.

1.3.1.1 Government Furnished Materials

The Contractor will be furnished "as-designed" drawings in Microstation V8 format compatible with a Windows XP operating system. The electronic files will be supplied on compact disc, read-only memory (CD-ROM). The plan drawings provided shall be the basis for resulting "As-Built" sheet scale, coverage and layout. If the Contractor submits a CADD project master overview file, it does not eliminate the need for the specific individual plates matching the scale and coverage as those provided in the government furnished CD-ROM.

1.3.1.2 Working As-Built and Final As-Built Drawings

The Contractor shall revise two (2) sets of paper drawings by red-line process to show the as-built conditions during the prosecution of the project. These working as-built marked drawings shall be kept current on a weekly basis and at least one (1) set shall be available on the jobsite at all times. 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 accurately and neatly recorded as they occur by means of details and notes. The working as-built marked prints and final As-Built drawings will be jointly reviewed for accuracy and completeness by the Contracting Officer and the Contractor prior to submission of each monthly pay estimate. If the Contractor fails to maintain the working and final As-Built drawings as specified herein, the Contracting Officer will deduct from the monthly progress payment an amount representing the estimated cost of maintaining the As-Built drawings. This monthly deduction will continue until an agreement can be reached between the Contracting Officer and the Contractor regarding the accuracy and completeness of updated drawings. The working and final As-Built drawings shall show, but shall not be limited to, the following information:

a. All information shown on the contract drawings and a record of all completed work, deviations, modifications, or changes from those drawings, however minor, which may have been incorporated into the work.

b. After dredging channel sections and acceptance profiles.

c. Gross and net yards dredged distinguished by dates of dredging and reach of channel dredged.

d. Disposal locations used, including gross yardage placed by site.

e. Period of disposal placement for each disposal site utilized.

f. Dredge discharge pipeline locations (Discharge coordinates).

g. Access corridors utilized, including notation of flotation dredging if constructed.

h. Retention dikes (if constructed/maintained).

i. Vertical control utilized including any applicable conversions.

j. Plan plot of required disposal area surveys.

k. Utility locations as verified by owners, including station, C/L XY-coordinate, and minimum elevation.

l. Channel markers, bouys, daymarkers, etc. surveyed during required preliminary survey efforts.

m. Changes or modifications which result from the final inspection.

n. Modifications will be shown in accordance with the following procedures.

(1) Directions in the modification for posting descriptive changes shall be followed.

(2) A Modification Triangle shall be placed at the location of each deletion.

(3) For new details or sections which are added to a drawing, a Modification Triangle shall be placed by the detail or section title.

(4) For minor changes, a Modification Triangle shall be placed by the area changed on the drawing (each location).

(5) For major changes to a drawing, a Modification Triangle shall be placed by the title of the affected plan, section, or detail at each location.

(6) The Modification Triangle size shall be 1/2 inch on a side unless the area where the triangle is to be placed is crowded. Smaller size triangle shall be used for crowded areas.

o. A Utility Summary Sheet that lists every utility (for both the dredging channel and disposal areas). C/L Station, C/L XY-coordinate, minimum elevation, all horizontal information required to determine actual alignments of all utilities, utility size, utility type, and POC information. In the notes column, state whether the utilities were dredged over or disposed on. A sample Utility Summary Sheet is included at the end of this sections. The Contractor shall also submit a copy of all utility as-builts, surveys, etc recieived from the owner. all utility as-builts shall be labeled such that each as-built has a current owner's name and pipeline locations (C/L Station and Mile #) on it.

1.3.1.3 Drawing Preparation

a. Each various feature of work performed shall be distinguishable by color coding and/or symbology. The as-built drawings shall be modified as may be necessary to correctly show the features of the project as it has been constructed by bringing the contract set into agreement with approved working as-built prints, and adding such additional drawings as may be necessary. Only personnel proficient in the preparation of CADD drawings shall be employed to modify the contract drawings or prepare additional new drawings. These working as-built marked prints shall be neat, legible and accurate. These drawings are part of the permanent records of this project and shall be returned to the Contracting Officer after approval by the Government. Any drawings damaged or lost by the Contractor shall be satisfactorily replaced by the Contractor at no expense to the Government.

b. Additions and corrections to the contract drawings shall be equal in quality and detail to that of the originals. Line colors, line weights, lettering, layering conventions, and symbols shall be the same as the original line colors, line weights, lettering, layering conventions, and symbols. If additional drawings are required, they shall be prepared 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 as-built drawings shall be identical to that used on the contract drawings. Additions and corrections to the contract drawings shall be accomplished using CADD files. The Contractor shall be responsible for providing all program files and hardware necessary to prepare final as-built drawings. The Contracting Officer will review final as-built drawings for accuracy and the Contractor shall make required corrections, changes, additions, and deletions.

1.3.1.4 Qualifications of CADD personnel

Only personnel proficient in the preparation of CADD drawings shall be employed to modify the contract drawings if required, or prepare additional new drawings.

1.3.1.5 Computer Aided Design and Drafting (CADD) Drawings

a. CADD colors shall be the "base" colors of red, green, and blue. Color code for changes shall be as follows.

(1) Deletions (red) - Deleted graphic items (lines) shall be colored red with red lettering in notes and leaders

(2) Additions (Green) - Added items shall be drawn in green with green lettering in notes and leaders

(3) Special (Blue) - Items requiring special information, coordination, or special detailing or detailing notes shall be in blue.

b. The Contract Drawing files shall be renamed in a manner related to the contract number (i.e., 980-C-10.DGN) as instructed in the Pre-Construction conference. Marked-up changes shall be made only to those renamed files. All changes shall be made on the layer/level as the original item. There shall be no deletions of existing lines; existing lines shall be over struck in red. Additions shall be in green with line weights the same as the drawing. Special notes shall be in blue on layer "?-ANNO-NOTE" where "?" represents the discipline designator (for example; "C" for Civil, "E" for electrical, "S" for Structural, etc.).

c. Within twenty (20) days after Government approval of all of the working as-built drawings, the Contractor shall prepare the final CADD as-built drawings and submit two (2) sets of hard-copy prints of these drawings for Government review and approval. The Government will promptly return one set of prints annotated with any necessary corrections. Within ten (10) days the Contractor shall revise the CADD files accordingly at no additional cost and submit the final As-Built drawing package for the entire project. The submittal shall consist of one (1) set of electronic files on compact disc, read-only memory (CD-ROM), three (3) sets of hard-copy prints and one (1) set of the approved working As-Built drawings. They shall be complete in all details and identical in form and function to the contract drawing files supplied by the Government. Any transactions or an adjustment necessary to accomplish this is the responsibility of the Contractor. The Government reserves the right to reject any drawing files it deems incompatible with the customer's CADD system.

1.3.1.6 Final As-Built Drawings

a. When final revisions have been completed, the cover sheet drawing shall show the wording "RECORD DRAWING AS-BUILT" followed by the name of the Contractor in letters at least 3/16 inch high. All other contract drawings shall be marked either "As-Built drawing" denoting no revisions on the sheet or "Revised As-Built" denoting one (1) or more revisions. Original contract drawings shall be dated in the revision block.

b. In lieu of revising contract cross section drawings to depict before and after conditions, the Contractor is allowed to submit

electronically plotted cross sections depicting before and after dredging cross sections overlayed with the required dredge template. The submission shall be in pdf format, such that each individual cross section is paged and scaled to 8.5" x 11" paper.

c. Paper prints, drawing files and storage media submitted will become the property of the Government upon final approval. Failure to submit final as-built drawing files and marked prints as specified shall be cause for withholding any payment due the Contractor under this contract. Approval and acceptance of final As-Built drawings shall be accomplished before final payment is made to the Contractor.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section --

Dredging Region: _____ Date submitted: _____

Utility Summary Sheet									
C/L Station & Mile #	C/L X, Y Coordinate	RDB Toe X, Y Coordinate	LDB Toe X, Y Coordinate	Minimum Elevation	Size of Utility	Type of Utility	Owner Name	Owner Point of Contacts (email address, phone number, and physical address)	Notes:

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SURVEYS
04/08

PART 1 GENERAL

1.1 SCOPE

The work provided for herein consists of furnishing all plant, labor, equipment, and materials, and performing all operations necessary for surveying as specified herein and as indicated on the contract drawings.

1.2 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for surveys. The cost of the surveys covered under this section shall be included in the contract unit price for "Dredging".

1.3 REFERENCES

US ARMY CORPS OF ENGINEERS

EM 1110-2-1003 (2013) Hydrographic Surveying

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. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Preliminary Field Surveys; G, CD

Prior to taking any original cross-sections, the Contractor shall run a preliminary electronically controlled field survey of the base dredging reach. (See paragraph "Preliminary Field Survey")

Before and After Dredging Cross Sections

Before and after dredging cross sections of the Baptiste Collette Bar channel shall be taken and submitted. (See paragraph "Before and After Dredging Cross Sections")

Disposal Area Surveys

Before and after disposal surveys shall be taken at each wetland creation area used and/or anticipated to be used by the Contractor to adequately capture impacts of material disposal. (See paragraph "Before and After Disposal Area Surveys")

SD-05 Design Data

Compiled Survey Data CD Disk

All survey data shall be collected, recorded and processed. The Contractor shall furnish the required data on compact disk (CD) containing ASCII character set.

Preliminary Field Surveys; G, CD

Preliminary Field Surveys; G, ED

Before and After Dredging Cross Sections; G, CD

Before and After Dredging Cross Sections; G, ED

Disposal Area Surveys; G, CD

Disposal Area Surveys; G, ED

SD-09 Manufacturer's Field Reports

Calibration checks

Calibration checks shall be run at the beginning and completion of each day's survey or portion thereof. Results shall be furnished daily to the Contracting Officer's Representative. (See paragraph COMMENCEMENT, PROSECUTION, AND COMPLETION, subparagraph "General")

1.5 QUALITY CONTROL

The Contractor shall establish and maintain quality control for the work specified in this section to assure compliance with the contract requirements and maintain records of his quality control for all surveying including but not limited to the following:

(1) Layouts and Surveys. Daily log of layout and surveys consisting of type and location using Contractor furnished control system as stated in the Contract Clause in Section 00700, entitled LAYOUT OF WORK (FAR 52.236-17).

(2) Reporting. The original and two copies of these reports and tests as well as the records of corrective action taken shall be furnished the Government daily. The report shall include a record of times and dates surveys were run, the horizontal control stations used and their coordinates, the vertical control points used and their elevations, and weather conditions. Format of report shall be as prescribed in Section 01 45 04.00 10 CONTRACTOR QUALITY CONTROL.

1.6 PROFESSIONAL CERTIFICATION

All surveys shall be performed in the presence of the Contracting Officer's Representative. All surveys shall be performed under the direction of and certified by a Professional Land Surveyor currently licensed by a state of the United States. In addition, the surveyor shall document at least three years of experience in hydrographic surveying of navigable channels.

1.7 SURVEY EQUIPMENT

1.7.1 Survey Boat

The Contractor shall furnish diesel or gasoline-powered boat(s), twin screw, not less than 30 feet in length, enclosed cabin space for six (6) passengers, air conditioned and heated, fully operated, Coast Guard certified, radar equipped, and an operable radio (same frequency as dredge). The survey boat(s) shall be equipped with electronic positioning equipment for conducting channel surveys and a surveying lead line as described in EM 1110-2-1003, Chapter 8-2, and shall be capable of maneuvering to permit surveying within the tolerances specified in paragraph COMMENCEMENT, PROSECUTION, AND COMPLETION. The survey boat(s) will be used solely for surveying and not providing the inspector's (Government agent's) transportation as stated in Section 35 20 23.00 12 DREDGING paragraph entitled "Inspectors (Government Agents) Transportation" unless in the case of mechanical malfunction of Government transportation. No smoking shall be allowed inside the cabin and operator's space while occupied by Government personnel. No smoking signs shall be posted.

1.7.2 Fathometer

1.7.2.1 General

All survey soundings shall be taken with a precision, high-resolution (0.1-ft) fathometer. The acoustic ping rate shall be, at minimum, 10-soundings per second. To limit signal attenuation in areas of unconsolidated bottom sediments, the acoustic frequency utilized shall be within the range of 24-28 kHz and Low Frequency Low Pulse Width shall be in accordance with the Manufacturers recommended settings for unconsolidated bottom sediments in shallow water depths (i.e., 0 to 150-ft). If a dual frequency fathometer is utilized, the low frequency shall be within the 24-28 kHz range. At minimum, the equipment shall be capable of recording depths of water ranging from 3-ft under the transducer face(s) to a maximum of 60-ft. At this maximum depth, the sounding accuracy must be 0.5-ft (28 kHz transducer) and 0.1-ft (200 kHz transducer). Acoustic returns shall be recorded on thermal chart paper by a fixed, high-resolution printing element (no stylus). A digital fathometer may be used instead of paper charts as directed by the Contracting Officer's Representative, but the Contractor must still be capable of producing paper charts unless otherwise directed by the Contracting Officer's Representative. The paper chart scaling shall be in English units, no greater than 0-60-ft full-scale and graduated in 1-ft increments with numeric depth annotations at the 0, 10, 20, 30, 40, 50, and 60-ft chart levels. The instrument shall, at minimum, be capable of adjusting transmit power, receiver sensitivity and time-varied gain settings and of inputting the correct speed-of-sound, vessel draft and tide values. During the surveying of run lines, the fathometer shall be capable of annotating periodic event marks on the paper chart as directed by other surveying system components (positioning, controlling software) and be capable of transmitting each event sounding back to these components for horizontal position tagging and data storage. Additionally, the surveyor shall print the control parameter settings on the chart paper at start of all surveys and when any control settings are changed and before and after all bar check. Prior to the Contractor taking field surveys, control parameter settings shall be turned into the Government Inspector for review to ensure the settings meet the surveying parameters.

1.7.2.2 Calibration

Hydrographic fathometer calibrations shall be performed at the survey site by methods described in EM 1110-2-1003, Chapters 9-7 thru 9-10 and at a frequency listed in Table 9-6 for navigation and dredging support surveys with soft bottom materials. The acoustic traces of the bar and ball check calibrations shall be captured on the fathometer paper chart (at 10, 20 and 30-ft. depths or as directed by the Contracting Officer's representative) along with a notation indicating the site location (i.e., station lat/long, x/y), the date and time. Additionally, if a velocity meter probe is utilized, the average speed-of-sound reading for the entire water column and the location, date, and time of the probe sounding must also be noted on the fathometer paper chart. All calibrations and soundings shall be made in the presence and to the satisfaction of the Contracting officer's Representative at the job site.

1.7.2.3 Low Frequency Signal Parameters

The Low Frequency Pulse Width range of cycles (i.e. 1 to 10) used shall not produce signal lengths less than 35 microseconds or greater than 125 microseconds. For example, using an Odom MKIII 24 kHz transducer with a LF Pulse Width Setting of 2, will result in a 83.3 microsecond long signal. 2 cycles (i.e. LF Pulse Width Setting = 2/24,000 Hz = 83.3 microseconds).

1.7.3 Automatic Recording Tide Gage

The Contractor shall furnish a Hazen or compatible remote, automatic recording tide gage that may be monitored aboard the dredge. The Auto Gage shall be initially calibrated to the staff gage and once a week the staff gage and auto gage shall be calibrated through the completion of the job. The calibration back up data shall be submitted to the Government Inspector for daily reports.

1.7.4 Lead Line/Level Rod

Disposal area surveys may require the use of convention survey means to obtain required data. Lead lines used for soundings shall consist of a seven (7)-pound lead having a six (6)-inch mushroom shaped bottom attached to a low stretch line graduated in 0.1-foot increments. Level rods, if used for soundings, shall have a six (6)-inch diameter plate attached to the bottom. Methodology to obtain additional conventional survey requirements shall be approved by the Contracting Officer's Representative. If a total station instrument is used to perform the survey, the Contractor shall submit a copy of the survey data on magnetic media, a printout of the survey data, and computer-plotted profiles and cross sections from the original data. Plotted cross sections and profiles plus duplicate notes shall be kept at the jobsite at all times and made available to the Government.

1.7.5 Positioning Equipment

1.7.5.1 Electronic Surveys

Positioning equipment for electronic surveys shall be capable of achieving the required accuracy stated in paragraph "Positioning Surveys." Initial calibration and subsequent checks shall be in accordance with the manufacturer's instructions as required in paragraph "General".

1.7.5.2 Data

The data obtained from the electronic control system (paragraph "Positioning Surveys") and the echo depth sounding instrument shall be collected, recorded and processed. Soundings shall be taken to the nearest 0.1-foot and X & Y coordinates of the location should be to the nearest foot. The applicable gage shall be read to the nearest 0.1 foot prior to and after each day's survey. More frequent readings will be required when directed by the Government Inspector. From the processed data, the Contractor shall provide certain survey information taken for the purpose of computing the total amount of work to be paid for. The Contractor shall furnish the required data on CD or 3-1/2 inch IBM compatible diskettes containing ASCII character set. The information received should be free of errors and in the following format: (a) The X-coordinate in feet of a recognized Louisiana Lambert grid system, (b) the Y-coordinate in feet of same recognized Louisiana grid system, (c) the sounding, and (d) remarks such as the station number (i.e. 1+00), CL (for centerline), ES (for end of station), EJ (for end of file), and direction of survey (either "L" for + or "R" for -, followed by Station No., i.e. L 30+00). The time and date the cross section was taken and the gage reading applicable to the section shall also be included. The electronically recorded data files, along with a hard copy of the track plotter surveys, plotted on the chart to show compliance with alignment, shall be presented to the Contracting Officer's representative on site no later than 2 days after the survey is taken. Under no circumstances shall the information be edited for the purpose of eliminating incorrect soundings. The Contractor shall provide a separate file listing all incorrect soundings to be eliminated. Additional format requirements for these files will be discussed, and sample formatted files will be made available, at the pre-work coordination meeting. The beginning station for each file shall be the repeated ending station from the previous file (i.e., Sta. 820+00 to 840+00, Sta. 840+00 to 860+00, etc.). The format for survey file(s) to be submitted to the Government will be discussed and sample sheets will be given at the Prework Coordination Meeting.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 COMMENCEMENT, PROSECUTION, AND COMPLETION

3.1.1 General

Surveys for all fixed stations shall be performed in accordance with Class 1 Third Order accuracy as defined by the National Oceanic and Atmospheric administration in "Classification, Standards of Accuracy, and General Specifications of Geodetic control Surveys." Prior to initiating positioning surveys using electronic survey equipment, a calibration test of the electronic measuring device shall be performed according to the manufacturer's instructions in the presence of the Contracting Officer's Representative. Calibration checks shall be run at the beginning and completion of each day's survey or portion thereof. Results shall be furnished daily to the Contracting Officer's Representative. All electronic surveys shall be tied to a fixed station. The station may be a Government furnished point or a temporary point established by the Contractor and approved by the Contracting Officer's Representative. Should the electronic measuring device fail to indicate the known distance

within the factory defined error range for the device, the device shall not be used for determining survey positions.

3.1.2 Positioning Surveys

These surveys shall be controlled using electronic surveying equipment. Information and data to reestablish the Government baseline, or to establish the relationship between the electronic control system and the Government baseline and the channel centerline will be furnished by the Government upon request. The electronic positioning fixed stations (antenna locations) shall be located at points that will give the greatest amount of accuracy to the dredge and survey boats using the equipment. The coordinates of the fixed stations shall be tied to the channel centerline and shall be made available to the Government upon request. A positional tolerance of +/-5-feet will be permitted for surveys performed using electronic positioning equipment installed on the dredge and/or survey boats.

3.1.3 Preliminary Field Surveys

Prior to taking any original cross-sections, the Contractor shall run a preliminary field survey electronically controlled locating the position of all day markers, buoys, and pipeline signs/markers, within the limits of the work. In addition, controlled cross sections of the channel (500-feet wide or WES to WES, whichever comes first) shall be taken every 1,000 feet along channel centerline over the entire channel limits of work. These surveys shall be performed in accordance with the specifications stated in the following paragraph. The data from this survey shall be plotted on a layout sheet (Track Plotter Chart) showing the ranges plotted in plan view, along with all day marker, buoy, and pipeline locations. All data obtained in this survey shall also be furnished in ASCII format. The cross sections shall also be plotted with the theoretical dredging template superimposed upon the cross sections. This survey data shall be submitted to the Contracting Officer for review. The Contractor shall allow five (5) calendar days for determination/verification of the final channel alignment by the Contracting Officer. The Contractor shall not proceed with any dredging work until the Contracting Officer determines/verifies the final channel alignment and furnishes this information to the Contractor.

3.1.4 Before and After Dredging Cross Sections

(1) Before and after dredging cross sections of the channel shall be taken at approximately 200-foot intervals along the channel centerline, at all P.C.'s and P.T.'s, and at pipeline crossing locations within the limits of dredging. The soundings shall be made with a depth-sounding instrument described in paragraph "Fathometer". Distances between soundings on each cross section shall be approximately 5-feet apart and on an azimuth normal to the centerline of the cut. A tolerance of 20 feet normal to and between the designated station and the actual survey line will be permitted. Any cross section sounding(s) exceeding the above specified tolerance shall invalidate the entire cross section. Data may be transmitted from the depth sounding equipment and recorded directly onto magnetic media, or picked from the depth sounding charts. If soundings are obtained from the depth sounder rolls, they shall be picked from the top of the true bottom line. Reflected lines (fluff lines) from lighter sedimentary materials shall be disregarded. Soundings shall be chosen to the nearest 0.1-foot. Regardless of which data collection method is used, the depth sounder rolls shall be

furnished to the Government. Data shall also be furnished to the Government in a structured ASCII format on magnetic media. The Track Plotter Chart shall also be furnished to the Government to verify positional tolerance.

(2) A layout of the before dredging cross sections shall be prepared on the preliminary field survey and approved by the Contracting Officer. This layout shall also be used in performing the required after dredging surveys.

(3) The actual location of each sounding taken on each before and after dredging cross section range shall be provided. This information shall be in the form of printout tabulation giving the actual location of the soundings on an azimuth normal to the centerline of the cut (Batch Files). Soundings shall be to the nearest 0.1-foot referred to the water surface. The data obtained from the before and after dredging cross sections shall be plotted in plan view on a layout sheet (Track Plotter Chart) to a scale of 1 inch = 200 feet. The cross section information shall also be plotted on a printout sheet, 1 inch = 50 feet horizontal and 1 inch = 5 feet vertical scales, along with a section showing the required theoretical section. The time and date taken shall be shown and the gage reading applicable to the survey shall be shown. The applicable gage shall be read to the nearest 0.1-foot prior to and after each day's survey. More frequent readings may be required when directed by the Contracting Officer's Representative.

3.1.5 After Dredging Profiles

As soon as possible after dredging quantity surveys have been completed in an acceptance reach, as specified in Section 35 20 23.00 12, paragraph "Acceptance Reach", profiles shall be taken over the same acceptance reach as the after dredging cross sections. The depth sounding instrument used to make the before and after dredging cross sections shall be used to make the after dredging profiles. No substitutions will be permitted unless approved by the Contracting Officer. Distances between soundings on each profile shall be approximately 20-feet apart and shall not exceed 20-feet on an azimuth parallel to the centerline of the cut. A tolerance of 20-feet normal to and between the designated profile line and the actual survey line will be permitted. Controlled profiles of the channel shall be made along the channel centerline and one (1) at each outside bottom edge of the cut. The Government reserves the right to direct additional soundings to be taken along ranges normal to the above-defined acceptance profiles. After dredging profiles shall be used in preparation of the As-Built profile drawing(s).

3.1.6 Before and After Disposal Area Surveys

Before and after disposal surveys shall be taken and plotted for each wetland creation area used by the Contractor, to adequately capture impacts of dredged material placement. Soundings and/or rod readings shall be recorded to the nearest tenth of a foot and the distance between soundings and/or rod reading shall not exceed 50-feet. Data shall be furnished to the Government in a structured XYZ ASCII format on magnetic media, regardless of which data collection or survey method is used.

3.1.6.1 Disposal Areas "G" and "H"

For Disposal Areas "G" and "H", a minimum of three (3) disposal cross

sections shall be taken normal to the channel centerline and three (3) sections taken parallel to the channel centerline. These cross sections shall be taken prior to and following placement of dredge material at this area and at intervals and locations to be determined by the Contracting Officer's Representative.

3.1.6.2 Y'atty Jane and Gunn Island

Cross sections and profiles as described herein shall be taken at the Y'atty Jane and Gunn Island discharge locations before and after disposal. Soundings and/or rod readings shall be recorded to the nearest tenth of a foot and the distance between soundings and/or rod readings shall not exceed 50-feet. For Gunn island, a minimum of three (3) before and after cross sections shall be taken normal to the channel centerline, as well as three (3) cross sections parallel to the channel centerline. These cross sections of the proposed disposal area/island shall be taken at intervals and locations to be determined by the Contracting Officer's Representative. The sections shall extend to adequately cover the area impacted by dredged material placement.

3.1.7 Survey Data

Each field book shall be given an identification number, which shall be noted on each page of the book. The information shown in the field notes shall meet the requirements of the Contracting Officer's Representative. The Contractor shall promptly plot the before and after dredging cross sections on a scale of 1-inch = 30-feet horizontally and 1-inch = 5-feet vertically, or as determined by the Government Inspector. The survey for progress payments shall have the theoretical design section superimposed thereon. Plotted cross sections, plan view sections, acceptance profiles, and duplicate notes shall be kept at the jobsite at all times and made available to the Contracting Officer's Representative as required. The contractor shall furnish to the Contracting Officer's Representative the plotted original cross sections for a minimum distance of 2000-feet ahead of dredging.

-- End of Section --

Sample

EM Format File

```
#H01 SAMPLE.EM
#H02 11/06/06
#H03 3
#H04 NAD83
#H05 07-002
#H06 FT
#H07 1702
#H08 PLAQUEMINES PARISH  LA
#H09 CHUSTZ SURVEYING INC.
#H12 1.0
#H13 PLAQUEMINES PARISH
#H14 NEW ORLEANS EAST SE  CHALMETTE SW  BERTRANDVILLE NE & NW
#H15 W912P8-06-D-0050
#H20 WEST BANK & VICINITY  ALGIERS CANAL HURRICANE PROTECTION
#H21 LEVEES  HERO TO BELLE CHASSE HWY (EAST SIDE) & BELLE CHASSE
#H22 HWY TO ALGIERS LOCK (WEST SIDE)
;
;
;-------------------VERTICAL CONTROL INFORMATION--------------------
;
;
#V01 BEL 1
#V02 -3.42
#V03 2004.65
#V04 NAVD88
#V05 GOOD
#V06 -3.42
#V07 494282.40,3697937.71
#V20 MONUMENT IS A 3/4" IRON ROD SET FLUSH WITH THE GROUND. IT IS
#V21 LOCATED 5.9 FT SE OF A RAILROAD IRON  25 FT NE OF ANOTHER
#V22 RAILROAD IRON  AND 116 FT EAST OF A GATE POST AT THE PUMP
#V23 STATION AREA.
#V24 PROJECT BENCHMARK POINTS ARE BEL1 AND V375 SEE
#V25 GPS REPORT FOR DETAILS.
;
;
#V01 770+58.11 (SETTLEMENT PLUG)
#V02 19.21
#V03 2004.65
#V04 NAVD88
#V05 GOOD
#V06 19.21
#V07 516940.13,3711674.20
#V20 MONUMENT IS A SETTLEMENT PLUG IN CONCRETE. IT IS LOCATED 9.4 FT
#V21 EAST NE OF THE EAST EDGE OF THE METAL STEPS  13.55 FT NE OF THE
#V22 EAST CORNER OF THE LOCK WALL  AND 17.3 FT NW OF THE NE CORNER
#V23 OF THE LOCK HOUSE.
;
;
;-------------------TEMPORARY BENCHMARK INFORMATION-----------------
;
;
#T01 TBM AC-1
#T02 7.96
#T05 GOOD
#T06 7.96
#T10 MONUMENT IS A STANDARD COE BRASS CAP RECESSED 0.5' BELOW GROUND
```

```
#T11 STAMPED "AC-1 07002C". IT IS LOCATED +/-500 FT. SW OF THE
#T12 CONCRETE BRIDGE OVER THE CANAL AT GENERAL DE GAULLE RD  69.3 FT
#T13 NW OF THE WATERS EDGE OF THE CANAL  17.6 FT NE OF THE SOUTHERN
#T14 GATE POST OF AN ENTRANCE GATE  AND 17.8 FT NE OF THR NORTHERN
#T15 MOST GATE POST.
;
;
#T01 TBM AC-2
#T02 8.50
#T05 GOOD
#T06 8.50
#T07 482914.44,3683055.07
#T10 MONUMENT IS A STANDARD COE BRASS CAP ON REBAR STAMPED "AC2
#T11 07002C". IT IS LOCATED 86.4 FT WNW OF THE AIRBASE FENCELINE
#T12 1.6 MILES SW OF THE PUMP STATION AT THE CROSSING  AND 0.17
#T13 MILES NE OF THE EDGE OF THE ASPHALT ROAD AT THE AIRBASE BOAT
#T14 RAMP.
;
;
#T01 TBM AC-3
#T02 8.86
#T05 GOOD
#T06 8.86
#T07 482917.55,3683035.15
#T10 MONUMENT IS A STANDARD COE BRASS CAP ON REBAR STAMPED "AC3
#T11 07002C". IT IS LOCATED 334 FT NW OF THE NORTHERNMOST GATE POST
#T12 ON THE ENTRANCE GATE TO THE LEVEE  336 FT NNW OF THE SOUTHERN
#T13 POST  0.2 MILES SE OF A POWER LINE CROSSING  AND 1 MILE SE OF
#T14 A CHAIN LINE FENCE GATE CROSSING THE LEVEE.
;
;
;
;
#H02 11/06/06
;
;
#H10 070003
#H11 53
;
;
;
;
;------------------------FIELD PERSONNEL---------------------------
;
#C01 J. GREMILLION
#C02 J. MASSE
#C03 K. MANUEL
#C03 S. HOLMES
;
;---------------------------EQUIPMENT-------------------------------
;
#E01 TOTAL STATION
#E02 46587793
#E03 TCR-305
;
#E01 LEICA
#E02 235668975
```

```
#E03 GT-3
;
;-----------------------------------------------------------------
;
#H02 11/02/06
;
;
#H10 070003
#H11 19
;
;
;-----------------------GAGE INFORMATION-------------------------
;
;
#G02 GAGE AC-3
#G03 0.50
#G04 12:55
#G07 483479.75,3683384.21
#G10 TEMPORARY STAKE GAGE SET AT AC-3
;
;
;---------------------- CROSS-SECTION -----------------------------
;
;
#X01 3700241.41  501025.16 3700687.38  500799.09 57090.00 570+90
#X03 10:53
#X04 0.80
20590,500960.30,3700343.72,-11.10,SND
20591,500954.99,3700362.88,-13.30,SND
20592,500948.11,3700381.50,-16.50,SND
20593,500942.69,3700401.47,-16.80,SND
20594,500934.73,3700420.93,-18.20,SND
20595,500927.26,3700438.51,-17.00,SND
20596,500916.38,3700455.22,-13.30,SND
20597,500907.08,3700473.36,-10.90,SND
20598,500899.57,3700491.79,-8.50,SND
20599,500892.12,3700510.12,-5.40,SND
20600,500882.66,3700528.07,-4.90,SND
20601,500872.68,3700545.22,-4.50,SND
20602,500862.95,3700562.58,-1.70,SND
20603,500854.68,3700581.17,-1.55,SND
20604,500847.27,3700599.48,-1.88,SND
20605,500838.98,3700617.69,-0.74,SND
20606,500830.68,3700635.90,0.40,SND
;
;----------------------- PROFILE ---------------------------------------
#P01
5552,494333.46,3697419.77,9.27,SHP
5553,494376.90,3697443.90,8.56,SHP
5554,494398.99,3697455.69,8.36,SHP
5555,494410.50,3697455.82,8.24,SHP
5556,494411.15,3697455.40,7.78,CLL
5557,494419.34,3697455.62,8.17,CLL
5558,494428.02,3697458.04,8.15,CLL
5559,494439.50,3697463.11,8.46,CLL
5560,494483.81,3697485.83,8.43,CLL
5561,494524.13,3697505.97,8.66,CLL
```

```
5562,494550.34,3697518.80,8.54,CLL
5563,494585.08,3697537.20,8.66,CLL
5564,494625.86,3697557.24,8.70,CLL
5565,494664.84,3697577.20,8.93,CLL
5566,494704.71,3697597.16,8.94,CLL
5567,494743.17,3697617.15,8.82,CLL
5568,494782.44,3697636.60,8.64,CLL
5569,494823.03,3697657.00,8.69,CLL
5570,494861.50,3697676.57,8.56,CLL
5571,494898.96,3697696.31,8.77,CLL
5572,494921.54,3697707.77,6.95,CLL
5573,494932.32,3697709.54,7.94,SHP
5574,494950.46,3697718.64,7.67,SHP
5575,494956.49,3697722.33,7.35,SHP
5576,494957.71,3697722.81,6.43,CLL
5577,494971.83,3697731.26,5.79,CLL
5578,494987.62,3697740.41,5.77,CLL
5579,495001.65,3697748.14,5.33,ESH
5580,495024.72,3697759.96,5.43,ESH
5581,495029.15,3697761.70,5.74,CLL
;
;--------------- MISC. SHOT POINTS ---------------------------
#M01 MISCELLANEOUS SHOTS TAKEN IN BETWEEN RANGES 312+00 AND 318+00
;
;
2807,482976.57,3682869.45,1.52,FL
2808,482905.77,3682933.86,4.69,FL
2809,482896.57,3682942.44,9.02,FL
2810,482885.94,3682951.60,8.64,FL
2811,482863.67,3682971.79,-0.26,FL
2812,482785.09,3683042.12,-2.88,FL
2813,482917.55,3683035.15,-0.89,RMP
2814,482931.41,3683036.73,1.15,RMP
2815,482952.25,3683037.10,4.61,RMP
2816,482977.95,3683039.14,8.61,RMP
2817,482998.08,3683041.58,9.32,RMP
2818,483030.60,3683049.20,7.53,RMP
2819,483056.35,3683056.21,4.64,RMP
2820,483051.39,3683065.63,5.47,RMP
2821,483033.83,3683062.95,7.85,RMP
2822,483020.70,3683060.67,9.36,RMP
2823,482995.31,3683055.36,9.26,RMP
2824,482970.99,3683049.58,7.08,RMP
2825,482951.69,3683049.63,4.06,RMP
2826,482914.44,3683055.07,-1.17,RMP
2827,483110.59,3683031.57,2.16,PIR
2828,483127.39,3683017.25,2.61,PIR
2829,483137.72,3683029.53,2.55,PIR
2830,483133.88,3683032.85,2.46,PIR
2831,483125.12,3683022.40,2.67,PIR
2832,483112.12,3683033.44,2.18,PIR
2833,483265.05,3683138.27,1.66,FL
2834,483195.48,3683208.46,5.46,FL
2835,483183.05,3683219.30,9.36,FL
2836,483172.83,3683229.40,9.28,FL
2837,483156.14,3683245.27,1.95,FL
2838,483069.19,3683323.97,-3.40,FL
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10/07

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SECTION 35 20 23.00 12

DREDGING
10/07

PART 1 GENERAL

1.1 SCOPE

The work provided for herein consists of furnishing all plant, labor, materials, and equipment and performing all operations necessary for the removal of all materials to the required dimensions as shown on the contract drawings, satisfactory disposal thereof, and all operations incidental thereto.

1.2 MEASUREMENT

1.2.1 Quantity Surveys

A survey of the sites for dredging shall be made in accordance with the provisions of Section 02 21 10.00 12 SURVEYS and all measurements to determine dredging quantities will be based on the "Before And After Dredging" cross sections described therein. The soundings and contours shown on the contract drawings are representative of conditions that existed August 2023 and do not necessarily represent existing conditions. Survey data reflecting most recent conditions will be obtained prior to contract award, and provided by amendment prior to bid opening. The elevations shown thereon shall be verified or corrected by the "before dredging" surveys. Determinations of quantities to be paid for in the area specified, after having once been made, will not be reopened.

1.2.2 After Dredging Profiles

Should the acceptance profiles and/or soundings described in Section 02 21 10.00 12 SURVEYS , paragraph "After Dredging Profiles", disclose any lack of the required dimensions, the Contractor shall redredge the area at no additional expense to the Government. After redredging, the required dimensions shall be verified by rerunning the profiles. Redredging shall be performed until the acceptance profiles and/or soundings show that the required dimensions have been obtained.

1.2.3 Quantity Computations

The quantity of dredged material removed and to be paid for will be measured by the cubic yard by computing the volume along the centerline between the "before-dredging" cross sections and the required dimensions as shown on the contract drawings using the average end area method. No allowance will be made for excessive dredging except as provided in paragraph "Excessive Dredging". In order for the Government to make dredging volume computations, the Contractor shall furnish the track plotter charts described in Section 02 21 10.00 12 SURVEYS , paragraph "Preliminary Field Surveys", and the "Before and After Dredging Cross Sections" data described in Section 02 21 10.00 12 SURVEYS , paragraph "Before and After Dredging Cross Sections".

1.2.4 Acceptance Reach

For the purpose of acceptance, the completed work will be accepted in reaches of 2,000 linear feet along the channel centerline, but not later than two (2) weeks upon completion of dredging within that acceptance reach over the full bottom width of the required dimensions specified on the contract drawings. The contractor may be allowed to take "after dredging" cross sections as soon as a station is completed behind the dredge until the entire 2000-foot acceptance reach has been completed, subject to approval by the Contracting Officer's Representative. All after dredging cross-section data for that 2,000-foot acceptance reach shall be submitted as one (1) file.

1.2.5 Timely Performance Of Quantity Surveys

"Before-dredging" quantity surveys shall be made at least 2,000-feet in advance of dredging operations, not more than two (2) weeks prior to commencement of work in the acceptance reach or channel reach to be covered by the survey unless an exception is granted by the Contracting Officer. After dredging profiles shall be made within 2,000-feet behind the dredge, not more than two (2) weeks after completion of work in any acceptance reach. After dredging quantity surveys and after dredging profiles shall be taken in conjunction of each other. Deviations from this limiting time element may be necessary because of unusual job conditions or adverse weather, but shall be subject to approval by the Contracting Officer. Before and after dredging survey data shall be plotted and submitted to the Government in 2,000-feet reaches within three (3) calendar days after the surveys are taken.

1.2.6 Progress Payments

Monthly progress payments will be made based on quantities determined using "before dredging" surveys taken in accordance with Section 00700 Contract Clause entitled QUANTITY SURVEYS (FAR 52.236-16) and Section 02 21 10.00 12, SURVEYS; provided the after dredging surveys and any additional soundings that may be directed indicate that the Contractor has met the required dimensions and acceptance reach length.

1.2.7 Radio And Telephone Communication Equipment

No separate measurement or payment will be made for furnishing and maintaining radio and telephone communication equipment.

1.3 PAYMENT

1.3.1 Mobilization And Demobilization

An item to cover the cost of initial mobilization and final demobilization of the Contractor's plant and equipment under this contract is included and will be paid for as stipulated in the Contract Clause in Section 00700, entitled PAYMENT FOR MOBILIZATION AND DEMOBILIZATION (DFARS 252.236-7004).

1.3.2 Dredging

Payment for dredging will be made at the contract unit price per cubic yard for "Dredging". Price and payment shall constitute full compensation for furnishing all plant, labor and materials and performing all work for surveying, including any additional soundings that may be directed, excavation, disposal of materials, furnishing diesel powered or gasoline

crewboats fully operated, airboats fully operated, aluminum skiff fully operated, furnishing survey vessel(s) as required in Section 02 21 10.00 12 SURVEYS, pollution control, furnishing and maintaining radio and telephone communications equipment, and all operations incidental thereto.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for 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

Dredge Plant Data

(a) Plant Data Sheets. The Contractor shall complete the plant data sheets attached at the end of this section for the dredge and attendant plant the contractor intends to use to perform the work under this contract. Dredge physical data is required for submittal in the data sheets.

Plan of Operation

Submit a Plan of Operation at each pipeline and utility crossing. (See paragraph "Working In The Vicinity Of Structures And Utility Crossings")

Disposal of Dredged Material; G, EDC

Submit a disposal of dredging material plan in Government furnished disposal areas no later than seven (7) days prior to commencement of the work. (See paragraph DISPOSAL OF DREDGED MATERIAL)

Access Plan; G, EDC

See paragraph "Access Plan" and Section 01100 GENERAL PROVISIONS, entitled ACCESS PLAN.

Construction Schedule; G, CDT

See subparagraph "Construction Schedule" of paragraph QUALITY CONTROL, and Section 00700 paragraph SCHEDULES FOR CONSTRUCTION CONTRACTS (FAR 52.236-15 - APR 1984).

SD-07 Certificates

Certified Letters; G, EDC

Copy of Certified Letters to Pipelines and Utilities Owners

SD-11 Closeout Submittals

Report of Operations; G, EDC

See paragraph QUALITY CONTROL, subparagraph "Report Of Operations"

1.5 QUALITY CONTROL

The Contractor shall establish and maintain quality control for dredging operations to assure compliance with contract requirements and maintain records of his/her quality control for all dredging operations including but not limited to the following:

(1) Dredging. Visual classification of material; limits of dredging as to bottom grades and widths; side slopes; alignment of channel.

(2) Access Corridors. The location, grade, disposal requirements, and adherence to usage of allowable access corridors.

(3) Dredged Material Disposal. Limits of dredged material as deposited in a disposal area, and location. Surveillance and location of the dredge discharge outlet, elevation of material placed in disposal areas, and distance from the channel centerline.

(4) Discharge Effluent. Any shoaling or leak in pipeline.

1.5.1 Quality Control Reports

The original and two copies of these reports and tests, as well as the records of corrective action taken, shall be furnished the Government daily. Format of this report shall be as prescribed in Section 01 45 04.00 10 CONTRACTOR QUALITY CONTROL.

1.5.2 Report Of Operations

(1) The Contractor shall prepare and submit a Report of Operations (MVN Form 4267) for each dredge working. This report shall be submitted on a daily basis and not in groups, e.g. several daily reports packaged together at one time. A sample of MVN Form 4267 is included at the end of this section.

(2) The Contractor shall also prepare a report of operations for each month or partial month's work on MVN Form 322 (Work Sheet for Preparing Consolidated Form 4267). The monthly report shall be submitted on or before the 7th of each month, consolidating the previous month's work. MVN Form 322 can be computer generated and shall be approved by the Contracting Officer's Representative on site. A sample of MVN Form 322 is attached at the end of this section.

(3) The Contractor shall submit the leverman's log (cutters), mate's log (hoppers), or similar, or any other documentation as requested by the COR pertaining to dredging activities, both electronically and hard copy on a daily basis.

(4) All required reports shall be made available in electronic format. The Contractor shall distribute one (1) copy of each report to each of the following:

(a) U.S. Army Engineer District, New Orleans
New Orleans Area Office
ATTN: Mr. Kenneth Crumholt, P.E.
7400 Leake Avenue
New Orleans, LA 70118

(b) Government Inspector

(5) One copy of each Report of Operations shall be maintained by the Contractor on the dredge(s).

(6) Upon completion of work a comprehensive compilation of all prepared reports shall be supplied on CD ROM, grouped by report type, and organized chronologically to CEMVN-EDC, ATTN: Scott Clement. Submittals shall include one PDF file of all form 4267 in chronological order with the form 322(s) combined into one file.

(7) Further instructions on the preparation of the reports will be furnished at the Preconstruction Conference.

1.5.3 Construction Schedule

The Contractor shall submit a practicable construction schedule showing the order in which the Contractor proposed to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work. The requirement is specified and further detailed in the Section 00700 Contract Clause SCHEDULES FOR CONSTRUCTION CONTRACTS (FAR 52.236-15).

1.5.4 Access Plan

The Contractor shall submit an Access Plan to be reviewed and approved by the Contracting Officer. The requirement is specified and further detailed in the Section 01100 GENERAL PROVISIONS, entitled ACCESS PLAN. The Access Plan shall include all open water routes proposed to deliver plant, equipment, and/or materials, as well as submerged dredge pipeline crossings of all navigable waterways, including all outlets off the river, that will be required in order to prevent impedance to navigation. A plan for safely crossing existing utility crossings along the access corridor shall be provided.

1.6 RADIO AND TELEPHONE COMMUNICATIONS

1.6.1 Maritime Radio Transceiver

The Contractor shall furnish and maintain throughout the contract, one FM ship's radio transceiver with power not in excess of 25 watts, and at least 15 watts output on the maritime frequencies of 156.800 (Channel 16) and 156.375 (Channel 67) MHz 16F3 emission, with a tolerance of plus or minus 5 kHz deviation at 100 percent modulation for communication concerning navigation in the vicinity of the dredge. The radio shall be operated in accordance with FCC rules and regulations.

1.6.2 Radio Equipment For Additional Dredges

In the event that the Contractor has more than one dredge operating simultaneously under this contract, the above-specified radio equipment shall be furnished and maintained on each dredge. The radio transceivers provided for in paragraph "Maritime Radio Transceiver" shall be continuously monitored by qualified Contractor personnel aboard each dredge.

1.6.3 Cellular Telephone and Internet

The Contractor shall provide at least one (1) cellular telephone aboard the dredge. Cellular phone service shall be available to Government personnel for conducting official Government business 24 hours per day, seven (7)

days per week. In the event that more than one (1) dredge is assigned to contract, there must be one (1) cellular phone per dredge. The Contractor shall also provide high speed Internet service and associated equipment must be capable of providing adequate connection to allow the inspectors to import/export files through ROMS (shall provide a minimum download speed of 10 Bps and a minimum upload speed of 1.5 Bps for the sole use of the Inspector). The contractor must field verify that the service provider chosen has adequate continuous coverage at the construction site. The contractor shall be responsible for the installation, maintenance of and the monthly service fees necessary to provide continuous cellular telephone and high speed Internet service for the duration of the contract. Final approval of the plant will not be made until the equipment is installed and in good working order.

1.6.4 Automatic Identification System (AIS)

The dredge shall be equipped with an Automatic Identification System (AIS) in accordance with the Code of Federal Regulations, 33 CFR 164.46. The system shall be operable at all times throughout the contract period. No separate payment will be made for AIS equipment. The Contractor shall include any and all costs for AIS equipment in the contract prices for items of work to which the equipment is incidental thereto. For further information, go to:

https://www.ecfr.gov/cgi-bin/text-idx?SID=2e33062dd9a775a8fd1f7a98b3f38bcc&mc=true&node=

1.7 PLANT

1.7.1 General Requirements

The Contractor shall keep on the job the necessary dredge equipment and attendant plant to meet the requirements of the work. The dredge equipment and attendant plant shall be in satisfactory operating condition and capable of safely and efficiently performing the work as set forth in specifications and shall be subject to inspection by the Contracting Officer's representative at all times.

1.7.2 Plant Data Sheet Submittal

The Contractor shall complete the Dredge Plant Data sheets attached at the end of this section for the dredge and attendant plant the contractor intends to use to perform the work under this contract. Dredge physical data is required for submittal in the data sheets. If any of the data submitted in the plant data sheets changes during the execution of the contract the Contractor shall submit new data to the Government within 48 hours thereafter, showing the changes made to the equipment, along with the date(s) the changes were made. The completed data sheets shall be submitted within five (5) calendar days after Contractor receipt of Government Notice to Proceed. The dredge plant data shall be submitted to the ACO at the address listed in paragraph "Report of Operations".

1.7.3 Capacity

No reduction in the capacity of the dredge equipment and attendant plant employed to execute the work shall be made except by written permission of the Contracting Officer. The measure of the "Capacity of the Dredge and Attendant Plant" shall be its actual performance on the work to which these specifications apply.

1.7.4 Inspectors (Government Agents) Transportation

Crewboats. The Contractor shall furnish, throughout the contract period, for the exclusive use of the Government, one diesel or gasoline powered crew boat, with twin propellers, capable of maintaining and traveling no less than the minimum speed of 25 miles per hour / 22 knots, not less than 30 feet in overall length, with enclosed space for at least six passengers after installation of all required equipment. The crew boat shall meet or exceed all applicable US Coast Guard regulations for vessels 65 feet or less in length, and shall be certified by the US Coast Guard. The crew boat shall be equipped with the following:

(1) air conditioning and heating;

(2) VHF radio for ship-to-ship communications, as described in paragraph RADIO AND TELEPHONE COMMUNICATIONS.

(3) Navigation radar for travel at night and in inclement weather; and

(4) Safety equipment meeting the inspection requirements of the US Coast Guard Auxiliary and EM 385-1-1.

(5) Global Positioning Equipment (GPS), as described in the paragraph entitled "Global Positioning System (GPS) Equipment". Equipment, which fails to perform because of insufficient power or other mechanical deficiencies, or due to inexperienced operators, shall be replaced, or the operator replaced, as the case may be, within 12 hours after the Contractor is directed to do so by the Contracting Officer's Representative.

The crew boat will be used solely for providing the Government Inspectors and Government Agents transportation, and not for conducting surveys, providing transportation for the Contractor's personnel, or transporting the Contractor's supplies. The Contractor shall make provisions to obtain a separate crew boat or vessel for conducting Contractor-related operations. The minimum full time crew for the crew boat shall be one operator. The crew boat shall be operated and available 24 hours a day. Refer to EM 385-1-1, Chapter 19-3 for additional crew and equipment requirements. Smoking shall not be allowed inside the cabin and operator's space while occupied by Government personnel. NO SMOKING signs shall be posted.

Skiff. Aluminum 18-foot aluminum skiff, fully operated, with a minimum 25 horsepower outboard motor.

Airboat. In addition to the above services, the Contractor shall provide the services of a fully operated airboat, capable of accommodating a minimum of four (4) passengers for the use of the Government to access the disposal sites.

1.8 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	(2024) Safety -- Safety and Health Requirements

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

33 CFR 164.46 Automatic Identification System

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 DREDGING

3.1.1 General

Dredging shall consist of the removal and satisfactory disposal of all material encountered to achieve the design section shown on the contract drawings and as specified herein.

3.1.2 Hydraulic Dredging

Hydraulic dredging operations shall be performed between approximate Stations 275+00 and 565+00, however this entire reach of channel may not require dredging. Anticipated dredging limits shall be provided prior to bid opening and will be verified by the Contractors Pre-Construction survey and before dredging surveys. All work shall be performed as specified herein and as shown on the contract drawings. Should analysis of the Pre-Construction survey and before dredging surveys result in a requirement for non-continuous dredging, the Contractor shall be responsible movement of dredge plant between required dredging reaches. No addition payment will be made for required movement of plant between required dredging reaches.

3.1.3 Channel Dimensions

The channel shall be dredged to the required dimensions shown on the contract drawings. A box cut will be permitted. The extent of required dredging and control of the box cut is illustrated in the Box Cut detail attached at the end of this section.

3.1.4 Excessive Dredging

Excessive dredging is defined to be any dredging which is in excess of the required dimensions, as shown on the contract drawings. Any material removed in excess of the required dimensions will not be measured for payment. The Contractor shall be responsible for damages caused by excessive dredging. Nothing herein shall be construed to prevent payment for removal of shoals performed in accordance with the applicable provisions of Section 01100, General Provision entitled SHOALING.

3.1.5 Slides

In the event sliding occurs in any part of any excavation after its completion but prior to its acceptance, the Contractor shall remove such portions of the slide as the Contracting Officer may direct. In the event, the slide is caused through the fault of the Contractor as determined by the Contracting Officer, the slide shall be removed by the Contractor at no additional expense to the Government. In the event the slide is not due to the fault of the Contractor, payment for removal will be made at the

contract price for "Dredging" A box cut will be permitted. The extent of required dredging and control of the box cut is illustrated in the Box Cut detail attached at the end of this Section.

3.1.6 Character Of Materials

The material to be removed within the required dimensions specified consists of shoaling that has occurred since the channel was last dredged and insitu material. Sand, silt, clay, shell, logs, stumps, snags, debris, and other obstructions may be encountered. Bidders are expected to examine the site of the work and, after investigation, decide for themselves the character of the materials, The Contractor shall note the following dredging jobs previously performed.

Limits	Date Dredged	Design Elevation Depth (ft-MLG)	Width Dimensions
C/L Sta. 300+00 to 320+00	April 2011	-16.0'	150'
C/L Sta. 330+00 to 560+00	April 2011	-18.0'	250'
C/L Sta. 420+00 to 504+00	October 2015	-10.0'	150'
C/L Sta. 410+00 to 518+00	January 2018	-14.0'	230'
C/L Sta 270+00 to 320+00	February 2020	-14.0'	150'
C/L Sta 330+00 to 565+00	February 2020	-16.0'	250'
C/L Sta 90+00 to 120+00	May 1978	-16.0'	150'
C/L Sta 160+00 to 235+00	May 1978	-16.0'	150'
C/L Sta 255+00 to 320+00	May 1978	-16.0'	150'
C/L Sta 90+00 to 120+00	Dec 2022	-16.0'	150'
C/L Sta	Dec 2022	-16.0'	150'

160+00 to 235+00			
C/L Sta 255+00 to 320+00	Dec 2022	-16.0'	150'
C/L Sta 330+00 to 565+00	Dec 2022	-18.0	250'

(Channel transitions from -14 feet by 150 feet to -16 feet by 250 feet between C/L Station 320+00 and C/L Station 330+00)

Virgin material may be encountered above or below the channel dimensions listed above. The table above indicates the most recent maintenance dredging events performed over the contract limits. Dredging history of the Baptiste Collette bar channel is available on request.

3.2 WORKING IN THE VICINITY OF STRUCTURES AND UTILITY CROSSINGS

3.2.1 General

The Contractor shall exercise caution when working in the vicinity of structures and utilities adjacent to the channel or disposal areas and/or pipeline crossings in the channel or disposal areas. Repair of any damage resulting from excessive or improper excavation in the bottom or on the side slopes of the channel shall be the responsibility of the Contractor. Where dredging to obtain the required dimensions might endanger any structure, the Contracting Officer, upon request, may reduce the required excavation in the vicinity of such structure.

3.2.2 Required Dimensions

The Contractor shall provide the following dimensions over all utility crossings by whatever approved method the Contractor elects to use. The dimensions are as follows: -16.0 feet MLG x 150 feet width between C/L Stations 275+00 and 320+00, with a linear transition to -18.0 feet MLG x 250 feet width at C/L Station 330+00 and continuing through C/L Station 565+00. The Contractor shall submit for approval by the Contracting Officer a detailed Plan of Operation at each pipeline or utility crossing where surveys indicate the above dimensions do not exist. The plan shall contain emergency measures to be taken in the event of an accident. The contractor shall notify the owners of pipelines or utilities by certified mail at least seven (7) days prior to operating within 500-feet of a pipeline or utility. A copy of the certified letter shall be submitted for information to the Contracting Officer concurrent with owner notification. The Contractor shall also provide transportation, meals and/or lodging for any pipeline/utility representatives who are deemed necessary to remain aboard the dredge while working in the vicinity of these crossings.

3.2.3 Existing Pipelines, Structures Or Utilities

The vertical clearances listed below were furnished by the utility owners at the time permits were issued and/or from "AS-BUILTS" and are not the result of a survey made by the Government. In addition, various pipeline databases available here at te New Orleans District, as well as nautical

charts published by NOAA, have been used in verifying the existence and locations of utilities within the vicinity of the project. The Contractor contact "LA One Call" at either 811 or 800-272-3020 and Gulfsafe at 1-888-910-4853 prior to dredging operations. Finally, prior to initiating dredging operations, the Contractor shall investigate the NOAA Chart OnLineViewer to verify any chart and utility updates in the project vicinity. The specific chart relating to this project can be found at:

http://www.charts.noaa.gov/OnLineViewer/11361.shtml

The following pipelines, structures or utilities are located within the project area. Also, contractor should be aware that there are other pipelines located within the general area:

Utility Or Structure	Approximate Station	Elevation M.L.G.	Name and Address of Owner
16" Gas Pipeline	296+97	-22.0'	Third Coast (See Below)
2-6" & 2-4" Pipelines	300+57	-37.0'	Lobo Operating, Inc 1819 West Pinhook Rd Suite 249 Lafayette, LA 70508 Mr. Brian Daigle (C) 985-249-1711 Email: brian.daigle@lobooil.com
26" Pipeline	355+76	-24.0'	Third Coast (See below)
12" Pipeline	373+67	-24.0'	Third Coast **Physical Address** 1501 McKinney St Suite 800 Houston, TX 77010 Michael Barbier 504-520-0460 Email: Mbarbier@third-coast.com
20" Delta Loop Oil Pipeline	543+53.57	-26.9'	Shell P/L Co LP 5317 Bayou Black Dr. Gibson, LA 70356 Rodney Boudreaux (C)985-856-9746 Email: Rodney.Boudreaux@shell.com
1-2 3/8" Pipeline	parallel to channel, running inside the east bank and through	Elev Unknown	Occidental Petroleum 1201 Lake Robbins Dr The Woodlands, TX 77380 Bridget Ofarrell Villarreal

Disposal Area "G" (O)832-636-1694
(C)281-743-2946
Email:
bridget_ofarrell-villarreal@oxy.com

3.2.4 Unidentified Pipelines, Structures, Or Utilities

Any unidentified pipelines, structures, or utilities that may be found within the limits of the work, during the course of dredging shall not be disturbed nor shall excavation be performed at this location unless approved by the Contracting Officer.

3.2.5 Utility and Pipeline Marking Required

If/when the dredge(s) is within 1,000 feet of the location of any utility or pipeline, the Contractor shall mark the established location of each utility or pipeline by placing one (1) Coast Guard approved yellow flashing buoy on each side of the channel to accurately mark the location of the pipeline or utility within easy view of the dredge leverman. The Contractor shall immediately remove such buoys upon completion of dredging in the area of the utility or pipeline.

3.2.6 Disposal

No dredged material shall be placed within 300 feet of any structure or utility.

3.3 DISPOSAL OF DREDGED MATERIAL

3.3.1 Disposal Areas

The dredged material shall be transported and deposited in the disposal areas provided by the Government as shown on the drawings and as specified herein. In no case, shall the excavated material be discharged closer to the channel than the channel ward limit of the wetland creation sites or the Y'ATTY Jane and Gunn Islands footprint location as shown on the drawings. The Contractor shall submit to the Contracting Officer for review a plan for disposal of dredged material prior to commencement of the work. This plan shall include dredge discharge locations.

3.3.1.1 Disposal Areas "G" and "H"

Material dredged between approximate C/L Stations 275+00 and 420+00 shall be placed into the available disposal areas "G" and "H". There is no priority on which disposal area is to be used first. Dredged material place into Disposal Area "G" and "H" will be limited to a maximum elevation of 5.5' MLG. Access to disposal areas "G" shall be across existing jetties and/or via Breton Sound. Material shall be placed along adjacent marsh and directed in a southeasterly direction. Access to Disposal Area "H" shall be between C/L Station 336+01 and 338+01 and/or via Breton Sound. Material shall be placed along adjacent marsh and directed in a northwesterly direction.

3.3.1.2 Y'atty Jane and Gunn Island

Material dredged between approximate C/L Stations 420+00 and 565+00 shall be used to enhance footprint of Y'atty Jane and Gunn Island as shown on contract drawings. There is no priority on which disposal area is to be used. The elevation of the dredged material placed on the island shall not

exceed +10.0 MLG, the purpose of which is to create a bird breeding island and maintain a final elevation at +8.0 MLG after consolidation.

3.3.2 Prevention Of Damage

The dredged material shall be transported and deposited in such a manner as to ensure that no damage will occur to jetties, pipelines, utility lines, structures, or other improvements. The limits of disposal shall be marked by the Contractor with conspicuous buoys or stakes. The Bird Island location shall be marked with "BOATS KEEP OFF" buoys after the discharge line is removed. The buoys shall be of can type, visible from a distance of 0.5 miles with a spacing of 2000' and have a diamond painted on opposite sides with the words "NO BOATS" painted in the middle of the diamond shape. A band 2 inches high shall be painted around the can near the top using florescent paint. Buoys shall be removed by Contractor upon the completion of this project.

3.3.3 Damage to Baptiste Collette East and West Jetties

The Contractor will be allowed to cross the East and West Jetties with dredge pipeline for access to the disposal areas. However, the Contractor shall repair any damage to this existing rock jetty resulting from ingress/egress to the disposal site. If such damage were to occur during hydraulic dredging operations, the Contractor shall immediately cease pumping at the site until the jetty has been adequately restored or raised and the jetty can successfully fulfill the purpose for which it was intended, including retention of dredged material. Material, which is deposited in an area not designated as a disposal area as a result of such failure, is the Contractor's responsibility and shall be removed at the Contractor's expense.

3.3.4 Before and After Disposal Surveys

Before and after disposal surveys shall be taken at all discharge locations as described in Section 02 21 10.00 12, paragraph "Before and After Disposal Area Surveys". Regardless of which data collection method is used, data shall be furnished to the Government in a structured ASCII format on magnetic media.

3.3.5 Plan for Disposal

The Contractor shall submit to the Contracting Officer for review and approval a plan for disposal of dredged material in Government furnished disposal areas a minimum of seven (7) days prior to commencement of dredging. This is to ensure that the retention of material is maximized. This plan shall include dredge discharge stations and distance from the channel centerline of each respective discharge location.

3.3.6 Excessive Discharge Pipe Leakage

Excessive leakage of the discharge pipe shall be sufficient cause for the Contracting Officer to require the Contractor to cease pumping until corrective measures can be taken at no additional cost to the Government.

3.3.7 Deposition In Non-Approved Areas

Any material that is deposited elsewhere than in disposal areas shown on the contract drawings or approved Contractor furnished disposal areas may be required to be removed and deposited in approved areas at no additional

expense to the Government. Should the Contractor refuse, or delay compliance with the above requirement, such material may be removed by the Contracting Officer, and the cost of such removal may be deducted from any money due or to become due the Contractor.

3.3.8 Protection Of Government Monuments, Markers, Or Towers

No dredged material shall be deposited on or near any Government monuments, markers, or towers such that they may become covered or destroyed. At no time shall dredging plant be anchored, moored, or attached to any Government pilings or towers along the route of work. Benchmarks in the disposal areas shall be protected by ring levees, and if material seeps through the levee, the benchmark shall be uncovered without disturbance and exposed for use.

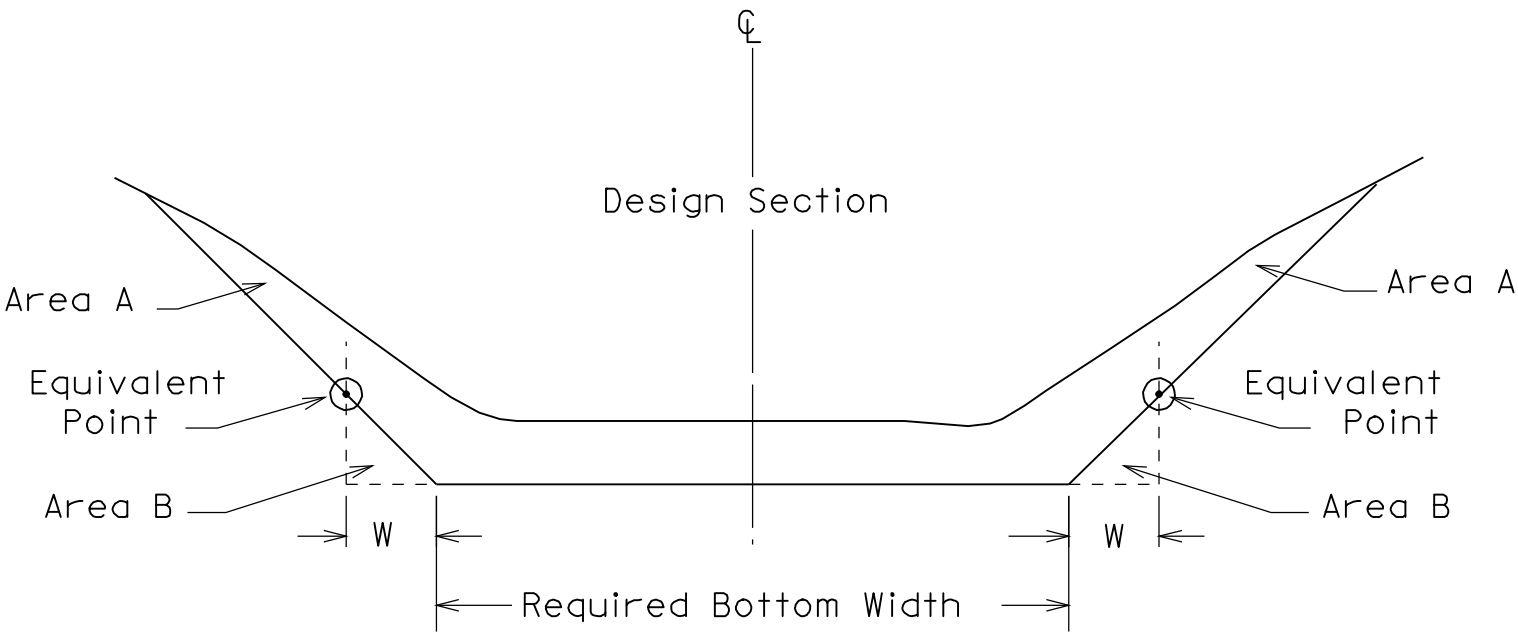
3.3.9 Submerged Discharge Lines

If a submerged discharge line is used, it shall at no time reduce the depth and width of the existing channel in which it is placed. When the submerged pipeline is placed in shallow water and where the possibility exists for motor boats to cross the pipeline, the pipeline shall be marked at 150ft intervals for the entire length of the pipeline with Coast Guard approved fluorescent orange buoys and signs stating "DANGER SUBMERGED PIPELINE."

3.3.10 Work In The Vicinity Of Other Government Contractors

The Contractor shall coordinate his/her operations, through the Contracting Officer's Representative, with any other Government personnel and/or Government Contractors who may be working in the vicinity (i.e. dredging, surveys, revetment, jetty repairs, and dike construction, etc.). Any disputes or disagreements arising from area use shall be brought to the attention of the Contracting Officer, who will then make a determination for operational procedures. Determinations made by the Contracting Officer shall be binding on all parties concerned.

-- End of Section --



Box Cut Section

Definitions:

Equivalent Point - That point on each side slope where the area above the point (Area A) equals the area below the point (Area B)

W - That additional width on each side of the required bottom width, that is determined by the location of the equivalent point, necessary to make Area A = Area B

DREDGE AND ATTENDANT PLANT DATA SHEET

Submittal Date: _____

In compliance with the contract requirements to submit plant data and subject to all conditions thereof, the undersigned _____ a corporation/joint venture/individual (indicate appropriate status) organized and existing under the laws of the City of _____ and the State of _____, hereby correctly describes the Contractor's plant to the Government, which is performing work under the following named contract _____ and Contract No: _____ .

Signed: _____

Certifying Officer of the Contractor's Firm

Title: _____

One cutterhead dredge and attendant plant with the following characteristics (in English units of measurement):

1. DREDGE INFORMATION:

(a) Bid Lot Number: _N/A__

(b) Dredge Name: _____ Dredge USCG Official Number: _____

(c) Minimum width of channel in which dredge can successfully operate and make a 180 degree turn around: _____

(d) Maximum draft of dredge: _____

(e) Depth range to which dredge will dig:

Maximum:_____ Minimum:_____

(f) Maximum effective dredge swing, in degrees: _____

(g) Length of dredge spuds: _____

(h) Length and beam of dredge hull: _____

(i) Length of dredge ladder: _____

(j) Length of suction and boat lines: _____

(k) Inside diameter of pump discharge: _____

(l) Inside diameter of pump suction inlet: _____

(m) Suction lift (Elevation of main dredge pump relative to the water surface level): _____

(n) Diameter of main pump impeller eye: _____

(o) Outside diameter of main pump impeller: _____

(p) Brake horsepower and corresponding engine RPMs (during dredging operations) applied to main pump impeller at rated drive of the prime mover, during dredging operations: _____

(q) Inside diameter of submerged pump discharge: _____

(r) Inside diameter of submerged pump suction inlet: _____

(s) Suction lift (Elevation of submerged dredge pump relative to the water surface level): _____

_____

(t) Diameter of submerged pump impeller eye: _____

(u) Outside diameter of submerged pump impeller: _____

(v) Brake horsepower and corresponding engine RPMs (during dredging operations) applied to submerged pump impeller at rated drive of the prime mover, during dredging operations:

_____

(w) Cutterhead type and diameter: _____

(x) Brake horsepower applied to cutterhead during dredging operations: _____

(y) Pump engine(s) horsepower and corresponding RPM: _____

(z) Completion date of each dredge pump engine re-build: _____ _____

(aa) Type(s) of production rate monitoring equipment on-board the dredge (measuring cy/hr of material dredged): _____

(ab) Indicate type of dredge advance mechanism (e.g. walking spuds, spud carriage or wires, etc.): _____

_____

2. BOOSTER PLANT INFORMATION:

(a) Length of suction and boat lines _____

(b) Inside diameter of pump discharge: _____ (This item must agree with the bid lot used.)

(c) Inside diameter of pump suction inlet: _____

(d) Suction lift (Elevation of booster pump relative to the water surface level): _____

(e) Diameter of pump impeller eye: _____

(f) Outside diameter of pump impeller: _____

(g) Brake horsepower and corresponding engine RPMs (during dredging operations) applied to pump impeller at rated drive of the prime mover, during dredging operations: _____

(h) Pump engine(s) horsepower and corresponding RPM: _____

(i) Completion date of booster pump engine re-build: _____

3. TENDER NO. 1:

(a) Name: _____

(b) Length and Beam: _____

(c) Owner, Name and Address: _____

_____

(d) Total Propulsion Horsepower: _____

(e) The Tender may be inspected at the following location: _____

_____

_____

4. TENDER NO. 2:

(a) Name: _____

(b) Length and Beam: _____

(c) Owner, Name and Address: _____

_____

(d) Total Propulsion Horsepower: _____

(e) The Tender may be inspected at the following location: _____

_____

_____

5. SURVEY BOAT:

(a) Name: _____

(b) Length and Beam: _____

(c) Owner, Name and Address: _____

_____

(d) Total Propulsion Horsepower: _____

6. SURVEY SKIFF:

(a) Name: _____

(b) Length and Beam: _____

(c) Owner, Name and Address: _____

_____

(d) Total Propulsion Horsepower: _____

7. PICKET BOAT:

(a) Name: _____

(b) Length and Beam: _____

(c) Owner, Name and Address: _____

_____

(d) Total Propulsion Horsepower: _____

8. CREW BOAT:

(a) Name: _____

(b) Length and Beam: _____

(c) Owner, Name and Address: _____

_____

(d) Total Propulsion Horsepower: _____

9. ELECTRONIC POSITIONING EQUIPMENT: (Model and Type):_____

_____

10. DEPTH SOUNDER: (Model and Type):_____

_____

11. DREDGE OWNER INFORMATION:

Firm Name: _____

Point of Contact: _____

Title: _____

Business Address:

Street: _____

City: _____

Parish/County: _____

State: _____ Zip+4 _____

Telephone No: (_____) _____

Facsimile No: (_____) _____

Additional signature blocks to be used for joint venture partner(s):

Firm Name: _____

Point of Contact: _____

Title: _____

Business Address:

Street: _____

City: _____

Parish/County: _____

State: _____ Zip+4 _____

Telephone No: (_____) _____

Facsimile No: (_____) _____

Firm Name: _____

Point of Contact: _____

Title: _____

Business Address:

Street: _____

City: _____

Parish/County: _____

State: _____ Zip+4 _____

Telephone No: (_____) _____

Facsimile No: (_____) _____

WORK SHEET FOR PREPARING CONSOLIDATED FORM 4267

Contract No.: W912P8-___-___-___ Period: _____
Dredge: _____

Date	Advance	Assign Width	Elevation		Cubic Yards	C.Y. Hour	Pump Time	Delays											Delay Time	Discharge Lines				Tide Guage	Discharge Lines				Pump RPM	Dredge Crew	Assignments	
			BD	AD				HPL	HAL	CPPL	CCSH	CLPJ	MOR	SISW	WIP	LDNE	PMUT	MISC		Pontoon	Shore	Sub.	Total		Fuel	Oil	Grease	Water			West	East
1																																	
2																																	
3																																	
4																																	
5																																	
6																																	
7																																	
8																																	
9																																	
10																																	
Total																																	
Avg.																																	
11																																	
12																																	
13																																	
14																																	
15																																	
16																																	
17																																	
18																																	
19																																	
20																																	
Total																																	
Avg.																																	
21																																	
22																																	
23																																	
24																																	
25																																	
26																																	
27																																	
28																																	
29																																	
30																																	
31																																	
Total																																	
Avg.																																	
G.T.																																	
Avg.																																	

NOTES: _____

MVN Form 322
March 1998

(Proponent: CEMVN-CD-NO-O)

REPORT OF OPERATIONS -- PIPELINE, DIPPER OR BUCKET DREDGES

REPORTS CONTROL SYMBOL
ENGCW-0-13

THRU:	TO:	FROM:	DATE OR PERIOD	REPORT NO.

CHARACTER OF REPORT	[ ]	MAINTENANCE	[ ]	DAILY	[ ]	COMPLETION	DREDGE PUMPS OPERATING & CORRESPONDING RPM	[ ]	MAIN 1		RPM	DREDGE TYPE:
	[ ]	NEW WORK	[ ]	ANNUAL				[ ]	MAIN 2		RPM	[ ] BUCKET
DREDGE	NAME		DREDGE ADVANCE MECHANISM					[ ]	SUBMERGED		RPM	[ ] CUTTERHEAD
			TYPE (walking, carriage, wires):					[ ]	BOOSTER 1		RPM	[ ] DIPPER
			IDLER BARGE USED (Yes/No):					[ ]	BOOSTER 2		RPM	[ ] DUSTPAN
	DREDGE DISCHARGE SIZE (ID), IN		CUTTER, HP		DUSTPAN SUCTION PIPE JET, HP		PROPULSION				DIPPER OR BUCKET	cu. yds. cap.
	NUMBER OF CREWMEMBERS	DREDGE	SHORE		OTHER	TOTAL		WORK SCHEDULE →		SHIFTS PER DAY		DAYS PER WEEK

PROJECT AND ASSIGNMENT					ASSIGNED DIMENSIONS →	WIDTH		DEPTH	OVERDEPTH	
	LOCATION (INCLUDE STATIONS NUMBERS)		>		WIDTH OF SWING		RANGES - RT, CL, LT			
			>		WIDTH OF SWING		RANGES - RT, CL, LT			
	C/L STATIONS		>		WIDTH OF SWING		RANGES - RT, CL, LT			

CHARACTER OF MATERIAL (leave blank if grab samples aren't taken)	ABSOLUTE DENSITY		IN PLACE DENSITY		VOIDS RATIO			
		GMS/liter		GMS/liter				
	GRAIN SIZE				VISUAL MATERIAL CLASSIFICATION	TYPE		
						TYPE		
		MM		MM		TYPE		

CONTRACT OR ORDER NUMBER	NUMBER	☐ CONTRACTOR	☐ HIRED LABOR	TOTAL NUMBER 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 (SWING)	FEET	
TOTAL ADVANCE THIS PERIOD	FEET	
TOTAL ADVANCE PREVIOUS TO THIS PERIOD	FEET	
TOTAL ADVANCE TO DATE	FEET	
TOTAL LENGTH OF DISCHARGE PIPELINE: ***SEE REVERSE SIDE**		
AVERAGE LIFT	FEET	
AVERAGE PUMP SPEED	RPM	
AVERAGE GROSS CY'S DREDGED PER PUMP HOUR	CY/HR	
AVERAGE NET CY'S DREDGED PER PUMP HOUR	CY/HR	
AVERAGE LINEAR FOOT PER HOUR	LF/HR	

CUBIC YARDS REMOVED

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

ATTENDANT PLANT

ITEM	NAME OR NUMBER	HOURS
DREDGE		
TENDER #1		
TENDER #2		
SKIFF		
CREW		
SURVEY		
BARGES		
CRANE BARGE		
IDLER BARGE		
CUTTER-TYPE		
SPUD LENGTH		

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	
	(If "YES", explain under remarks on back)	( )	YES	

DISTRIBUTION OF TIME

EFFECTIVE WORKING TIME (chargeable to cost of work)		AMOUNT
PUMPING OR DREDGING		
PCT. OF EFFECTIVE TIME		
BOOSTER (in line) :		

NON-EFFECTIVE WORKING TIME (chargeable to cost of work)		NO. OF TIMES	AMOUNT
HANDLING PIPELINES	HPL		
HANDLING ANCHOR LINES	HAL		
CLEARING PUMP AND PIPELINE	CPPL		
CLEARING CUTTER OR SUCTION HEAD	CCSH		
WAITING FOR SCOWS	WFS		
TO AND FROM WHARF OR ANCHORAGE	TFWA		
CHANGING LOCATION OF PLANT ON JOB	CLPJ		
LOSS DUE TO OPPOSING NATURAL ELEMENTS	LDNE		
LOSS DUE TO PASSING VESSELS	WVP		
SHORELINE AND SHORE WORK	SLSW		
WAITING FOR BOOSTER	WFB		
MINOR OPER. REPAIRS (explain in remarks)	MOR		
WAITING FOR ATTENDANT PLANT	WAP		
PREPARATION AND MAKING UP TOW	PMUT		
TRANSFERRING PLANT BETWEEN WORKS	TPBW		
LAY TIME OFF SHIFT AND SATURDAYS	LTOSS		
SUNDAYS AND HOLIDAYS	SH		
FIRE DRILL	FD		
MISCELLANEOUS (explain in remarks)	MISC		
TOTAL NON-EFFECTIVE WORKING TIME			
PCT. OF NON-EFFECTIVE 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			

SUMMARY OF DREDGE DISCHARGE PIPELINE, DISPOSAL AREAS AND TIME BREAKDOWN

ATTENDANT PLANT

DREDGE DISCHARGE PIPELINE

FLOATING PONTOONS	AMOUNT	SUBMERGED	AMOUNT	SHORE	AMOUNT	
Metal		Metal		Metal		
PVC		PVC		PVC		TOTAL COMBINED DISCHARGE, LF
Flexifloat		Other		Other		
TOTAL LF						

ELBOWS		
	Stiff	
	Swivel	

LEAST INSIDE DIAMETER OF DISHARGE PIPELINE, IN

DISPOSAL AREA EQUIPMENT

Marsh Trackhoes-30'	
Marsh Trackhoes-60'	
Marsh Buggies	
Dozers	
Front End Loaders	
Air Boats	
ATV's	
Y-Valves	
Spreaders	

ANCHORING SYSTEMS

Skidder Barges	
ANCHORS	
Breast	
Head	
Line	
Other	

DISPOSAL AREA SUMMARY

NAME/LOCATION COORDINATE	SHORE CONNECTION	DATE START	DATE FINISH	TOTAL GROSS CYS	TOTAL ACREAGE	REMARKS

TIME BREAKDOWN

	100%	70%	35%	0%	0% - MISC (Mob)	TOTAL
BASE HRS						
OPTION HRS						
PREVIOUS HRS						
TOTAL HRS						

OPERATING SUPPLIES

		TODAY QUANTITY	PREVIOUS QUANTITY	QUANTITY TO DATE
FUEL (diesel)	GAL.			
LUBRICANT (oil)	GAL.			
LUBRICANT (grease)	LBS.			
WATER	GAL.			

REMARKS:

SUBMITTEDED BY (Name, title, and signature)	RECOMMENDED BY (Name, title, and signature)	APPROVED BY (Name, title, and signature)
NAME:	NAME:	NAME:
TITLE:	TITLE:	TITLE:

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SECTION 35 20 23.33

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May 31, 2018

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SECTION 35 20 23.33

NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM

May 31, 2018

PART 1 GENERAL

1.1 DESCRIPTION

(1) The work under this contract requires use of the US Army Corps of Engineers (USACE) National Dredging Quality Management Program (DQM) to monitor the dredge's status at all times during the contract duration and manage data history.

(2) This performance-based specification section identifies the minimum required output as well as the precision and instrumentation requirements. The requirements may be satisfied using equipment and technical procedures selected by the Contractor.

1.2 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the installation, operation, and maintenance of the DQM-certified system as specified herein for the duration of the dredging operations. All costs in connection therewith shall be considered a subsidiary obligation of the Contractor and shall be included in the contract unit price for "Dredging".

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 responsible for review of the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00, SUBMITTAL PROCEDURES:

SD-01, Preconstruction Submittals

Dredge Plant Instrumentation Plan Revisions; G, OM

SD-07, Certificates

Letter of National Dredging Quality Management Program Certification; G, EDC

1.4 NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM CERTIFICATION

The Contractor shall have a current certification from the DQM Program for the cutter/suction head hydraulic dredge instrumentation system to be used under this contract. Standard Operating Procedures (SOP) and criteria for certification are presented on the DQM website at https://dqm.usace.army.mil.

1.5 DREDGE PLANT INSTRUMENTATION PLAN (DPIP)

The Contractor shall have a digital copy of the Dredge Plant

Instrumentation Plan (DPIP) on file with the DQM Support Center. While working on site, the Contractor shall also maintain on the dredge a copy of the DPIP, which is easily accessible to Government personnel at all times. This document shall accurately describe the sensors used, the configuration of the system, how sensor data will be collected, how quality control on the data will be performed, and how the sensors/data-reporting equipment will be calibrated and repaired if it fails. A description of the computed dredge-specific data and how the sensor data will be transmitted to the DQM database shall also be included. Prior to the start of work, the Contractor shall submit to the DQM Support Center any addendum or modifications made to the plan subsequent to its original submission. Requirements and a template for the DPIP are available on the DQM website at https://dqm.usace.army.mil.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 REQUIREMENTS FOR REPORTED DATA

The Contractor shall provide, operate, and maintain all hardware and software to meet these specifications. The Contractor shall also be responsible for the replacement, repair, and calibration of the sensors and other necessary data acquisition equipment needed to supply the required data.

The procedure to complete a repair shall be documented and completed as soon as practical. If repair is not possible within two business days of any sensor failure, a plan and timeline to complete the repair shall be submitted. Upon completion of a repair, replacement, installation, modification, or calibration, the Contractor shall notify the Contracting Officer's Representative (COR). The COR may request recalibration of the sensors or other hardware components at any time during the contract as deemed necessary.

The Contractor shall keep a log of sensor repair, replacement, installation, modification, and calibration in the dredge's onboard copy of the DPIP. The log shall contain a three-year history of sensor maintenance, including the time of the sensor failures (and subsequent repairs), the time and results of sensor calibrations, the time of sensor replacements, and the time that backup sensor systems were initiated to provide the required data. It shall also contain the name of the person responsible for the sensor work.

Sensors installed shall be capable of collecting parameters within the specified accuracies and resolutions indicated in the following subparagraphs and transmit these parameters to the DQM database. All data shall be transmitted in JSON message bundles. Each bundle can contain multiple message types. Sensor data shall be transmitted as work event messages, and data which relates to the operational state of the dredge or its sensors shall be transmitted as state event messages. See paragraph entitled "Parameter Transmission to the Web Service".

3.1.1 Message Bundle Data

Every message bundle shall contain descriptive data that relates the message to a given dredge plant and date/time. The start of a message bundle shall be identified by the tag "DQM_data".

3.1.1.1 Messages

Messages contain operational data that populates the DQM database for a dredge plant. A message shall consist of an event type and its associated data (as defined in paragraphs entitled "Dredge Events"), a date/time stamp indicating when the event occurred or started, and a comment providing clarification or metadata about the situation. There are multiple event types, but they all fall into one of two categories - work events and state events.

3.1.1.1.1 Message Time

In a work event message, message time is the date and time that the data is collected from the sensors; in a state event message, message time is the date and time that the state event begins. The message time shall be reported to the nearest second and referenced to Coordinated Universal Time (UTC) time based on a 24-hour format (*YYYY-MM-DD HH:MM:SS*). In order to ensure accuracy and reliability, the time stamp shall be synchronized to UTC format from an accurate, unchangeable source (for example, a GPS National Marine Electronics Association [NMEA] datastring). Message time shall be identified by the tag "msg_time".

3.1.1.1.2 Comment

Comments concerning the work event or state event messages being transmitted provide descriptive information that relates to the data. An example of a comment for work event data is information about a sensor issue; an example of a comment for state event data is a description of operations. A comment shall be identified by the introductory tag "comment", and the comment shall consist of no more than 250 characters.

3.1.1.2 Dredge Events - Work Event

There are two types of dredge event messages - work event messages and state event messages. Work event messages contain data that are instantaneously collected or calculated from sensors and are logged as a series of events. Work events are triggered by a time interval change (as described in paragraph entitled "Work Event Messages"). All work event messages shall be initiated by the header tag "work_event".

3.1.1.2.1 Vertical Correction

The variation of the water level from the vertical datum for the river stage or tidal gage described in the state events shall be obtained using appropriate equipment to give the water level with an accuracy of +/- 0.1 ft. Vertical correction values above project datum described in the dredging specification shall be entered with a positive sign and those below with a negative sign. The tag for vertical correction shall be "vert_correction".

3.1.1.2.2 Cutter/Suction Head Location and Movement

The X, Y, and Z components of the cutter/suction head location shall be monitored. Additional calculations made from the observed values determine the rates of movement to track the progress of the dredge.

3.1.1.2.2.1 Cutter/Suction Head Horizontal Position

The forwardmost point of the cutter/suction head shall be obtained using a

positioning system operating with a minimum accuracy level of 3-10 feet horizontal Circular Error Probable (CEP). It shall be reported as Latitude/Longitude WGS 84 in decimal degrees with West Longitude and South Latitude values reported as negative. Position values shall be identified by the tags "ch_latitude" and "ch_longitude".

3.1.1.2.2.2 Cutter/Suction Invert Depth

Cutter/suction invert depth is the depth of the invert of the suction mouth relative to the surface of the water. Instrumentation shall be capable of reporting to an accuracy of +/- 0.5 foot and a resolution to the nearest 0.1 foot with no tidal adjustments. Minimum accuracies are conditional to relatively calm water. The tag "ch_depth" shall be used to identify the cutter/suction head depth.

3.1.1.2.2.3 Cutter/Suction Head Heading

The cutter/suction head heading is the angle of the centerline of the cutter/suction head and dredge ladder measured relative to true north. All headings shall be provided using industry-standard equipment. The heading shall be accurate to within 5 degrees and reported to the nearest whole degree with values from 000 (true north) to 359 degrees referenced to a clockwise positive direction convention. The tag "ch_heading" shall be used to identify the cutter/suction head heading.

3.1.1.2.3 Dredge Activity

Dredge activity shall be monitored using a combination of the following parameters.

3.1.1.2.3.1 Slurry Velocity

A flow-metering device, calibrated according to the manufacturer's specifications, shall be used to record the slurry velocity to the nearest 0.01 fps with an accuracy of plus 0.1 fps. If the manufacturer does not specify a frequency of recalibration, calibration shall be conducted prior to the commencement of work. The slurry velocity shall be measured for the same pipeline inside diameter as that used for the slurry density measurement. The tag "slurry_velocity" shall be associated with this value.

3.1.1.2.3.2 Slurry Density

A density-metering device, calibrated according to the manufacturer's specifications, shall be used to record the slurry density to the nearest 0.01 g/cc. It is understood that the accuracy of this sensor can vary based on several factors, including the type of material, the magnitude of the cut, and the length of time since calibration. If the manufacturer does not specify a frequency of recalibration, calibration shall be conducted prior to the commencement of work. Continuous monitoring of this sensor ensures that drift and other factors inherent in the dredging process can be accounted for in monitoring dredge activity. The tag "slurry_density" shall be associated with this value.

3.1.1.2.3.3 Pump RPM

The pump rpm is the number of revolutions per minute measured for the slurry pump shaft. The shaft revolution rate (rev/min) shall be measured with the highest level of accuracy that is standard on the vessel's operational displays either at the bridge or in the engine room. This value

shall be identified by the tag "rpm".

3.1.1.2.3.4 Pump Vacuum

The vacuum pressure of the dredge pump(s) (inches of mercury) shall be measured as near to the eye as practicable in the pump's suction pipe with the highest level of accuracy that is standard on the vessel's operational displays either at the leverman's controls or in the engine room. Vacuum pressure shall be identified by the tag "vacuum".

3.1.1.2.3.5 Pump Outlet Pressure

The pump outlet pressure shall be measured in the discharge line on the pump side of the flap valve in terms of pounds per square inch (psi) on a gauge. Pump outlet pressure shall be identified by the tag "outlet_psi".

3.1.1.2.4 Outfall Information (Open Water/Spill Barge Disposal)

The X and Y position of the terminal end of the outfall pipe shall be monitored continuously and the position reported as part of the work event string.

3.1.1.2.4.1 Discharge Horizontal Position

The horizontal position of the outfall end of the discharge pipe shall be obtained using a positioning system operating with a minimum accuracy level of 3-10 feet horizontal Circular Error Probable (CEP). It shall be reported as Latitude/Longitude WGS 84 in decimal degrees with West Longitude and South Latitude values being reported as negative. Position values shall be identified by the tags "outfall_latitude" and "outfall_longitude".

3.1.1.3 Dredge Events - State Event

There are two types of dredge event messages - work event messages and state event messages. State event messages provide information about the current state of the dredge equipment or operations. They are created and sent only when a state changes. Since state events often cannot be collected in real time, state events are tagged with a date time stamp (referenced to Coordinated Universal Time [UTC]) that indicates when the state change happened relative to the work event message tag. This data is considered to be "true" until another state event tag is received. Each type of state event message shall be indicated by a specific header tag as enumerated in the following subparagraphs. State events can be transmitted along with work event message bundles directly by the contractor using the indicated format, or they can be entered on the "State" tab in the DQM-provided software.

3.1.1.3.1 Message Time

The state event time is the date and time that the event starts. The leverman's time shall be entered to the nearest second as local time and automatically converted to and reported in UTC based on a 24-hour format (YYYY-MM-DD HH:MM:SS). Message time shall be identified by the tag "msg_time".

3.1.1.3.2 Contract Event

Information concerning the contract under which dredging is being performed shall be reported at the start and completion of each contract using the

header tag "contract_event".

3.1.1.3.2.1 Contract Number

The USACE-assigned contract number for the project shall be reported using the tag "contract_number".

3.1.1.3.2.2 Contract Start and End

The start and end of a contract shall be reported using the tag "event_type" with the appropriate value of "start" or "end".

3.1.1.3.3 Tide Station/River Stage Gage Event

Properties associated with the vertical correction (see paragraph entitled "Vertical Correction") for the tide station/river stage gage shall be grouped together under the header tag "station_event". This information shall be sent at the start of the contract and each time the dredge has moved enough to change the station being used.

3.1.1.3.3.1 Station Name

The station name is a concise name defining the tide station/river stage gage begin referred to. It shall be introduced by the tag "station_name", and it shall consist of a descriptor of no more than 25 characters.

3.1.1.3.4 Length of Pipe Event

The leverman's estimate of the length of pipe downflow from the dredge pump, measured to the nearest whole foot, shall be reported under the header tag "pipe_length_event". This information shall be sent at the start of the contract and at the completion of each 24-hour period ending at midnight local time.

3.1.1.3.4.1 Floating Pipe

The total length of floating pipe shall be reported with the tag "length_floating".

3.1.1.3.4.2 Submerged Pipe

The total length of floating pipe shall be reported with the tag "length_submerged".

3.1.1.3.4.3 Shore Pipe

The total length of shore pipe shall be reported with the tag "length_land".

3.1.1.3.5 Booster Pump Event

Information concerning the booster pumps being used shall be included under the header tag "booster_pump_event". A message shall be sent to indicate any change in the status of the booster pumps being used.

3.1.1.3.5.1 Number of Booster Pumps

Upon the addition or removal of a booster pump, the total number of booster pumps being used shall be reported with the tag "booster_total".

3.1.1.3.6 Dredge Advance

The dredge advance, the total forward progress of the dredge relative to the centerline of the cut, shall be measured to the nearest whole foot and cumulatively calculated over a 24-hour period from midnight to midnight local time. It shall be identified by the tag "advance_daily". The msg_time associated with this tag shall be reported as the first timestamp of the following 24-hour period (based on the local time) rather than as midnight of the day for which the value was calculated, and it shall be reported in Greenwich Mean Time (GMT). The type of dredge advance mechanism shall be recorded, (i.e. spud carriage, walking spud or is moving on wires.

3.1.1.3.7 Outfall Information

The X and Y position of the terminal end of the outfall pipe shall be monitored and sent at the start of the contract and thereafter according to the following table. Discharge Heading and Pipe Elevation may be omitted if the dredge is not discharging into an upland disposal site. For beach nourishment, the horizontal X and Y position of the outfall shall be sent at the start of the contract and at the completion of each 24-hour period ending at midnight local time.

Discharge Location	Horizontal Position	Discharge Pipe Elevation	Discharge Outfall Heading
Open Water	Continuous Work Event	N/A	N/A
Scow	Upon Change	N/A	N/A
Beach	Every 24 Hours	N/A	N/A
Upland	Upon Change	Upon Change	Upon Change

3.1.1.3.7.1 Discharge Location

Information on where the slurry is being discharged shall be reported with the tag "outfall_location". Acceptable values include "upland", "open water", "beach", and "scow".

3.1.1.3.7.2 Discharge Horizontal Position

The horizontal position of the outfall end of the discharge pipe shall be obtained using a positioning system operating with a minimum accuracy level of 3-10 feet horizontal Circular Error Probable (CEP). It shall be reported as Latitude/Longitude WGS 84 in decimal degrees with West Longitude and South Latitude values being reported as negative. Position values shall be identified by the tags "outfall_latitude" and "outfall_longitude".

3.1.1.3.7.3 Discharge Outfall Heading

The discharge outfall heading is the angle relative to true north measured from the centerline of the pipe in the direction of discharge. All headings shall be provided using industry-standard equipment. They shall be accurate to within 5 degrees and reported to the nearest whole degree with values from 000 (true north) to 359 degrees referenced to a clockwise positive direction convention. The discharge heading shall be identified by the tag

"outfall_heading".

3.1.1.3.7.4 Discharge Pipe Elevation

The discharge pipe elevation is the height of the outfall measured in feet and tenths of a foot relative to the project datum. The required accuracy is contingent upon contract requirements. The tag "outfall_elevation" shall be used to identify this elevation.

3.1.1.3.8 Non-effective Work Event

Delays and dredge downtime shall be reported at the conclusion of the event. The reason for the non-effective work time shall be submitted under the header tag "non_eff_event" within 24 hours of the event.

3.1.1.3.8.1 Non-effective Work Interval

The start and end times for the non-effective work event shall be reported using the tags "msg_start_time" and "msg_end_time".

3.1.1.3.8.2 Dredge Function Code

The dredge operator indication of production delays, as listed on Form 4267, shall be transmitted at the end of the non-effective interval. Dredge function event messages shall be identified by the tag "function_code" and shall consist of one of the following standardized entries to indicate the operation:

AGV	Assisting Grounded Vessels
CCH	Change Cutterhead
CCSH	Clear Cutter Suction
CLPJ	Change Location Bar
COLL	Collision
CPPL	Clear Pump Pipeline
CPR	Change Impeller
DR	Dike Repair
FBD	Fire Boat Drills
HPL	Handling Pipe Line
HSL	Handling Swing Line
HSP	Handling Shore Pipe
LDNE	Loss Due to Natural Elements
LDPV	Loss Due to Passing Vessel
LNL	Transfer to New Location
MISC	Miscellaneous
MOB	Mobilization & Demobilization
MSC	Miscellaneous/Non-pay
OC	Out of Commission
OR	Operating Repairs
P	Preparation
PREP	Preparation & Making Up Tow
RPL	Repair Pipeline
SB	Sounding & Buoying
SBT	Stand-By Time as Directed
SH	Sundays-Holidays
TFS	Taking on Fuel & Supplies
TOW	Time on Tow
WAP	Waiting Attendant Plant

3.1.1.3.8.3 Additional Comments

The "comment" tag shall be used to provide additional explanation for the noted delays or downtimes. For example, when the code "LDPV" (Loss Due to Passing Vessel) is indicated, the name of the vessel and the number of tows shall be listed with the "comment" tag.

3.2 NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM SYSTEM REQUIREMENTS

The Contractor's DQM system shall be capable of collecting and transmitting information to the DQM onboard computer. The applicable parameters from paragraph entitled REQUIREMENTS FOR REPORTED DATA shall be recorded as events locally and continuously transmitted to the DQM database anytime an Internet connection is available. The dredge shall be equipped with a DQM computer system consisting of a computer, monitor, keyboard, mouse, data modem, Universal Power Supply (UPS), and network hub. The computer system shall be a standalone system, exclusive to the DQM monitoring system, and shall have USACE DQM software installed on it. If a hardware problem occurs, or if a part of the system is physically damaged, then the Contractor shall be responsible for repairing it within two business days of the determination of the condition or submitting a plan and timeline to the DQM Data Acquisition and Analysis Team for repair if the repair will take more than two business days.

3.2.1 Computer Requirements

The Contractor shall provide a dedicated onboard computer for use by the Dredging Quality Management system. This computer shall run the USACE DQM software and receive data from the Contractor's data-reporting interface. This computer must meet or exceed the following performance specifications:

CPU	Intel or AMD processor with a (non-overclocked) clock speed of at least 1.8 gigahertz (GHz)
Hard drive	250 gigabytes (GB); internal
RAM	4 gigabytes (GB)
Ethernet adapter	10 or 100 megabit (Mbit) internal network card
Video adapter	Must support a resolution of 1024x768 at 16-bit
Keyboard	Standard 101-key keyboard
Mouse	Standard 2-button mouse
Monitor	Must support a resolution of 1024x768 at 16-bit color depth
Ports	2 free serial ports with standard 9-pin
Other hardware	Category 5 (Cat-5) cable with standard RJ-45 plugs connecting the network adapter to the network hub; one spare cable

The Contractor shall install a fully licensed copy of Windows 7 Professional Operating System on the computer specified above. The Contractor shall also install any necessary manufacturer-provided drivers for the installed hardware.

This computer shall be located and oriented to allow data entry and data viewing as well as to provide access to data ports for connection of external hardware.

3.2.2 Software

The DQM computer's primary function is to transmit data to the DQM shoreside database. No other software which conflicts with this function shall be installed on it. The DQM computer shall also have the USACE-provided Dredging Quality Management Onboard Software (DQMOBS) installed on it by DQM personnel.

3.2.3 UPS

The Contractor shall supply an Uninterruptible Power Supply (UPS) for the computer and networking equipment. It shall interface with the DQM computer to communicate UPS status, and it shall provide backup power at 1 kVA for a minimum of 10 minutes. The Contractor shall ensure that sufficient power outlets are available to run all specified equipment.

3.2.4 Internet Access

The Contractor shall maintain an Internet connection capable of transmitting real-time data to the DQM server as well as enough additional bandwidth to clear historically queued data when a connection is re-established. The telemetry system shall always be available and have connectivity in the contract area. If connectivity is lost, unsent data shall be queued and transmitted upon restoration of connectivity. The Contractor shall acquire and install all necessary hardware and software to make the Internet connection available for data transmission to the DQM web service. The hardware and software shall be configured to allow the DQM Support Center remote access to this computer, and the telemetry system shall be capable of meeting these minimum reporting requirements in all operating conditions.

In areas with an unreliable Internet connection and at the Contracting Officers discretion, it may be required to manually download the data on a daily basis using the protocol for retrieving and submitting backup files provided by the DQM Support Center. This method of data transmission should be used only if Internet connectivity is unavailable at the dredging site, and it should be considered a temporary measure. If data must be manually downloaded, it shall be submitted to the DQM Data Acquisition and Analysis Team within 48 hours of the date it was collected.

3.2.5 Data Routing Requirements

Onboard sensors continually monitor dredge conditions, operations, and efficiency and route this information to the shipboard dredge-specific system (DSS) computer to assist in guiding dredge operations. Portions of this Contractor-collected information, as described in this specification, shall be routed to the DQM computer on a real-time basis. Standard sensor data shall be sent to the DQM computer via an RS-232 serial interface with a baud rate of 9600 or 19200 bps. The serial interface shall be configured as 8 bits, no parity, and no flow control

Information regarding changes in the state of the dredge shall be digitally logged and transmitted as close to the time of the occurrence as possible. These events can either be included in a separate message bundle going to the DQM onboard computer, or they can be entered on the "State" tab in the DQM Pipeline Software

3.3 DREDGE MONITORING DATA

3.3.1 General

Onboard sensors continuously collect dredging data in support of the dredge Contractor's operations. Portions of this Contractor-collected information, as described in this specification, and calculations based on them shall be stored and transmitted to the DQM database on a near real-time basis. Additionally, information regarding the state of the dredge shall be digitally logged and transmitted.

3.3.2 Data Measurement Frequency

The frequency of data transmission is dependent on the type of message being sent. Work Event messages contain data that are instantaneously collected or calculated from sensors and are logged as a series of events. State event messages are activated by a change in the dredge state.

3.3.2.1 Work Event Messages

Data shall be logged as a series of events. Each event shall consist of a dataset containing dredge information (as defined in paragraph entitled REQUIREMENTS FOR REPORTED DATA). Each set of measurements (for example, time and position) shall be considered an event, and there shall be a 6-12 second interval between work events. This interval shall remain consistent across event types for the dredge plant.

A standard data string shall be recorded within one second of an event trigger with the time stamp and all parameters reflecting when the event happened.

3.3.2.2 State Event Messages

A set of descriptive information (event name, time, description, comment) shall be considered a state event. These events shall be recorded within 24 hours of a change in state with the time stamp reflecting when the event happened.

3.3.3 Parameter Transmission to the Web Service

The data shall be formatted as JSON (JavaScript Object Notation, as defined at http://www.json.org) strings of arbitrary length. These JSON strings represent a hierarchical data structure consisting of a message bundle which may contain 0-3 automatic data messages and any number of manual data messages.

A tag/parameter is reported only when it contains a value. No "Null" value strings shall be included in a message bundle.

```
****************************
Message bundle
****************************

{
  "DQM_Data": {
    "messages": [
      {
        "work_event": {
        "msg_time":            <24-hour UTC time YYYY-MM-DD HH:MM:SS>,
```

```
                "vert_correction":   <floating point 100th decimal place>,
                "ch_latitude":       <decimal to 6 decimal places>,
                "ch_longitude":      <decimal to 6 decimal places>,
                "ch_depth":          <floating point 100th decimal place>,
                "ch_heading":        <integer value 000-359>,
                "slurry_velocity":   <floating point 100th decimal place>,
                "slurry_density":    <floating point 100th decimal place>,
                "pump_rpm":          <integer>,
                "vacuum":            <floating point 100th decimal place>,
                "outlet_psi":        <floating point 100th decimal place>,
                "comment":           <string>},
              }
            },
            {
              "contract_event": {
                "msg_time":          <24-hour UTC time YYYY-MM-DD HH:MM:SS>,
                "contract_number":   <string>,
                "event_type":        <string - "start" or "end">,
                "comment":           <string>
              }
            },
            {
              "station_event": {
                "msg_time":          <24-hour UTC time YYYY-MM-DD HH:MM:SS>,
                "station_name":      <string>,
                "comment":           <string>
              }
            },
            {
              "pipe_length_event": {
                "msg_time":          <24-hour UTC time YYYY-MM-DD HH:MM:SS>,
                "length_floating":   <integer>,
                "length_submerged":  <integer>,
                "length_land":       <integer>,
                "comment":           <string>
              }
            },
            {
              "booster_pump_event": {
                "msg_time":          <24-hour UTC time YYYY-MM-DDHH:MM:SS>,
                "booster_total":     <integer>,
                "comment":           <string>
              }
            },
            {
              "advance_Event": {
                "msg_time":          <24-hour UTC time YYYY-MM-DD HH:MM:SS>,
                "advance_daily":     <integer>,
                "comment":           <string>
              }
            },
            {
              "outfall_position": {
                "msg_time":          <24-hour UTC time YYYY-MM-DD HH:MM:SS>,
                "outfall_location":  <string-"upland", "beach", "scow", "open
        water">
                "outfall_latitude":  <decimal to 6 decimal places>,
                "outfall_longitude": <decimal to 6 decimal places>,
                "outfall_heading":   <integer value 000-359>,
```

```
                "outfall_elevation": <floating point 10th decimal place>,
                "comment":           <string>
              }
            },
            {
              "non_eff_event": {
                "msg_start_time":    <24-hour UTC time YYYY-MM-DD HH:MM:SS>,
                "msg_end_time":      <24-hour UTC time YYYY-MM-DD HH:MM:SS>,
                "function_code":     <string - 1 to 4 characters>,
                "comment":           <string>

              }
            }
          ]
        }
      }
```

3.3.4 Contractor Data Backup

The Contractor shall maintain an archive of all data sent to the DQM computer during the dredging contract. The COR may require, at no increase in the contract price, that the Contractor provide a copy of these data covering specified time periods. The data shall be provided in the same JSON format as would have been transmitted to the DQM computer. There shall be no line breaks between the parameters, and each record string shall be on separate line. The naming convention for the files shall be <*dredgename*>_<*StartYYYYMMddhhmmss*>_<*EndYYYYMMddhhmmss*>.txt.
Data submission shall be via a storage medium acceptable to the COR.

At the end of the dredging contact, the Contractor shall call the National DQM Support Center prior to discarding the data to ensure that it has been appropriately archived. The Contractor shall record the following information in a separate section at the end of the dredge's onboard copy of the DPIP:

- Person who called the National DQM Support Center
- Date of the call
- DQM representative who gave permission to discard the data

On the same day that the call is made, but prior to discarding the data, the Contractor shall submit a "Data Appropriately Archived" email to the local USACE District's COR with the above information and cc: the DQM Support Center representative who granted the permission. In addition to the above information, the following shall also be included in the email:

- Project name and contract number
- Dredge start and end dates
- Name of the dredge

3.4 PERFORMANCE REQUIREMENTS

The Contractor's National Dredging Quality Management Program's data transmission shall be fully operational at the start of dredging operations. To meet contract requirements for operability, the Contractor's system shall provide an accurate data string return and be compliant with hardware requirements. Data string return is defined as the number of quality records within an event or state tag sent by the contractor's system to the DQM database. Quality data strings are considered to be those providing accurate values for all parameters reported when operating

according to the specification. Repairs necessary to restore data return compliance shall be made within two business days, or a plan and timeline for repair shall be submitted to the DQM Data Acquisition and Analysis Team if the repair will take more than two business days. Failure by the Contractor to report quality data within the specified time window for dredge measurements as stated in the specifications (see Paragraphs entitled "Internet Access", "Data Measurement Frequency" and "Parameter Transmission to the Web Service") will result in withholding of up to 10% of the contract progress payment in accordance to Section 00700 Contract Clause entitled PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS, (FAR 52.232-5).

3.5 QUALITY ASSURANCE CHECKS

Quality assurance (QA) checks are a part of the DQM dredge certification procedure. They are required prior to the commencement of dredging and, at the discretion of the COR, periodically throughout the duration of the contract. The SOP and criteria for QA checks are presented on the DQM website at https://dqm.usace.army.mil.

3.6 CONTRACTOR QUALITY CONTROL

The Contractor shall designate a quality control systems manager (QCSM), who shall develop and maintain daily procedures to ensure quality control (QC) of the dredge's DQM system. These methods shall include the procedure by which data being collected is checked against known values, and verification that the telemetry is functioning. These procedures shall be outlined in the DPIP and submitted prior to the Notice to Proceed. In the event a Contractor Quality Control (CQC) Report is required, daily annotations shall be made in the Daily CQC Report, documenting all actions taken on each day of work, including all deficiencies found and the corrective actions taken.

3.7 LIST OF ITEMS PROVIDED BY THE CONTRACTOR

- DPIP — Paragraph entitled DREDGE PLANT INSTRUMENTATION PLAN (DPIP)
- DQM System — Paragraph entitled NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM SYSTEM REQUIREMENTS
- Dredge Data — Paragraph entitled DREDGE MONITORING DATA

-- End of Section --

according to the specification. Repairs necessary to restore data return compliance shall be made within two business days, or a plan and timeline for repair shall be submitted to the DQM Data Acquisition and Analysis Team if the repair will take more than two business days. Failure by the Contractor to report quality data within the specified time window for dredge measurements as stated in the specifications (see Paragraphs entitled "Internet Access", "Data Measurement Frequency" and "Parameter Transmission to the Web Service") will result in withholding of up to 10% of the contract progress payment in accordance to Section 00700 Contract Clause entitled PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS, (FAR 52.232-5).

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3.7 LIST OF ITEMS PROVIDED BY THE CONTRACTOR

- DPIP Paragraph entitled DREDGE PLANT INSTRUMENTATION PLAN (DPIP)
- DQM System Paragraph entitled NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM SYSTEM REQUIREMENTS
- Dredge Data Paragraph entitled DREDGE MONITORING DATA

-- End of Section --

US Army Corps
of Engineers
New Orleans District

MISSISSIPPI RIVER OUTLETS
VICINITY OF VENICE, LOUISIANA
BAPTISTE COLLETTE
BAR CHANNEL #24-2
MAINTENANCE DREDGING

PLAQUEMINES PARISH, LOUISIANA

SOLICITATION NO. W912P824B0048

THIS PROJECT WAS DESIGNED BY THE NEW ORLEANS DISTRICT CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8152. SIGNATURES INDICATE OFFICIAL RECOMMENDATION OF ALL DRAWINGS IN THIS SET.

APPROVED BY:

C.A. Jones, P.E., PMP
DISTRICT COMMANDER

APPROVAL RECOMMENDED BY:

P.E.
ETL CIVIL BRANCH

P.E.
CHIEF CIVIL BRANCH

Ph.D., P.E.
CHIEF ENGINEERING DIVISION

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

ED-24-007

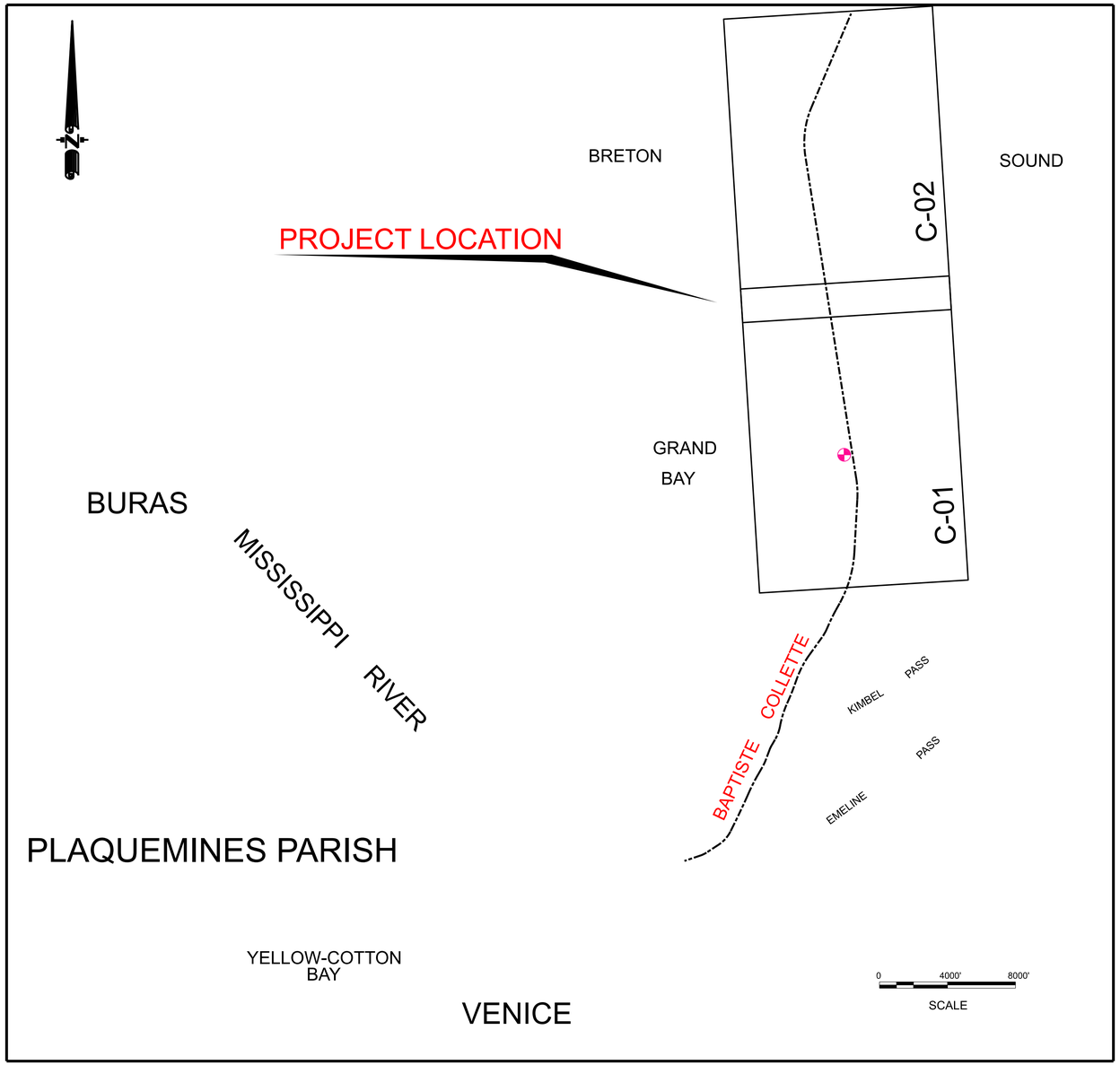
DESIGNED BY: SCOTT CLEMENT
DWN BY: S.A.C.
CKD BY: JASON BINET
SUBMITTED BY: JASON BINET
PLOT SCALE: 1:1
PLOT DATE: 7/17/2023
SIZE: ANSI D
FILE NAME: ED_24_007_G-01.dgn
DATE: MAY 2024
SOLICITATION NO.: W912P824B0048
CONTRACT NO.: W912P824CXXXX
FILE NUMBER: 1-1-24-007

MISSISSIPPI RIVER OUTLETS
VICINITY OF VENICE, LOUISIANA
BAPTISTE COLLETTE BAR CHANNEL #24-2
MAINTENANCE DREDGING

COVER SHEET

PLAQUEMINES PARISH, LA

SHEET IDENTIFICATION
G-01



LOCATION MAP

VICINITY MAP

SCALE OF MILES

40 0 40 80 120 160 200

GAGE INFORMATION		
GAGE COORDINATES	DESCRIPTION	ELEVATION
01465 (GAGE ID) X=3,927,490.52 Y= 319,536.50	BLACK AND WHITE STAFF GAGE NAILED TO NAVIGATION DAY MARKER NO. 16 IN BAPTISTE COLLETTE PASS.	0.0' MLLW (02-06) = 0.0' NAVD88 (2009.55) = 3.5' MLG

TABLE OF ABBREVIATIONS

C/L	CENTERLINE
DWG	DRAWING
EL	ELEVATION
FT	FEET
F.S.	FORESHORE
LA	LOUISIANA
MIN	MINIMUM
NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988
N	NORTH
P/L	PIPELINE
STA	STATION
V	VERTICAL
X	X-COORDINATE
Y	Y-COORDINATE
WES	WATER'S EDGE
NAR	NATURAL ANGLE OF REPOSE
DM	NAVIGATION DAY MARKER

GENERAL LEGEND

-·-·-·-·-	CHANNEL CENTERLINE
— — — — —	BOTTOM EDGE OF CUT
—O—	OIL PIPELINES
	GAS PIPELINES
■ △	DAY MARKERS
◔	GAGE

DRAWING INDEX

DWG.	DESCRIPTION
G-01	COVER SHEET
G-02	LOCATION MAP, VICINITY MAP, DRAWING INDEX, LEGEND AND VERTICAL CONTROL
C-01	PLAN - C/L STA. 270+00 TO C/L STA. 420+00
C-02	PLAN - C/L STA. 420+00 TO C/L STA. 600+00
C-03	PROFILE
C-04	TYPICAL SECTIONS - C/L STATIONS 275+00 TO C/L STA. 320+00
C-05	TYPICAL SECTIONS - C/L STATIONS 330+00 TO C/L STA. 380+00
C-06	TYPICAL SECTIONS - C/L STATIONS 390+00 TO C/L STA. 440+00
C-07	TYPICAL SECTIONS - C/L STATION 450+00 TO C/L STA. 500+00
C-08	TYPICAL CROSS SECTIONS - C/L STA. 510+00 TO C/L STA. 560+00
C-09	TYPICAL SECTIONS - C/L STATION 565+00

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

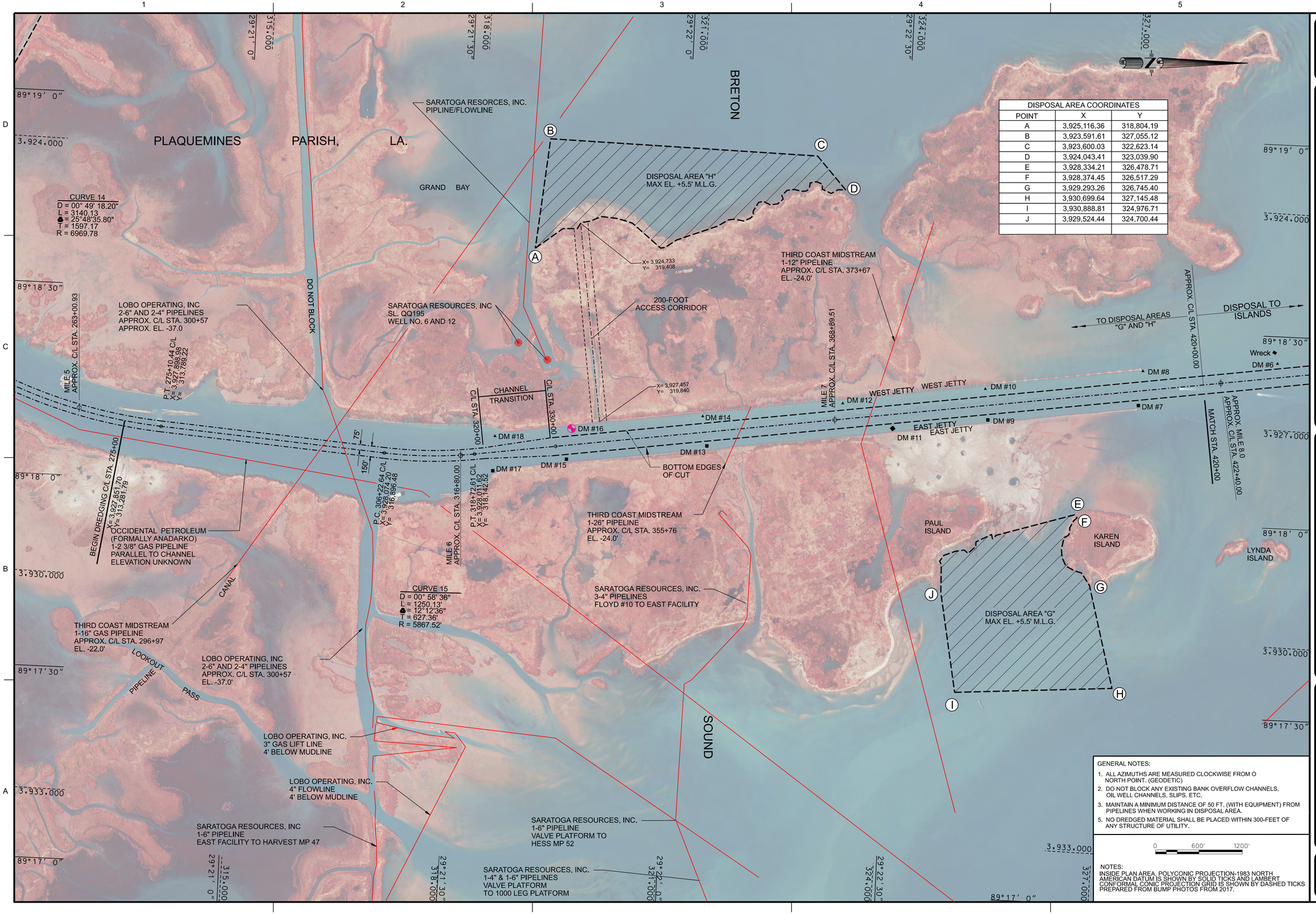
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

ED-24-007

DESIGNED BY: SCOTT CLEMENT
DWN BY: S.A.C.
CKD BY: JASON BINET
SUBMITTED BY: JASON BINET
PLOT SCALE: 1" = 4000'
PLOT DATE: 07/09/2024
DATE: MAY 2024
SOLICITATION NO.: W912P8-24-B-0048
CONTRACT NO.: W912P8-24-C-XXXX
FILE NUMBER: H-16-4077
SIZE: ANSI D
FILE NAME: ED_24_0007_VICINITY_G-02.DGN

MISSISSIPPI RIVER OUTLETS
VICINITY OF VENICE, LOUISIANA
BAPTISTE COLLETTE BAR CHANNEL #24-2
MAINTENANCE DREDGING
LOCATION MAP, VICINITY MAP, DRAWING INDEX, LEGEND AND VERTICAL CONTROL
PLAQUEMINES PARISH, LA

SHEET IDENTIFICATION
G-02



DISPOSAL AREA COORDINATES		
POINT	X	Y
A	3,925,116.36	318,804.19
B	3,923,591.61	327,055.12
C	3,923,600.03	322,623.14
D	3,924,043.41	323,039.90
E	3,928,334.21	326,478.71
F	3,928,374.45	326,517.29
G	3,929,293.26	326,745.40
H	3,930,699.64	327,145.48
I	3,930,888.81	324,976.71
J	3,929,524.44	324,700.44

GENERAL NOTES:

1. ALL AZIMUTHS ARE MEASURED CLOCKWISE FROM O NORTH POINT. (GEODETIC)
2. DO NOT BLOCK ANY EXISTING BANK OVERFLOW CHANNELS, OIL WELL CHANNELS, SLIPS, ETC.
3. MAINTAIN A MINIMUM DISTANCE OF 50 FT. (WITH EQUIPMENT) FROM PIPELINES WHEN WORKING IN DISPOSAL AREA.
5. NO DREDGED MATERIAL SHALL BE PLACED WITHIN 300-FEET OF ANY STRUCTURE OF UTILITY.

0 600' 1200'

NOTES:
INSIDE PLAN AREA, POLYCONIC PROJECTION-1983 NORTH AMERICAN DATUM IS SHOWN BY SOLID TICKS AND LAMBERT CONFORMAL CONIC PROJECTION GRID IS SHOWN BY DASHED TICKS PREPARED FROM BUMP PHOTOS FROM 2017.

US Army Corps of Engineers
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: SCOTT CLEMENT
DWN BY: S.A.C.
CKD BY: JASON BINET
SUBMITTED BY: JASON BINET
PLOT SCALE: 1:5000
PLOT DATE: 11/17/2023
DATE: MAY 2024
SOLICITATION NO.: W912P824B0048
CONTRACT NO.: W912P824C0XXX
FILE NUMBER: H:\HI-4497.07
SIZE: ANSI D
FILE NAME: ED_24_007_C-01.DGN

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

ED-24-007

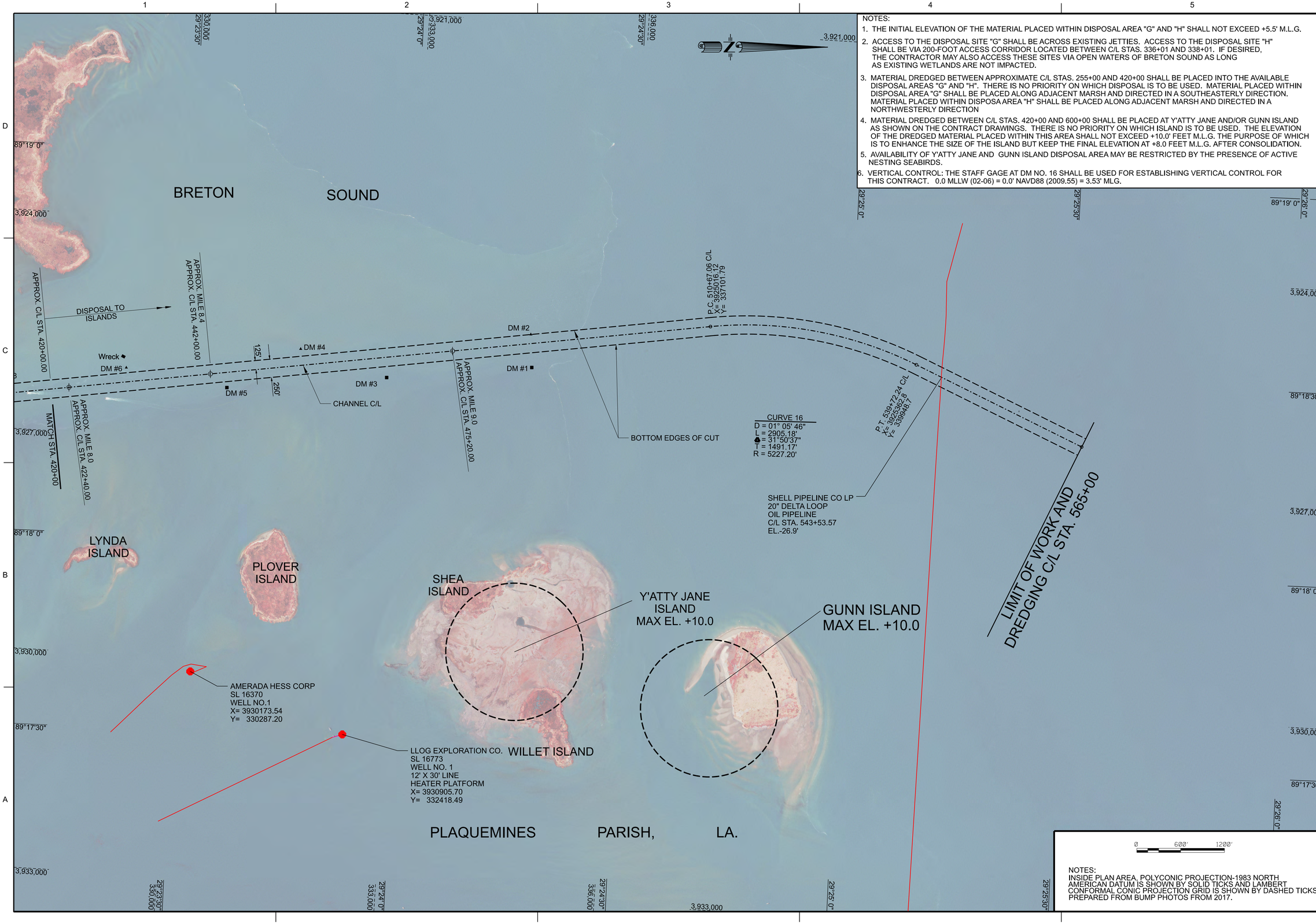
MISSISSIPPI RIVER OUTLETS
VICINITY OF VENICE, LOUISIANA
BAPTISTE COLLETTE BAR CHANNEL #24-2
MAINTENANCE DREDGING

PLAN
C/L STA 270+00 TO C/L STA. 420+00
PLAQUEMINES PARISH, LA

SHEET IDENTIFICATION
C-01

NOTES:

1. THE INITIAL ELEVATION OF THE MATERIAL PLACED WITHIN DISPOSAL AREA "G" AND "H" SHALL NOT EXCEED +5.5' M.L.G.
2. ACCESS TO THE DISPOSAL SITE "G" SHALL BE ACROSS EXISTING JETTIES. ACCESS TO THE DISPOSAL SITE "H" SHALL BE VIA 200-FOOT ACCESS CORRIDOR LOCATED BETWEEN C/L STAS. 336+01 AND 338+01. IF DESIRED, THE CONTRACTOR MAY ALSO ACCESS THESE SITES VIA OPEN WATERS OF BRETON SOUND AS LONG AS EXISTING WETLANDS ARE NOT IMPACTED.
3. MATERIAL DREDGED BETWEEN APPROXIMATE C/L STAS. 255+00 AND 420+00 SHALL BE PLACED INTO THE AVAILABLE DISPOSAL AREAS "G" AND "H". THERE IS NO PRIORITY ON WHICH DISPOSAL IS TO BE USED. MATERIAL PLACED WITHIN DISPOSAL AREA "G" SHALL BE PLACED ALONG ADJACENT MARSH AND DIRECTED IN A SOUTHEASTERLY DIRECTION. MATERIAL PLACED WITHIN DISPOSA AREA "H" SHALL BE PLACED ALONG ADJACENT MARSH AND DIRECTED IN A NORTHWESTERLY DIRECTION
4. MATERIAL DREDGED BETWEEN C/L STAS. 420+00 AND 600+00 SHALL BE PLACED AT Y'ATTY JANE AND/OR GUNN ISLAND AS SHOWN ON THE CONTRACT DRAWINGS. THERE IS NO PRIORITY ON WHICH ISLAND IS TO BE USED. THE ELEVATION OF THE DREDGED MATERIAL PLACED WITHIN THIS AREA SHALL NOT EXCEED +10.0' FEET M.L.G. THE PURPOSE OF WHICH IS TO ENHANCE THE SIZE OF THE ISLAND BUT KEEP THE FINAL ELEVATION AT +8.0 FEET M.L.G. AFTER CONSOLIDATION.
5. AVAILABILITY OF Y'ATTY JANE AND GUNN ISLAND DISPOSAL AREA MAY BE RESTRICTED BY THE PRESENCE OF ACTIVE NESTING SEABIRDS.
6. VERTICAL CONTROL: THE STAFF GAGE AT DM NO. 16 SHALL BE USED FOR ESTABLISHING VERTICAL CONTROL FOR THIS CONTRACT. 0.0 MLLW (02-06) = 0.0' NAVD88 (2009.55) = 3.53' MLG.



NOTES:
INSIDE PLAN AREA, POLYCONIC PROJECTION-1983 NORTH AMERICAN DATUM IS SHOWN BY SOLID TICKS AND LAMBERT CONFORMAL CONIC PROJECTION GRID IS SHOWN BY DASHED TICKS PREPARED FROM BUMP PHOTOS FROM 2017.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: SCOTT CLEMENT		DATE: MAY 2024
DWN BY: S.A.C.	CKD BY: JASON BINET	SOLICITATION NO.: W912P8240048
SUBMITTED BY: JASON BINET		CONTRACT NO.: W912P8241XXXX
PLOT SCALE: 1:2000	PLOT DATE: 07/08/2025	FILE NUMBER: H:\ed-24\07\
SIZE: ANSI D	FILE NAME: ED_24_02_C-02.DGN	

ED-24-007

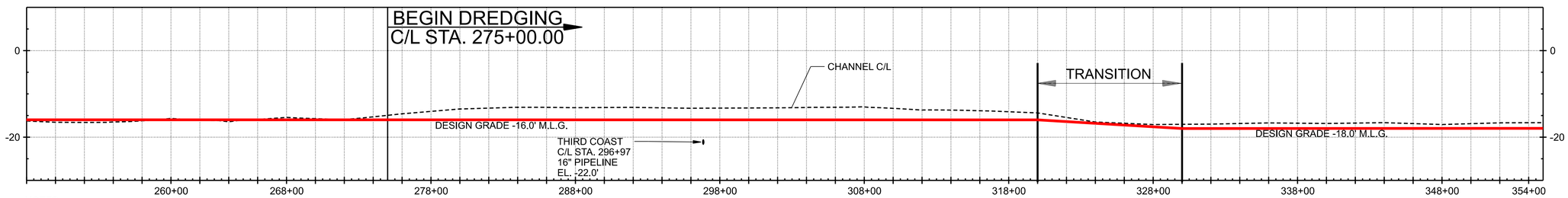
MISSISSIPPI RIVER OUTLETS
VICINITY OF VENICE, LOUISIANA
BAPTISTE COLLETTE BAR CHANNEL #24-2
MAINTENANCE DREDGING

PLAN
C/L STA 420+00 TO C/L STA. 565+00

PLAQUEMINES PARISH, LA

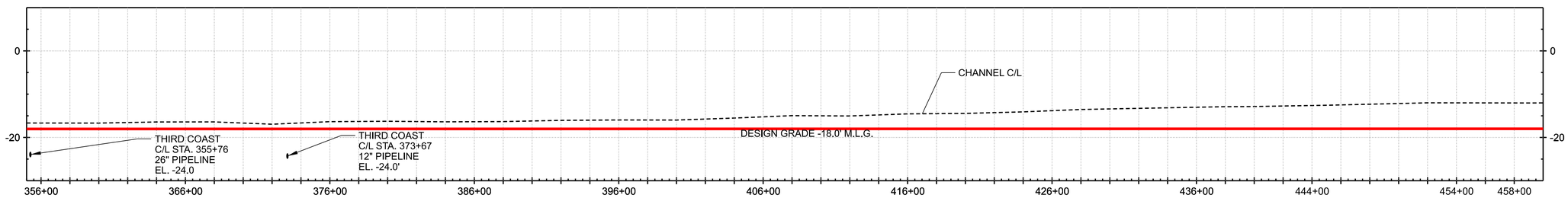
SHEET IDENTIFICATION
C-02

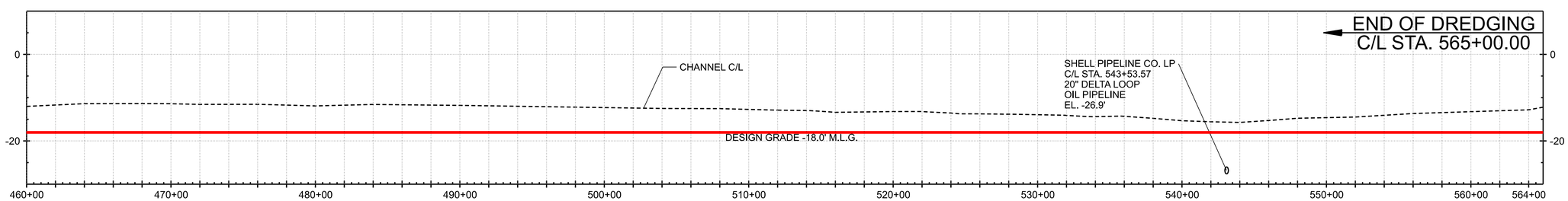
PROFILE VIEW



NOTES:

1. LOBO OPERATING, INC PIPELINES ARE NOT SHOWN ON PROFILE. THE 2-6" AND 2-4"ARE LOCATED AT C/L STA. 300+57 AT A DEPTH OF -37.0' M.L.G.





PROFILE
NOT TO SCALE

NOTES:

1. CROSS SECTIONS AND PROFILES ARE REPRESENTATIVE OF CONDITIONS THAT EXISTED AUGUST 2023.
2. ALL ELEVATIONS IN SECTIONS AND PROFILE ARE M.L.G.
3. ALL STATIONS REFLECT CHANNEL CENTERLINE.
4. REQUIRED CHANNEL BOTTOM GRADE FROM C/L STA. 275+00 TO C/L STA. 320+00 IS -16.0' M.L.G., TRANSITIONING TO -18.0' M.L.G. AT C/L STA. 330+00, AND -18.0' M.L.G. FROM C/L STA. 330+00 TO C/L STA. 565+00.
5. REQUIRED CHANNEL BOTTOM WIDTH FROM C/L STA. 275+00 TO C/L 320+00 IS 150', TRANSITIONING TO 250' AT C/L STA. 330+00, AND 250' FROM C/L STA. 330+00 TO C/L STA. 565+00.
6. SIDE SLOPES ARE 1V ON 3H.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: SCOTT CLEMENT
DWN BY: S.A.C.
CKD BY: JASON BINET
SUBMITTED BY: JASON BINET
PLOT SCALE: 1:1
PLOT DATE: 07/02/2024
SIZE: ANSI D
FILE NAME: ED_24_007_C-03
DATE: MAY 2024
SOLICITATION NO.: W912P824B0048
CONTRACT NO.: W912P822C-XXXX
FILE NUMBER: H:14-04-24
ED-24-007

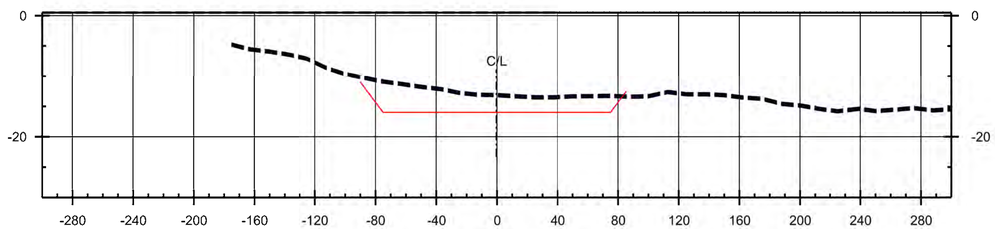
MISSISSIPPI RIVER OUTLETS
VICINITY OF VENICE, LOUISIANA
BAPTISTE COLLETTE BAR CHANNEL #22-2
MAINTENANCE DREDGING

PROFILE VIEW

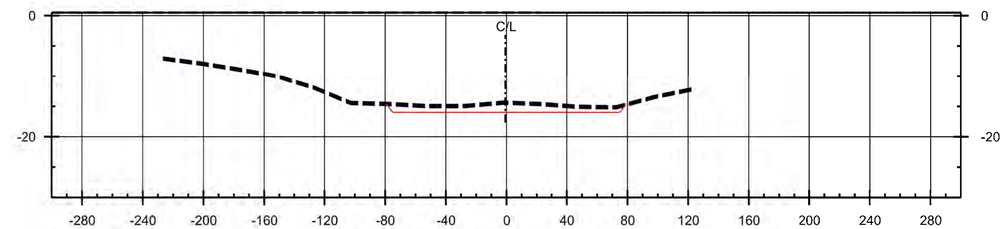
PLAQUEMINES PARISH, LA

SHEET IDENTIFICATION
C-03

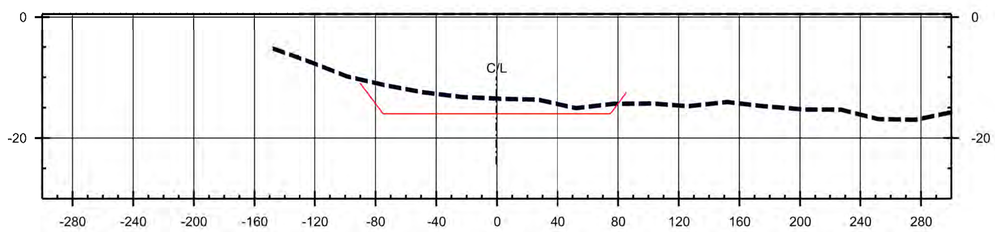
TYPICAL SECTIONS - C/L STATION 275+00 TO 320+00



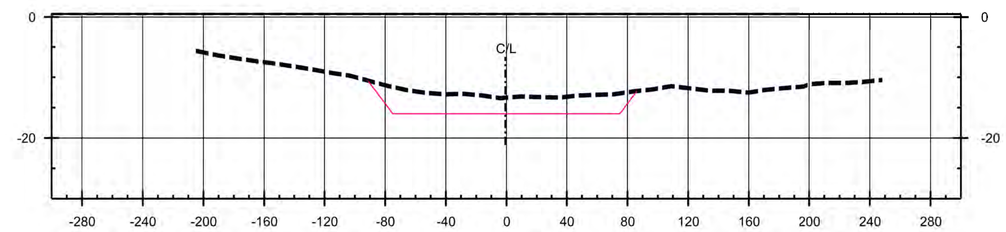
290+00



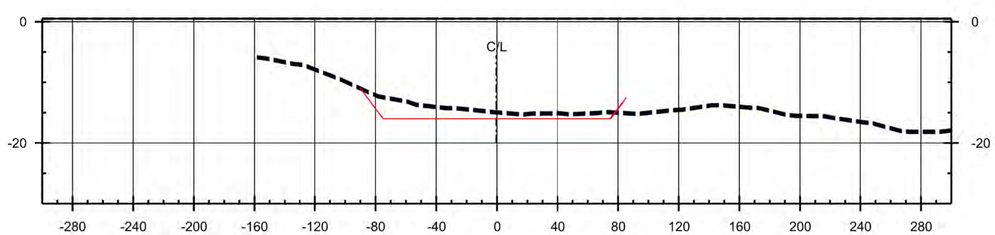
320+00



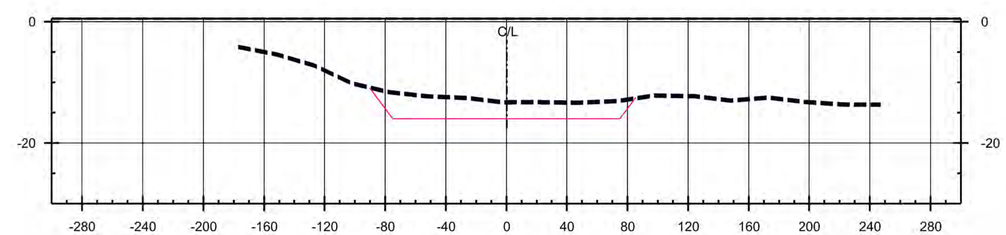
280+00



310+00



275+00



300+00

NOTES:

1. CROSS SECTIONS AND PROFILES ARE REPRESENTATIVE OF CONDITIONS THAT EXISTED AUGUST 2023.
2. ALL ELEVATIONS IN SECTIONS AND PROFILE ARE M.L.G.
3. ALL STATIONS REFLECT CHANNEL CENTERLINE.
4. REQUIRED CHANNEL BOTTOM GRADE FROM C/L STA. 275+00 TO C/L STA. 320+00 IS -16.0' M.L.G, TRANSITIONING TO -18.0 M.L.G AT C/L STA. 330+00, AND -18.0 M.L.G FROM C/L STA. 330+00 TO C/L STA. 565+00.
5. REQUIRED CHANNEL BOTTOM WIDTH FROM C/L STA. 275+00 TO C\L STA. 320+00 IS 150', TRANSITIONING TO 250' AT C/L STA. 330+00, AND 250' FROM C/L STA. 330+00 TO C\L STA. 565+00. SIDE SLOPES ARE 1V ON 3H.
6. CROSS SECTIONS ARE NOT TO SCALE.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: SCOTT CLEMENT
DWN BY: S.A.C.
CKD BY: JASON BINET
SUBMITTED BY: JASON BINET
PLOT SCALE: 1:100
PLOT DATE: 01/12/2023
SIZE: ANSI D
FILE NAME: ED_24_007_C-04
DATE: MAY 2024
SOLICITATION NO.: W912P824B0048
CONTRACT NO.: W912P824CXXXX
FILE NUMBER: H14-NAS-7
ED-24-007

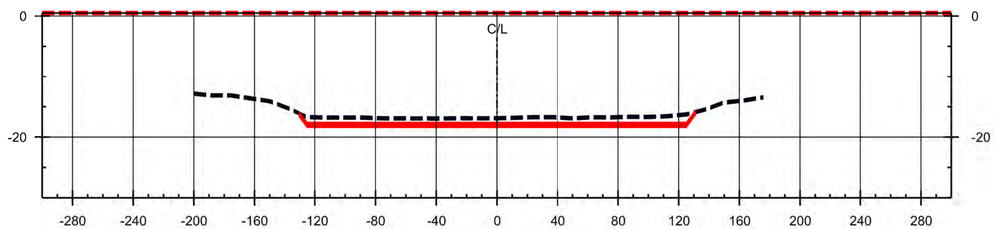
MISSISSIPPI RIVER OUTLETS
VICINITY OF VENICE, LOUISIANA
BAPTISTE COLLETTE BAR CHANNEL #22-2
MAINTENANCE DREDGING

TYPICAL SECTIONS - C/L STATION 275+00 TO 320+00

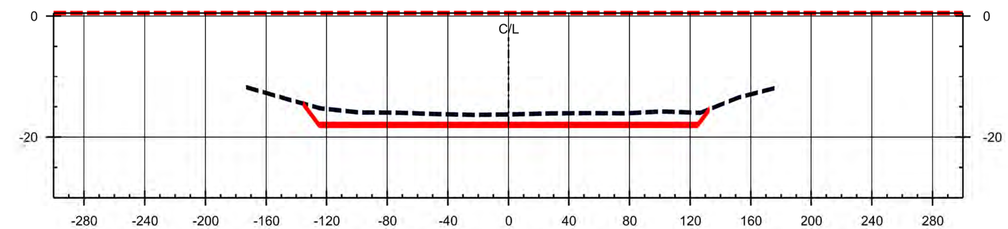
PLAQUEMINES PARISH, LA

SHEET IDENTIFICATION
C-04

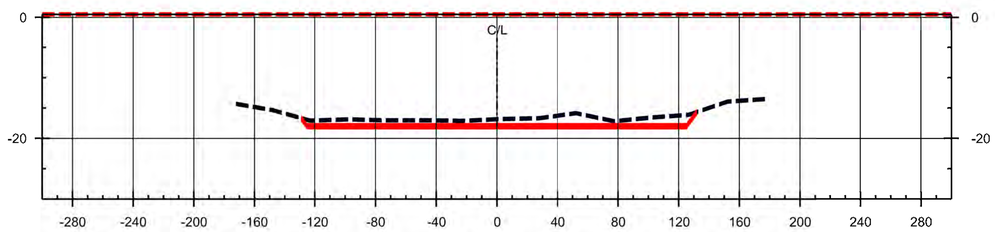
TYPICAL SECTIONS - C/L STATION 330+00 TO 380+00



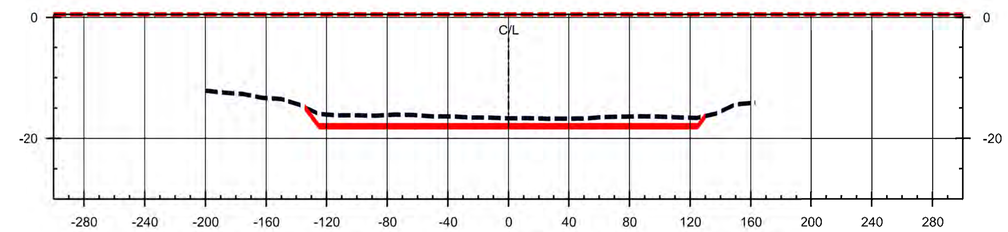
350+00



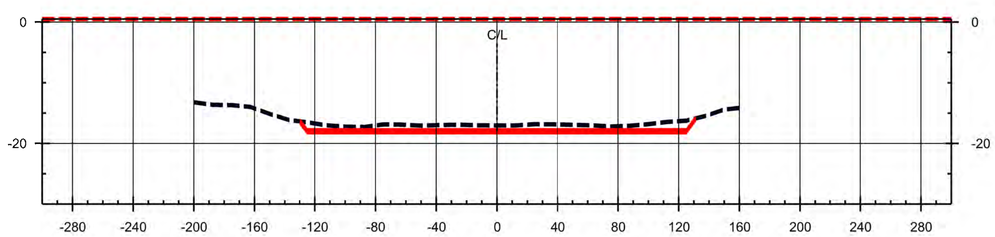
380+00



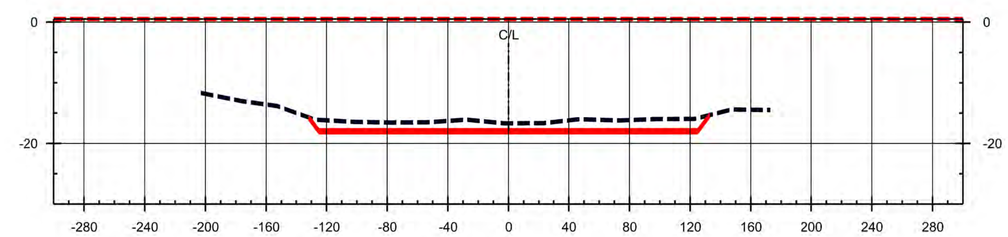
340+00



370+00



330+00



360+00

NOTES:

1. CROSS SECTIONS AND PROFILES ARE REPRESENTATIVE OF CONDITIONS THAT EXISTED AUGUST 2023.
2. ALL ELEVATIONS IN SECTIONS AND PROFILE ARE M.L.G.
3. ALL STATIONS REFLECT CHANNEL CENTERLINE.
4. REQUIRED CHANNEL BOTTOM GRADE FROM C/L STA. 275+00 TO C/L STA. 320+00 IS -16.0' M.L.G, TRANSITIONING TO -18.0 M.L.G AT C/L STA. 330+00, AND -18.0 M.L.G FROM C/L STA. 330+00 TO C/L STA. 565+00.
5. REQUIRED CHANNEL BOTTOM WIDTH FROM C/L STA. 275+00 TO C\L STA. 320+00 IS 150', TRANSITIONING TO 250' AT C/L STA. 330+00, AND 250' FROM C/L STA. 330+00 TO C\L STA. 565+00. SIDE SLOPES ARE 1V ON 3H.
6. CROSS SECTIONS ARE NOT TO SCALE.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: SCOTT CLEMENT
DWN BY: S.A.C.
CKD BY: JASON BINET
SUBMITTED BY: JASON BINET
PLOT SCALE: 1:100
PLOT DATE: 01/17/2025
DATE: MAY 2024
SOLICITATION NO.: W912P824B0048
CONTRACT NO.: W912P8-22-C-XXXX
FILE NUMBER: H14-NAS-1
SIZE: ANSI D
FILE NAME: ED_24_007_C-05

ED-24-007

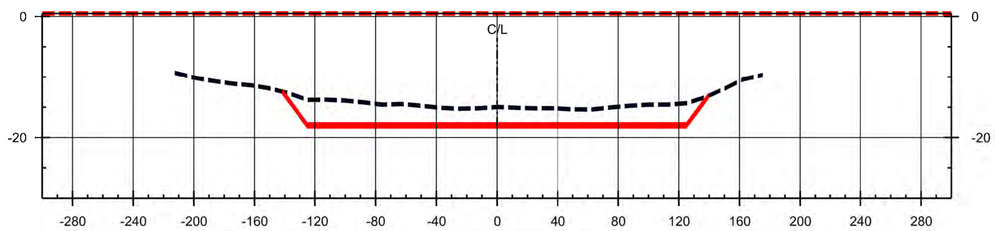
MISSISSIPPI RIVER OUTLETS
VICINITY OF VENICE, LOUISIANA
BAPTISTE COLLETTE BAR CHANNEL #22-2
MAINTENANCE DREDGING

TYPICAL SECTIONS - C/L STATION 330+00 TO 380+00

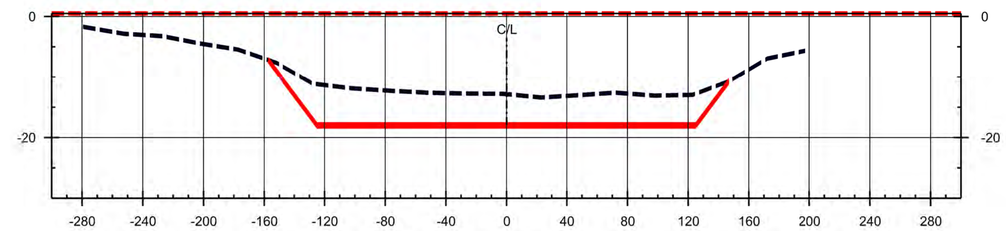
PLAQUEMINES PARISH, LA

SHEET IDENTIFICATION
C-05

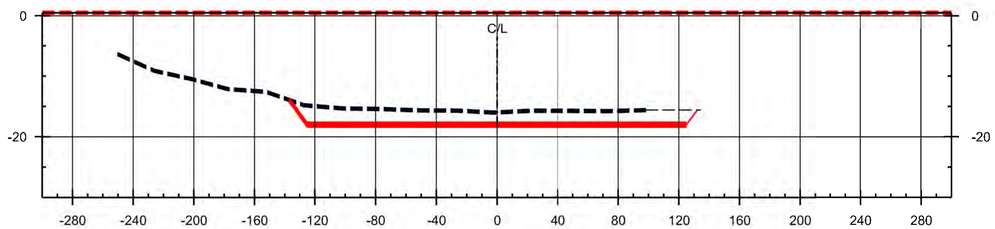
TYPICAL SECTIONS - C/L STATION 390+00 TO 440+00



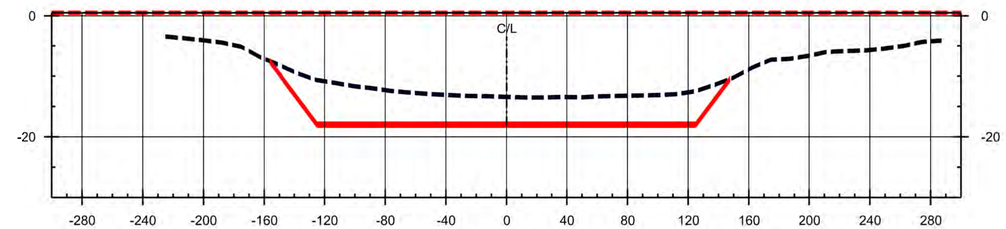
410+00



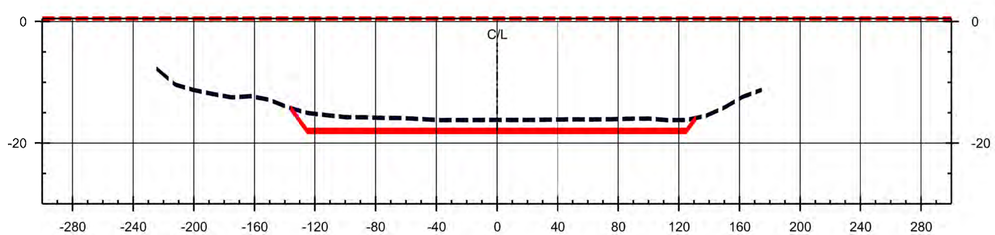
440+00



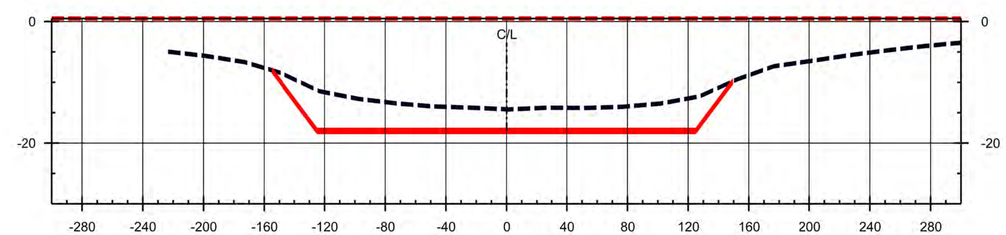
400+00



430+00



390+00



420+00

NOTES:

1. CROSS SECTIONS AND PROFILES ARE REPRESENTATIVE OF CONDITIONS THAT EXISTED AUGUST 2023.
2. ALL ELEVATIONS IN SECTIONS AND PROFILE ARE M.L.G.
3. ALL STATIONS REFLECT CHANNEL CENTERLINE.
4. REQUIRED CHANNEL BOTTOM GRADE FROM C/L STA. 275+00 TO C/L STA. 320+00 IS -16.0' M.L.G, TRANSITIONING TO -18.0 M.L.G AT C/L STA. 330+00, AND -18.0 M.L.G FROM C/L STA. 330+00 TO C/L STA. 565+00.
5. REQUIRED CHANNEL BOTTOM WIDTH FROM C/L STA. 275+00 TO C\L STA. 320+00 IS 150', TRANSITIONING TO 250' AT C/L STA. 330+00, AND 250' FROM C/L STA. 330+00 TO C\L STA. 565+00. SIDE SLOPES ARE 1V ON 3H.
6. CROSS SECTIONS ARE NOT TO SCALE.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

ED-24-007

DESIGNED BY: SCOTT CLEMENT
DWN BY: S.A.C.
CKD BY: JASON BINET
SUBMITTED BY: JASON BINET
PLOT SCALE: 1:1
PLOT DATE: 10/17/2023
SIZE: ANSI D
FILE NAME: ED_24_007_C-06
DATE: MAY 2024
SOLICITATION NO.: W912P8246046
CONTRACT NO.: W912P8-22-C-XXXX
FILE NUMBER: R-V-E-4-A-A-1

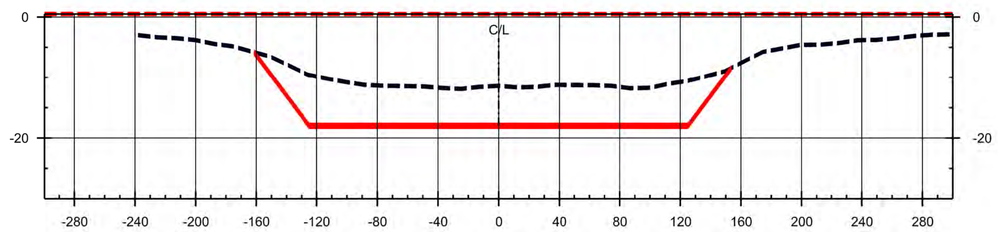
MISSISSIPPI RIVER OUTLETS
VICINITY OF VENICE, LOUISIANA
BAPTISTE COLLETTE BAR CHANNEL #22-2
MAINTENANCE DREDGING

TYPICAL SECTIONS - C/L STATION 390+00 TO 440+00

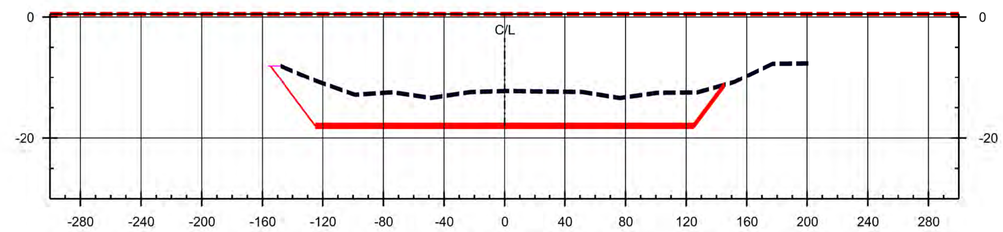
PLAQUEMINES PARISH, LA

SHEET IDENTIFICATION
C-06

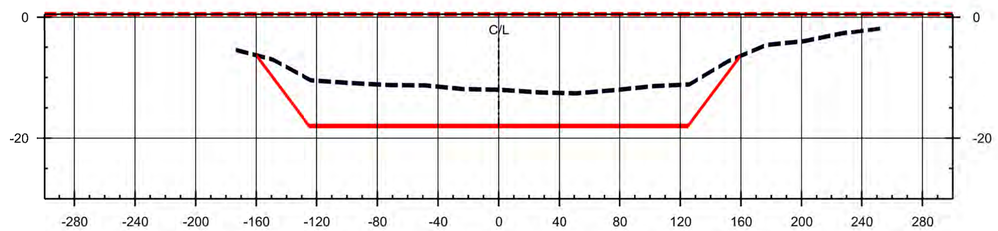
TYPICAL SECTIONS - C/L STATION 450+00 TO 500+00



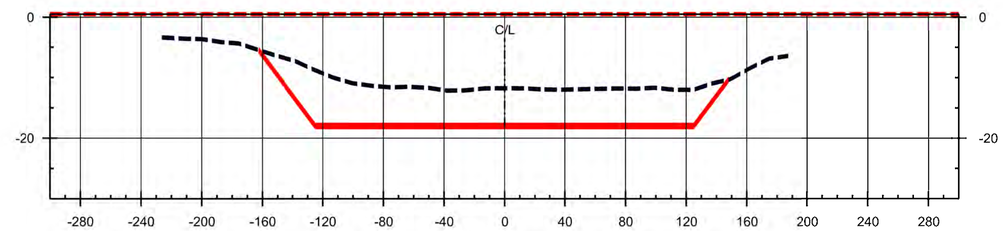
470+00



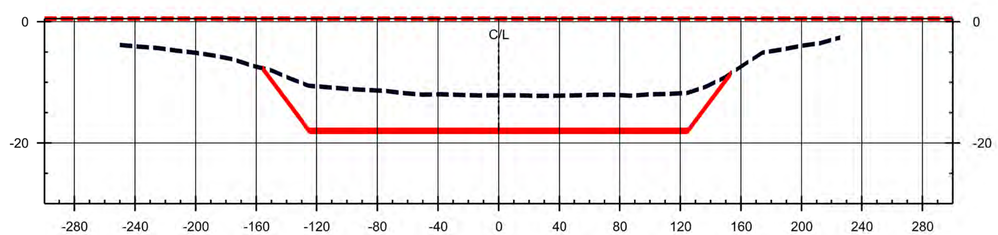
500+00



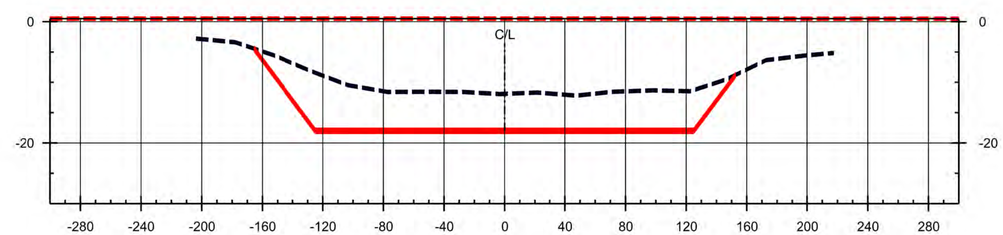
460+00



490+00



450+00



480+00

NOTES:

1. CROSS SECTIONS AND PROFILES ARE REPRESENTATIVE OF CONDITIONS THAT EXISTED AUGUST 2023.
2. ALL ELEVATIONS IN SECTIONS AND PROFILE ARE M.L.G.
3. ALL STATIONS REFLECT CHANNEL CENTERLINE.
4. REQUIRED CHANNEL BOTTOM GRADE FROM C/L STA. 275+00 TO C/L STA. 320+00 IS -16.0' M.L.G, TRANSITIONING TO -18.0 M.L.G AT C/L STA. 330+00, AND -18.0 M.L.G FROM C/L STA. 330+00 TO C/L STA. 565+00.
5. REQUIRED CHANNEL BOTTOM WIDTH FROM C/L STA. 275+00 TO C\L STA. 320+00 IS 150', TRANSITIONING TO 250' AT C/L STA. 330+00, AND 250' FROM C/L STA. 330+00 TO C\L STA. 565+00. SIDE SLOPES ARE 1V ON 3H.
6. CROSS SECTIONS ARE NOT TO SCALE.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

ED-24-007

DESIGNED BY: SCOTT CLEMENT
DWN BY: S.A.C.
CKD BY: JASON BINET
SUBMITTED BY: ANDREW BELL
PLOT SCALE: 1:100
PLOT DATE: 07/12/2023
SIZE: ANSI D
FILE NAME: ED_24_007_C-07
DATE: MAY 2024
SOLICITATION NO.: W912P8-24-B-0046
CONTRACT NO.: W912P8-24-C-XXXX
FILE NUMBER: 1-15-49454

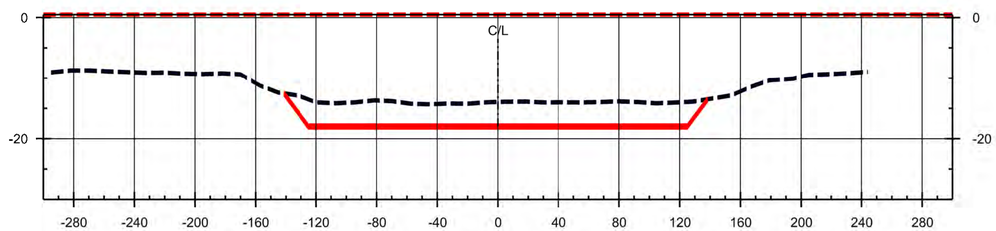
MISSISSIPPI RIVER OUTLETS
VICINITY OF VENICE, LOUISIANA
BAPTISTE COLLETTE BAR CHANNEL #22-2
MAINTENANCE DREDGING

TYPICAL SECTIONS - C/L STATION 450+00 TO 500+00

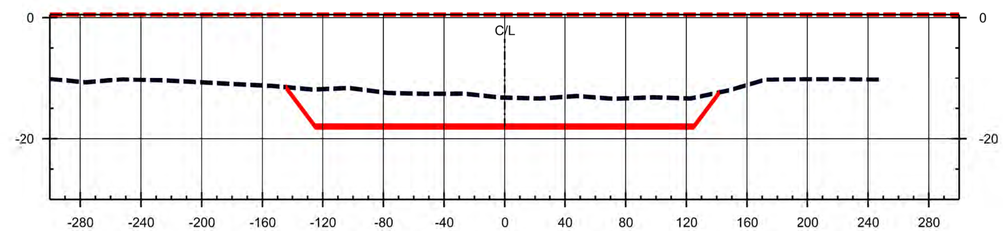
PLAQUEMINES PARISH, LA

SHEET IDENTIFICATION
C-07

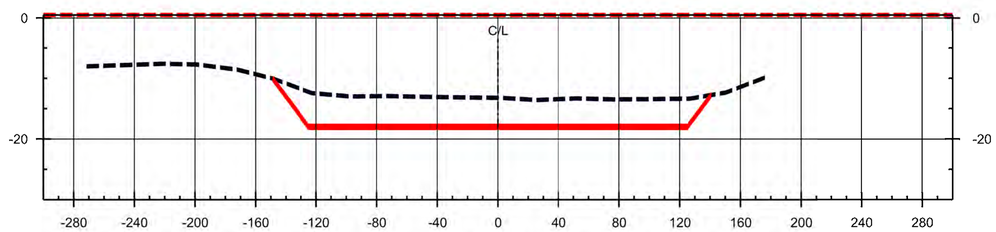
TYPICAL SECTIONS - C/L STATION 510+00 TO 560+00



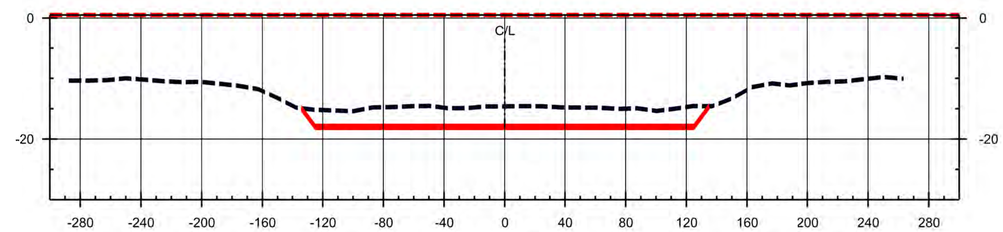
530+00



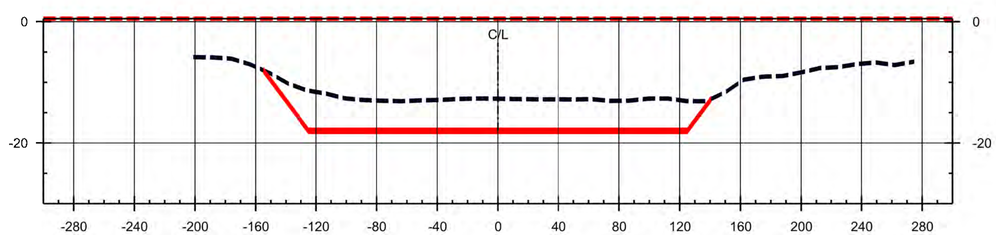
560+00



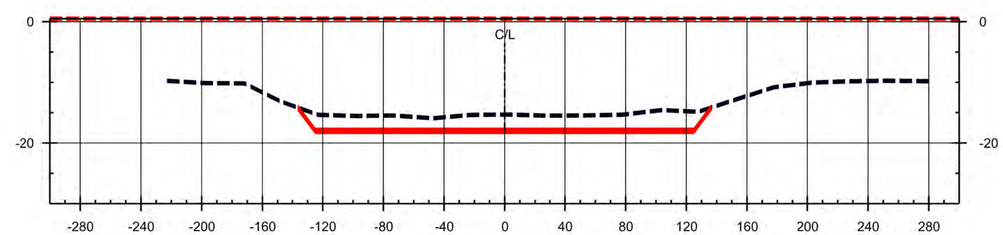
520+00



550+00



510+00



540+00

NOTES:

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3. ALL STATIONS REFLECT CHANNEL CENTERLINE.
4. REQUIRED CHANNEL BOTTOM GRADE FROM C/L STA. 275+00 TO C/L STA. 320+00 IS -16.0' M.L.G, TRANSITIONING TO -18.0 M.L.G AT C/L STA. 330+00, AND -18.0 M.L.G FROM C/L STA. 330+00 TO C/L STA. 565+00.
5. REQUIRED CHANNEL BOTTOM WIDTH FROM C/L STA. 275+00 TO C\L STA. 320+00 IS 150', TRANSITIONING TO 250' AT C/L STA. 330+00, AND 250' FROM C/L STA. 330+00 TO C\L STA. 565+00. SIDE SLOPES ARE 1V ON 3H.
6. CROSS SECTIONS ARE NOT TO SCALE.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

DESIGNED BY: SCOTT DUEMENT
DATE: MAY 2024
DWN BY: S.A.C.
CKD BY: JASON BINET
SOLICITATION NO.: W912P824B0048
SUBMITTED BY: JASON BINET
CONTRACT NO.: W912P825C0XXX
PLOT SCALE: 1:100
PLOT DATE: 07/17/2025
FILE NUMBER: H-18-4054
SIZE: ANSI D
FILE NAME: ED_24_007_C-08

ED-24-007

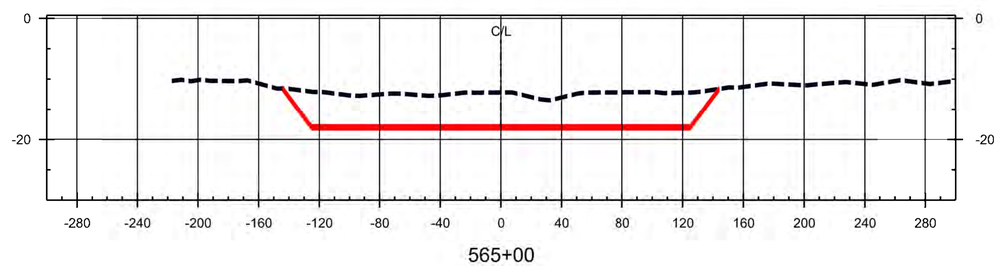
MISSISSIPPI RIVER OUTLETS
VICINITY OF VENICE, LOUISIANA
BAPTISTE COLLETTE BAR CHANNEL #22-2
MAINTENANCE DREDGING

TYPICAL SECTIONS - C/L STATION 510+00 TO 560+00

PLAQUEMINES PARISH, LA

SHEET IDENTIFICATION
C-08

TYPICAL SECTION - C/L STATION 565+00



NOTES:

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3. ALL STATIONS REFLECT CHANNEL CENTERLINE.
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5. REQUIRED CHANNEL BOTTOM WIDTH FROM C/L STA. 275+00 TO 320+00 IS 150', TRANSITIONING TO 250' AT C/L STA. 330+00, AND 250' FROM C/L STA. 330+00 TO C/L STA. 565+00. SIDE SLOPES ARE 1V ON 3H.
6. CROSS SECTIONS ARE NOT TO SCALE.

US Army Corps of Engineers®
NEW ORLEANS DISTRICT

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT
NEW ORLEANS, LOUISIANA

ED-24-007

DESIGNED BY: SCOTT CLEMENT
DWN BY: S.A.C.
CKD BY: JASON BINET
SUBMITTED BY: JASON BINET
PLOT SCALE: 1:100
PLOT DATE: 07/12/2023
SIZE: ANSI D
FILE NAME: ED_24_007_C-09
DATE: MAY 2024
SOLICITATION NO.: W912P8-24B0048
CONTRACT NO.: W912P8-22-C-XXXX
FILE NUMBER: 111-1-14-24-2

MISSISSIPPI RIVER OUTLETS
VICINITY OF VENICE, LOUISIANA
BAPTISTE COLLETTE BAR CHANNEL #22-2
MAINTENANCE DREDGING

TYPICAL SECTION - C/L STATION 565+00

PLAQUEMINES PARISH, LA

SHEET IDENTIFICATION
C-09