

US Army Corps  
of Engineers®  
New Orleans District

IFB NO. W912P820B0045

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# Passes of the Mississippi River

## **South Pass Maintenance Dredging #20-2**

Plaquemines Parish, Louisiana

Construction Solicitation  
and Specifications

July 2020

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REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
**CORPS OF ENGINEERS, NEW ORLEANS DISTRICT**  
7400 LEAKE AVENUE  
NEW ORLEANS, LOUISIANA 70118

13 AUG 2020

SOLICITATION: W912P820B0045

**UNRESTRICTED**

FOR: Passes of the Mississippi River, South Pass Maintenance Dredge No. 20- 2, Plaquemines Parish, Louisiana (ED-20-075)

TO OPEN: TIME AND PLACE OF BID OPENING WILL BE ESTABLISHED IN AN AMENDMENT

- 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 number. If you do not already have a D&B number, one can be requested from Dun and Bradstreet at (800) 333-0505 or <http://fedgov.dnb.com/webform>. 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 which is located within the System for Award Management (SAM). Prospective contractors with expired or inactive Representations and Certifications in SAM at time of award will be deemed unresponsive.
- IV. SUBCONTRACTING PLAN WILL BE DUE WITHIN TWO HOURS (2) OF VERBAL NOTIFICATION

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 dredging of shoal material from South Pass within limits shown on the contract drawings above elevation -20.0' MLG over a 300' bottom width, and satisfactory disposal of the dredged material at the disposal sites. (The estimated time of completion is 280 days after receipt of Notice to Proceed. The solicitation will include 20 drawings and specifications).

**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. 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 HEALTH REQUIREMENTS MANUAL", LATEST CONSOLIDATED VERSION.

ED-20-075

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

Bianca James Gaddison  
AND/ OR  
Karen D. Hargrave

CONTRACT SPECIALISTS

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

E-MAILS: [BIANCA.M.JAMESGADDISON@USACE.ARMY.MIL](mailto:BIANCA.M.JAMESGADDISON@USACE.ARMY.MIL)

PHONE: (504) 862-2163

AND/OR

[Karen.D.Hargrave@USACE.ARMY.MIL](mailto:Karen.D.Hargrave@USACE.ARMY.MIL)

PHONE: (504) 862-1561

COLLECT CALLS NOT ACCEPTED

NOTE: FOR THE MOST PROMPT REPSONSE, PLEASE SEND ALL QUESTIONS VIA  
E-MAIL.

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<b>SOLICITATION, OFFER, AND AWARD</b> <b>(Construction, Alteration, or Repair)</b>	1. SOLICITATION NUMBER	2. TYPE OF SOLICITATION	3. DATE ISSUED	PAGE OF PAGES
	W912P820B0045	<input checked="" type="checkbox"/> SEALED BID (IFB) <input type="checkbox"/> NEGOTIATED (RFP)	08/13/2020	1 2

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

4. CONTRACT NUMBER	5. REQUISITION/PURCHASE REQUEST NUMBER	6. PROJECT NUMBER
		ED-20-075
7. ISSUED BY	CODE	8. ADDRESS OFFER TO
U.S. Army Engineer District, New Orleans 7400 Leake Ave. New Orleans, LA 70118-3651		U.S. Army Engineer District, New Orleans Attn: CEMVN-CT-E 7400 Leake Ave., Room 172 New Orleans, LA 70118

9. FOR INFORMATION CALL:	a. NAME	b. TELEPHONE NUMBER (Include area code) (NO COLLECT CALLS)
	Bianca James Gaddison	(504) 862-2163

### 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 number, date)

Passes of the Mississippi River, South Pass Maintenance Dredging #20-2, Plaquemines Parish, Louisiana (OM-ED-075)

This is an UNRESTRICTED procurement.

Estimated value is between \$25,000,000.00 and \$100,000,000.00.

The work consist of dredging of shoal material from South Pass within limits shown on the contract drawings above elevation -20.0' MLG over a 300' bottom width and satisfactory disposal of the dredged material at the disposal sites. (The estimated time of completion is 280 calendar days after receipt of Notice to Proceed. The solicitation will include 20 drawings and specifications).

**\*\* BID OPENING TO BE ESTABLISHED BY AMENDMENT**

\* See Paragraph 00010-1.5"

11. The contractor shall begin performance within <u>180</u> calendar days and complete it within <u>460</u> calendar days after receiving <input type="checkbox"/> award, <input checked="" type="checkbox"/> notice to proceed. This performance period is <input checked="" type="checkbox"/> mandatory <input type="checkbox"/> negotiable. (See <u>00800-3.2</u> ).	12b. CALENDAR DAYS
12a. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (If "YES", indicate within how many calendar days after award in Item 12b.) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	1(one)

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 will 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 ☒ 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 30 calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

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

14. NAME AND ADDRESS OF OFFEROR (Include ZIP Code)		15. TELEPHONE NUMBER (Include area code)	
		16. REMITTANCE ADDRESS (Include only if different than 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 requirement stated in Item 13d. Failure to insert any number means the offeror accepts the minimum in Item 13d.)

AMOUNTS 

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 NUMBER										
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 26	25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO <input type="checkbox"/> 10 U.S.C. 2304(c) ( ) <input type="checkbox"/> 41 U.S.C. 3304(a) ( )
26. ADMINISTERED BY USACE, New Orleans Area Office 7400 Leake Avenue New Orleans, LA 70118	27. PAYMENT WILL BE MADE BY US ARMY CORPS OF ENGR FINANCE CENTER 5722 INTEGRITY DRIVE MILLINGTON TN 38054-5005	

**CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE**

<input type="checkbox"/> 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 requirements 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 incorporated by reference in or attached to this contract.	<input type="checkbox"/> 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)		
30b. SIGNATURE	30c. DATE	31b. UNITED STATES OF AMERICA	31c. DATE
		BY	

# SECTION 00010 – BIDDING SCHEDULE

Passes of the Mississippi River  
South Pass  
Maintenance Dredging # 20-2  
Plaquemines Parish, Louisiana

Item	DESCRIPTION	Estimated Quantity	Unit	Unit Price	Estimated Amount
<b>BASE WORK</b>					
0001	Mobilization and Demobilization	1	JOB		
0002	Dredging				
0002AA	First 8,000,000	8,000,000	CY		
0002AB	All Over 8,000,000	2,500,000	CY		
0003	Flotation Access Channel/Access Corridor	1	JOB		
0004	Dike and Closure Construction/Maintenance	1	JOB		
<b>TOTAL BASE WORK:</b>					<b>\$</b>
<b>OPTIONAL WORK (OW)</b>					
0005	Bird Nesting Prevention and Avoidance Measures - OW	90	DAY		
<b>TOTAL OPTIONAL WORK:</b>					<b>\$</b>
<b>TOTAL BASE WORK + OPTIONAL WORK:</b>					<b>\$</b>

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 24 hours 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: 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 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 within three days prior to the estimated completion date of the basic line item or any previously exercised option. 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 OPTIONAL WORK ITEM: If the Government activates the Optional Work Item, 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 8: TIME ADJUSTMENT IN THE EVENT OF THE EXERCISE OF OPTIONAL WORK. In the event that the OPTIONAL WORK is exercised under the terms of the contract, the time required for completion of the contract shall be the original contract duration of 280 calendar days established for the BASE WORK items specified in Section 00700, CONTRACT CLAUSES, paragraph entitled "COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK". The time required for completion of the Optional Work on this contract will not be adjusted but shall be performed concurrent with the original base contract duration.

NOTE 9: The quantity shown in Item 0002 is for evaluation purposes only; payment for this line item will be based on the actual quantity used and they shall be excluded from the "VARIATIONS IN ESTIMATED QUANTITIES" clause.

NOTE 10: Any VEQ analysis under Option Item 0002AA will be based upon the variation in the line item quantity provided in the Bid Schedule above, and not a variation in any lesser quantity actually awarded under that option line item.

NOTE 11: 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>

<b>BID BOND</b> <i>(See instructions on reverse)</i>	DATE BOND EXECUTED <i>(Must not be later than bid opening date)</i>	<b>OMB Control Number: 9000-0045</b> <b>Expiration Date: 8/31/2022</b>
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 <i>(Legal name and business address)</i>		TYPE OF ORGANIZATION <i>("X" one)</i> <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> JOINT VENTURE <input type="checkbox"/> CORPORATION <input type="checkbox"/> OTHER <i>(Specify)</i>
		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 <i>(Construction, Supplies or Services)</i>	

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.	2.	3.	Corporate Seal
	(Seal)	(Seal)	(Seal)	
NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.	3.	

INDIVIDUAL SURETY(IES)		
SIGNATURE(S)	1. (Seal)	2. (Seal)
NAME(S) <i>(Typed)</i>	1.	2.

CORPORATE SURETY(IES)				
SURETY A	NAME & ADDRESS	STATE OF INCORPORATION	LIABILITY LIMIT (\$)	Corporate Seal
	SIGNATURE(S)	1.	2.	
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.	

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

52.204-22	Alternative Line Item Proposal	JAN 2017
52.214-4	False Statements In Bids	APR 1984
52.214-6	Explanation To Prospective Bidders	APR 1984
52.214-7	Late Submissions, Modifications, and Withdrawals of Bids	NOV 1999
52.214-19	Contract Award-Sealed Bidding-Construction	AUG 1996
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
52.225-10	Notice of Buy American Requirement--Construction Materials	MAY 2014
52.232-13	Notice Of Progress Payments	APR 1984

### CLAUSES INCORPORATED BY FULL TEXT

#### 52.214-3 AMENDMENTS TO INVITATIONS FOR BIDS (DEC 2016)

- (a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.
- (b) (1) Bidders shall acknowledge receipt of any amendment to this solicitation--
  - (i) By signing and returning the amendment;
  - (ii) By identifying the amendment number and date in space provided for this purpose on the form for submitting a bid;
  - (iii) By letter;
  - (iv) By facsimile, if facsimile bids are authorized in the solicitation; or
  - (v) By email, if email bids are authorized in the solicitation.
- (2) The Government must receive the acknowledgement by the time and at the place specified for receipt of bids.

(End of provision)

#### 52.214-5 SUBMISSION OF BIDS (DEC 2016)

- (a) Bids and bid modifications shall be submitted in sealed envelopes or packages (unless submitted by electronic means) (1) addressed to the office specified in the solicitation, and (2) showing the time and date specified for receipt, the solicitation number, and the name and address of the bidder.
- (b) Bidders using commercial carrier services shall ensure that the bid is addressed and marked on the outermost envelope or wrapper as prescribed in subparagraphs (a)(1) and (2) of this provision when delivered to the office specified in the solicitation.

(c) Facsimile bids, modifications, or withdrawals, will not be considered unless authorized by the solicitation.

(d) Bids submitted by electronic commerce shall be considered only if the electronic commerce method was specifically stipulated or permitted by the solicitation.

(End of provision)

#### 52.214-18 PREPARATION OF BIDS--CONSTRUCTION (APR 1984)

(a) Bids must be (1) submitted on the forms furnished by the Government or on copies of those forms, and (2) manually signed. The person signing a bid must initial each erasure or change appearing on any bid form.

(b) The bid form may require bidders to submit bid prices for one or more items on various bases, including--

(1) Lump sum bidding;

(2) Alternate prices;

(3) Units of construction; or

(4) Any combination of subparagraphs (1) through (3) above.

(c) If the solicitation requires bidding on all items, failure to do so will disqualify the bid. If bidding on all items is not required, bidders should insert the words "no bid" in the space provided for any item on which no price is submitted.

(d) Alternate bids will not be considered unless this solicitation authorizes their submission.

(End of provision)

#### 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)

#### 52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)



(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for each trade	Goals for female participation for each trade
20%-23 %	6.9%

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

- (1) Name, address, and telephone number of the subcontractor;
- (2) Employer's identification number of the subcontractor;
- (3) Estimated dollar amount of the subcontract;
- (4) Estimated starting and completion dates of the subcontract; and
- (5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is **Plaquemines Parish, Louisiana**

(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 20% percent 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 the forms 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 Ione M. Cataldo, Contracting Officer, U.S. Army Corps of Engineers, ATTN: CEMVN-CT-E, 7400 Leake Avenue, New Orleans, LA 70118-3651.

(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)

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: Mr. Charles Freeman, Area Engineer, New Orleans Area Office  
Address: 7400 Leake Avenue, New Orleans, LA 70118-3651  
Telephone: 504-862-1554

(End of provision)

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://www.acquisition.gov>

(End of provision)

52.252-5 AUTHORIZED DEVIATIONS IN PROVISIONS (APR 1984)

(a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the provision.

(b) The use in this solicitation of any DFARS (48 CFR Chapter 2) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of provision)

U.S. Army Corps of Engineers, New Orleans District  
Current Small Business Program Target Percentages  
FY2020

SUBCONTRACTING

Small Business (SB)	44.92%
Small Disadvantaged Business (SDB)	13.25%
Women-Owned Small Business (WOSB/EDWOSB)	7.87%
HUBZone Small Business (HUBZone)	12.0%
Service-Disabled Veteran Small Business (SDVOSB)	8.0%

NOTE: The above figures are subject to change. Contact the New Orleans District Small Business Office for further information.

Section 00600 - Reps and Certs

CLAUSES INCORPORATED BY REFERENCE

52.203-18	Prohibition on Contracting With Entities That Require Certain Internal Confidentiality Agreements or Statements--Representation	JAN 2017
52.204-7	System for Award Management	OCT 2018
52.204-16	Commercial and Government Entity Code Reporting	JUL 2016
52.204-24	Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment.	DEC 2019
252.203-7005	Representation Relating to Compensation of Former DoD Officials	NOV 2011

CLAUSES INCORPORATED BY FULL TEXT

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (MAR 2020)

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

(2) The small business size standard is \$39,500,000.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(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 will be performed in the United States or its outlying areas.

(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 will be performed in the United States or its outlying areas.

(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 items.

(xvii) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA-designated items; or include the clause at 52.223-2, Affirmative Procurement 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 I, II, and III.) This provision applies to solicitations containing the clause at 52.225- 3.

(A) If the acquisition value is less than \$25,000, the basic provision applies.

(B) If the acquisition value is \$25,000 or more but is less than \$50,000, the provision with its Alternate I applies.

(C) If the acquisition value is \$50,000 or more but is less than \$83,099, the provision with its Alternate II applies.

(D) If the acquisition value is \$83,099 or more but is less than \$100,000, 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) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (Alternate I only).

(vii) 52.227-6, Royalty Information.

(A) Basic.

(B) Alternate I.

(viii) 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
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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)

#### 52.209-7 INFORMATION REGARDING RESPONSIBILITY MATTERS (OCT 2018)

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

Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative Proceedings, Civilian Board of Contract Appeals Proceedings, and Armed Services Board of Contract Appeals Proceedings). This includes administrative proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include agency actions such as contract audits, site visits, corrective plans, or inspection of deliverables.



Federal contracts and grants with total value greater than \$10,000,000 means--

- (1) The total value of all current, active contracts and grants, including all priced options; and
- (2) The total value of all current, active orders including all priced options under indefinite-delivery, indefinite-quantity, 8(a), or requirements contracts (including task and delivery and multiple-award Schedules).

Principal means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

(b) The offeror ( ) has ( ) does not have current active Federal contracts and grants with total value greater than \$10,000,000.

(c) If the offeror checked “has” in paragraph (b) of this provision, the offeror represents, by submission of this offer, that the information it has entered in the Federal Awardee Performance and Integrity Information System (FAPIS) is current, accurate, and complete as of the date of submission of this offer with regard to the following information:

(1) Whether the offeror, and/or any of its principals, has or has not, within the last five years, in connection with the award to or performance by the offeror of a Federal contract or grant, been the subject of a proceeding, at the Federal or State level that resulted in any of the following dispositions:

(i) In a criminal proceeding, a conviction.

(ii) In a civil proceeding, a finding of fault and liability that results in the payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more.

(iii) In an administrative proceeding, a finding of fault and liability that results in--

(A) The payment of a monetary fine or penalty of \$5,000 or more; or

(B) The payment of a reimbursement, restitution, or damages in excess of \$100,000.

(iv) In a criminal, civil, or administrative proceeding, a disposition of the matter by consent or compromise with an acknowledgment of fault by the Contractor if the proceeding could have led to any of the outcomes specified in paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this provision.

(2) If the offeror has been involved in the last five years in any of the occurrences listed in (c)(1) of this provision, whether the offeror has provided the requested information with regard to each occurrence.

(d) The offeror shall post the information in paragraphs (c)(1)(i) through (c)(1)(iv) of this provision in FAPIS as required through maintaining an active registration in the System for Award Management, which can be accessed via <https://www.sam.gov> (see 52.204-7).

(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)

#### 52.209-12 CERTIFICATION REGARDING TAX MATTERS (FEB 2016)

(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 \$5,000,000 (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)

#### 52.209-13 VIOLATION OF ARMS CONTROL TREATIES OR AGREEMENTS--CERTIFICATION (JUL 2020)

(a) This provision does not apply to acquisitions below the simplified acquisition threshold or to acquisitions of commercial items as defined at FAR 2.101.

(b) Certification. [Offeror shall check either (1) or (2).]

\_\_\_\_ (1) The Offeror certifies that--

(i) It does not engage and has not engaged in any activity that contributed to or was a significant factor in the President's or Secretary of State's determination that a foreign country is in violation of its obligations undertaken in any arms control, nonproliferation, or disarmament agreement to which the United States is a party, or is not adhering to its arms control, nonproliferation, or disarmament commitments in which the United States is a participating state. The determinations are described in the most recent unclassified annual report provided to Congress pursuant to section 403 of the Arms Control and Disarmament Act (22 U.S.C. 2593a). The report is available via the internet at <https://www.state.gov/bureaus-offices/under-secretary-for-arms-control-and-international-security-affairs/bureau-of-arms-control-verification-and-compliance/>; and

(ii) No entity owned or controlled by the Offeror has engaged in any activity that contributed to or was a significant factor in the President's or Secretary of State's determination that a foreign country is in violation of its obligations undertaken in any arms control, nonproliferation, or disarmament agreement to which the United States is a party, or is not adhering to its arms control, nonproliferation, or disarmament commitments in which the United States is a participating state. The determinations are described in the most recent unclassified annual report provided to Congress pursuant to section 403 of the Arms Control and Disarmament Act (22 U.S.C. 2593a). The report is available via the internet at <https://www.state.gov/bureaus-offices/under-secretary-for-arms-control-and-international-security-affairs/bureau-of-arms-control-verification-and-compliance/>; or

\_\_\_\_ (2) The Offeror is providing separate information with its offer in accordance with paragraph (d)(2) of this provision.

(c) Procedures for reviewing the annual unclassified report (see paragraph (b)(1) of this provision). For clarity, references to the report in this section refer to the entirety of the annual unclassified report, including any separate reports that are incorporated by reference into the annual unclassified report.

(1) Check the table of contents of the annual unclassified report and the country section headings of the reports incorporated by reference to identify the foreign countries listed there. Determine whether the Offeror or any person owned or controlled by the Offeror may have engaged in any activity related to one or more of such foreign countries.

(2) If there may have been such activity, review all findings in the report associated with those foreign countries to determine whether or not each such foreign country was determined to be in violation of its obligations undertaken in an arms control, nonproliferation, or disarmament agreement to which the United States is a party, or to be not adhering to its arms control, nonproliferation, or disarmament commitments in which the United States is a participating state. For clarity, in the annual report an explicit certification of non-compliance is equivalent to a determination of violation. However, the following statements in the annual report are not equivalent to a determination of violation:

(i) An inability to certify compliance.

(ii) An inability to conclude compliance.

(iii) A statement about compliance concerns.

(3) If so, determine whether the Offeror or any person owned or controlled by the Offeror has engaged in any activity that contributed to or is a significant factor in the determination in the report that one or more of these foreign countries is in violation of its obligations undertaken in an arms control, nonproliferation, or disarmament agreement to which the United States is a party, or is not adhering to its arms control, nonproliferation, or disarmament commitments in which the United States is a participating state. Review the narrative for any such findings reflecting a determination of violation or non-adherence related to those foreign countries in the report, including the finding itself, and to the extent necessary, the conduct giving rise to the compliance or adherence concerns, the analysis of compliance or adherence concerns, and efforts to resolve compliance or adherence concerns.

(4) The Offeror may submit any questions with regard to this report by email to [NDAA1290Cert@state.gov](mailto:NDAA1290Cert@state.gov). To the extent feasible, the Department of State will respond to such email inquiries within 3 business days.

(d) Do not submit an offer unless--

(1) A certification is provided in paragraph (b)(1) of this provision and submitted with the offer; or

(2) In accordance with paragraph (b)(2) of this provision, the Offeror provides with its offer information that the President of the United States has--

(i) Waived application under U.S.C. 2593e(d) or (e); or

(ii) Determined under 22 U.S.C. 2593e(g)(2) that the entity has ceased all activities for which measures were imposed under 22 U.S.C.2593e(b).

(e) Remedies. The certification in paragraph (b)(1) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly submitted a false certification, in addition to other remedies available to the Government, such as suspension or debarment, the Contracting Officer may terminate any contract resulting from the false certification.

(End of provision)

#### 252.204-7007 ALTERNATE A, ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JUN 2019)

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

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

(i) 252.209-7003, Reserve Officer Training Corps and Military Recruiting on Campus--Representation. Applies to all solicitations with institutions of higher education.

(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) 252.222-7007, Representation Regarding Combating Trafficking in Persons, as prescribed in 222.1771. Applies to solicitations with a value expected to exceed the simplified acquisition threshold.

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

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

(vi) 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.

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

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

(ix) 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.

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

\_\_\_ (iii) 252.225-7020, Trade Agreements Certificate.

\_\_\_ Use with Alternate I.

**XXX** (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.

(e) The offeror has completed the annual representations and certifications electronically via the SAM Web site at <https://www.acquisition.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 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 located in the SAM database.

(End of provision)

## Section 00700 - Contract Clauses

### CLAUSES INCORPORATED BY REFERENCE

52.202-1	Definitions	JUN 2020
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	MAY 2014
52.203-6	Restrictions On Subcontractor Sales To The Government	JUN 2020
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
52.203-17	Contractor Employee Whistleblower Rights and Requirement To Inform Employees of Whistleblower Rights	JUN 2020
52.203-19	Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements	JAN 2017
52.204-4	Printed or Copied Double-Sided on Postconsumer Fiber Content Paper	MAY 2011
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	JUL 2016
52.204-19	Incorporation by Reference of Representations and Certifications.	DEC 2014
52.204-23	Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities.	JUL 2018
52.204-25	Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.	AUG 2019
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	JUN 2020
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
52.211-18	Variation in Estimated Quantity	APR 1984
52.214-4	False Statements In Bids	APR 1984
52.214-26	Audit and Records--Sealed Bidding	JUN 2020
52.214-27	Price Reduction for Defective Certified Cost or Pricing Data - Modifications - Sealed Bidding	JUN 2020
52.214-28	Subcontracting Certified Cost Or Pricing Data-- Modifications--Sealed Bidding	JUN 2020
52.214-29	Order Of Precedence--Sealed Bidding	JAN 1986
52.219-8	Utilization of Small Business Concerns	OCT 2018
52.219-9 Alt I (Dev)	Small Business Subcontracting Plan (Deviation 2018-O0018) - Alternate I	AUG 2018
52.219-28	Post-Award Small Business Program Rerepresentation	MAY 2020
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	AUG 2018
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
52.222-13	Compliance With Construction Wage Rate Requirements and Related Regulations	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
52.222-35	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	JAN 2019
52.222-54	Employment Eligibility Verification	OCT 2015
52.222-55	Minimum Wages Under Executive Order 13658	DEC 2015
52.222-62	Paid Sick Leave Under Executive Order 13706	JAN 2017
52.223-2	Affirmative Procurement of Biobased Products Under Service and Construction Contracts	SEP 2013
52.225-13	Restrictions on Certain Foreign Purchases	JUN 2008
52.227-1	Authorization and Consent	JUN 2020
52.227-2	Notice And Assistance Regarding Patent And Copyright Infringement	JUN 2020
52.228-2	Additional Bond Security	OCT 1997
52.228-11	Pledges Of Assets	AUG 2018
52.228-12	Prospective Subcontractor Requests for Bonds	MAY 2014
52.228-15	Performance and Payment Bonds--Construction	JUN 2020
52.229-3	Federal, State And Local Taxes	FEB 2013
52.232-5	Payments under Fixed-Price Construction Contracts	MAY 2014
52.232-17	Interest	MAY 2014
52.232-18	Availability Of Funds	APR 1984
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	DEC 2013
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
52.236-21	Specifications and Drawings for Construction	FEB 1997
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
52.244-2	Subcontracts	JUN 2020
52.244-6	Subcontracts for Commercial Items	JUN 2020
52.246-12	Inspection of Construction	AUG 1996
52.249-2 Alt I	Termination for Convenience of the Government (Fixed-Price) (Apr 2012) - Alternate I	SEP 1996
52.249-10	Default (Fixed-Price Construction)	APR 1984
52.252-6	Authorized Deviations In Clauses	APR 1984
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7000	Requirements Relating to Compensation of Former DoD Officials	SEP 2011
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DEC 2008
252.203-7002	Requirement to Inform Employees of Whistleblower Rights	SEP 2013
252.204-7000	Disclosure Of Information	OCT 2016
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7006	Billing Instructions	OCT 2005
252.204-7012	Safeguarding Covered Defense Information and Cyber Incident Reporting	DEC 2019
252.204-7015	Notice of Authorized Disclosure of Information for Litigation Support	MAY 2016
252.205-7000	Provision Of Information To Cooperative Agreement Holders	DEC 1991
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	DEC 2010
252.223-7004	Drug Free Work Force	SEP 1988
252.225-7001	Buy American And Balance Of Payments Program-- Basic	DEC 2017
252.225-7002	Qualifying Country Sources As Subcontractors	DEC 2017
252.225-7012	Preference For Certain Domestic Commodities	DEC 2017
252.225-7048	Export-Controlled Items	JUN 2013
252.226-7001	Utilization of Indian Organizations and Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns	APR 2019
252.232-7003	Electronic Submission of Payment Requests and Receiving Reports	DEC 2018
252.232-7010	Levies on Contract Payments	DEC 2006
252.236-7000	Modification Proposals-Price Breakdown	DEC 1991
252.239-7001	Information Assurance Contractor Training and Certification	JAN 2008
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 2012
252.244-7000	Subcontracts for Commercial Items	JUN 2013

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52.203-13 CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT (JUN 2020)

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

Agent means any individual, including a director, an officer, an employee, or an independent Contractor, authorized to act on behalf of the organization.

Full cooperation—

(1) Means disclosure to the Government of the information sufficient for law enforcement to identify the nature and extent of the offense and the individuals responsible for the conduct. It includes providing timely and complete response to Government auditors' and investigators' request for documents and access to employees with information;

(2) Does not foreclose any Contractor rights arising in law, the FAR, or the terms of the contract. It does not require--

(i) A Contractor to waive its attorney-client privilege or the protections afforded by the attorney work product doctrine; or

(ii) Any officer, director, owner, or employee of the Contractor, including a sole proprietor, to waive his or her attorney client privilege or Fifth Amendment rights; and

(3) Does not restrict a Contractor from--

(i) Conducting an internal investigation; or

(ii) Defending a proceeding or dispute arising under the contract or related to a potential or disclosed violation.

Principal means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

Subcontract means any contract entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract.

Subcontractor means any supplier, distributor, vendor, or firm that furnished supplies or services to or for a prime contractor or another subcontractor.

United States means the 50 States, the District of Columbia, and outlying areas.

(b) Code of business ethics and conduct. (1) Within 30 days after contract award, unless the Contracting Officer establishes a longer time period, the Contractor shall--

(i) Have a written code of business ethics and conduct;

(ii) Make a copy of the code available to each employee engaged in performance of the contract.

(2) The Contractor shall--

(i) Exercise due diligence to prevent and detect criminal conduct; and

(ii) Otherwise promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law.

(3)(i) The Contractor shall timely disclose, in writing, to the agency Office of the Inspector General (OIG), with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of this contract or any subcontract thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed--

(A) A violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 of the United States Code; or

(B) A violation of the civil False Claims Act (31 U.S.C. 3729-3733).

(ii) The Government, to the extent permitted by law and regulation, will safeguard and treat information obtained pursuant to the Contractor's disclosure as confidential where the information has been marked "confidential" or "proprietary" by the company. To the extent permitted by law and regulation, such information will not be released by the Government to the public pursuant to a Freedom of Information Act request, 5 U.S.C. Section 552, without prior notification to the Contractor. The Government may transfer documents provided by the Contractor to any department or agency within the Executive Branch if the information relates to matters within the organization's jurisdiction.

(iii) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the Contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract.

(c) Business ethics awareness and compliance program and internal control system. This paragraph (c) does not apply if the Contractor has represented itself as a small business concern pursuant to the award of this contract or if this contract is for the acquisition of a commercial item as defined at FAR 2.101. The Contractor shall establish the following within 90 days after contract award, unless the Contracting Officer establishes a longer time period:

(1) An ongoing business ethics awareness and compliance program.

(i) This program shall include reasonable steps to communicate periodically and in a practical manner the Contractor's standards and procedures and other aspects of the Contractor's business ethics awareness and compliance program and internal control system, by conducting effective training programs and otherwise disseminating information appropriate to an individual's respective roles and responsibilities.

(ii) The training conducted under this program shall be provided to the Contractor's principals and employees, and as appropriate, the Contractor's agents and subcontractors.

(2) An internal control system.

(i) The Contractor's internal control system shall--

(A) Establish standards and procedures to facilitate timely discovery of improper conduct in connection with Government contracts; and

(B) Ensure corrective measures are promptly instituted and carried out.

(ii) At a minimum, the Contractor's internal control system shall provide for the following:

(A) Assignment of responsibility at a sufficiently high level and adequate resources to ensure effectiveness of the business ethics awareness and compliance program and internal control system.

(B) Reasonable efforts not to include an individual as a principal, whom due diligence would have exposed as having engaged in conduct that is in conflict with the Contractor's code of business ethics and conduct.

(C) Periodic reviews of company business practices, procedures, policies, and internal controls for compliance with the Contractor's code of business ethics and conduct and the special requirements of Government contracting, including--

(1) Monitoring and auditing to detect criminal conduct;

(2) Periodic evaluation of the effectiveness of the business ethics awareness and compliance program and internal control system, especially if criminal conduct has been detected; and

(3) Periodic assessment of the risk of criminal conduct, with appropriate steps to design, implement, or modify the business ethics awareness and compliance program and the internal control system as necessary to reduce the risk of criminal conduct identified through this process.

(D) An internal reporting mechanism, such as a hotline, which allows for anonymity or confidentiality, by which employees may report suspected instances of improper conduct, and instructions that encourage employees to make such reports.

(E) Disciplinary action for improper conduct or for failing to take reasonable steps to prevent or detect improper conduct.

(F) Timely disclosure, in writing, to the agency OIG, with a copy to the Contracting Officer, whenever, in connection with the award, performance, or closeout of any Government contract performed by the Contractor or a subcontractor thereunder, the Contractor has credible evidence that a principal, employee, agent, or subcontractor of the Contractor has committed a violation of Federal criminal law involving fraud, conflict of interest, bribery, or gratuity violations found in Title 18 U.S.C. or a violation of the civil False Claims Act (31 U.S.C. 3729-3733).

(1) If a violation relates to more than one Government contract, the Contractor may make the disclosure to the agency OIG and Contracting Officer responsible for the largest dollar value contract impacted by the violation.

(2) If the violation relates to an order against a Governmentwide acquisition contract, a multi-agency contract, a multiple-award schedule contract such as the Federal Supply Schedule, or any other procurement instrument intended for use by multiple agencies, the contractor shall notify the OIG of the ordering agency and the IG of the agency responsible for the basic contract, and the respective agencies' contracting officers.

(3) The disclosure requirement for an individual contract continues until at least 3 years after final payment on the contract.

(4) The Government will safeguard such disclosures in accordance with paragraph (b)(3)(ii) of this clause.

(G) Full cooperation with any Government agencies responsible for audits, investigations, or corrective actions.

(d) Subcontracts.

(1) The Contractor shall include the substance of this clause, including this paragraph (d), in subcontracts that exceed the threshold specified in FAR 3.1004(a) on the date of subcontract award and a performance period of more than 120 days.

(2) In altering this clause to identify the appropriate parties, all disclosures of violation of the civil False Claims Act or of Federal criminal law shall be directed to the agency Office of the Inspector General, with a copy to the Contracting Officer.

(End of clause)

2019)

(a) Definitions. As used in this provision, “covered telecommunications equipment or services” has 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) Representation. 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.

(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 180 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 460 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 mean dredging.**

#### LIQUIDATED DAMAGES - CONSTRUCTION (FAR 52.211-12 – SEPT 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 \$2,525.00 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 within 3 days prior to the estimated completion of the base item. Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

(End of clause)

Note: The word "schedule" in this clause refers to the bidding schedule.

#### 52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (JUN 2020)

(a) This clause does not apply to small business concerns.

(b) Definitions. As used in this clause—

“Alaska Native Corporation (ANC)” means any Regional Corporation, Village Corporation, Urban Corporation, or Group Corporation organized under the laws of the State of Alaska in accordance with the Alaska Native Claims Settlement Act, as amended ([43 U.S.C. 1601](#), et seq.) and which is considered a minority and economically disadvantaged concern under the criteria at [43 U.S.C. 1626\(e\)\(1\)](#). This definition also includes ANC direct and indirect subsidiary corporations, joint ventures, and partnerships that meet the requirements of [43 U.S.C. 1626\(e\)\(2\)](#).

“Commercial item” means a product or service that satisfies the definition of commercial item in Federal Acquisition Regulation (FAR) [2.101](#)

“Commercial plan” means a subcontracting plan (including goals) that covers the offeror’s fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line).

“Electronic Subcontracting Reporting System (eSRS)” means the Governmentwide, electronic, web-based system for small business subcontracting program reporting. The eSRS is located at <http://www.esrs.gov>.

“Indian tribe” means any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act ([43 U.S.C.A. 1601](#) et seq.), that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs in accordance with [25 U.S.C. 1452\(e\)](#). This definition also includes Indian-owned economic enterprises that meet the requirements of [25 U.S.C. 1452\(e\)](#).

“Individual subcontracting plan” means a subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror’s planned subcontracting in support of the specific contract, except that indirect costs incurred for common or joint purposes may be allocated on a prorated basis to the contract.

“Master subcontracting plan” means a subcontracting plan that contains all the required elements of an individual subcontracting plan, except goals, and may be incorporated into individual subcontracting plans, provided the master subcontracting plan has been approved.

“Reduced payment” means a payment that is for less than the amount agreed upon in a subcontract in accordance with its terms and conditions, for supplies and services for which the Government has paid the prime contractor.

“Subcontract” means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

“Total contract dollars” means the final anticipated dollar value, including the dollar value of all options.

“Untimely payment” means a payment to a subcontractor that is more than 90 days past due under the terms and conditions of a subcontract for supplies and services for which the Government has paid the prime contractor.

(c)(1) The Offeror, upon request by the Contracting Officer, shall submit and negotiate a subcontracting plan, where applicable, that separately addresses subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns. If the Offeror is submitting an individual subcontracting plan, the plan must separately address subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The subcontracting plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer. Failure to submit and negotiate the subcontracting plan shall make the Offeror ineligible for award of a contract.

(2)(i) The Contractor may accept a subcontractor's written representations of its size and socioeconomic status as a small business, small disadvantaged business, veteran-owned small business, service-disabled veteran-owned small business, or a women-owned small business if the subcontractor represents that the size and socioeconomic status representations with its offer are current, accurate, and complete as of the date of the offer for the subcontract.

(ii) The Contractor may accept a subcontractor's representations of its size and socioeconomic status as a small business, small disadvantaged business, veteran-owned small business, service-disabled veteran-owned small business, or a women-owned small business in the System for Award Management (SAM) if–

(A) The subcontractor is registered in SAM; and

(B) The subcontractor represents that the size and socioeconomic status representations made in SAM are current, accurate and complete as of the date of the offer for the subcontract.

(iii) The Contractor may not require the use of SAM for the purposes of representing size or socioeconomic status in connection with a subcontract.

(iv) In accordance with 13 CFR 121.411, 124.1015, 125.29, 126.900, and 127.700, a contractor acting in good faith is not liable for misrepresentations made by its subcontractors regarding the subcontractor's size or socioeconomic status.

(d) The Offeror's subcontracting plan shall include the following:

(1) Separate goals, expressed in terms of total dollars subcontracted, and as a percentage of total planned subcontracting dollars, for the use of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. For individual subcontracting plans, and if required by the Contracting Officer, goals shall also be expressed in terms of percentage of total contract dollars, in addition to the goals expressed as a percentage of total subcontract dollars. The Offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs. In accordance with [43 U.S.C. 1626](#)–

(i) Subcontracts awarded to an ANC or Indian tribe shall be counted towards the subcontracting goals for small business and small disadvantaged business concerns, regardless of the size or Small Business Administration certification status of the ANC or Indian tribe; and

(ii) Where one or more subcontractors are in the subcontract tier between the prime Contractor and the ANC or Indian tribe, the ANC or Indian tribe shall designate the appropriate Contractor(s) to count the subcontract towards its small business and small disadvantaged business subcontracting goals.

(A) In most cases, the appropriate Contractor is the Contractor that awarded the subcontract to the ANC or Indian tribe.

(B) If the ANC or Indian tribe designates more than one Contractor to count the subcontract toward its goals, the ANC or Indian tribe shall designate only a portion of the total subcontract award to each Contractor. The sum of the amounts designated to various Contractors cannot exceed the total value of the subcontract.

(C) The ANC or Indian tribe shall give a copy of the written designation to the Contracting Officer, the prime Contractor, and the subcontractors in between the prime Contractor and the ANC or Indian tribe within 30 days of the date of the subcontract award.

(D) If the Contracting Officer does not receive a copy of the ANC's or the Indian tribe's written designation within 30 days of the subcontract award, the Contractor that awarded the subcontract to the ANC or Indian tribe will be considered the designated Contractor.

(2) A statement of—

(i) Total dollars planned to be subcontracted for an individual subcontracting plan; or the Offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan;

(ii) Total dollars planned to be subcontracted to small business concerns (including ANC and Indian tribes);

(iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;

(iv) Total dollars planned to be subcontracted to service-disabled veteran-owned small business;

(v) Total dollars planned to be subcontracted to HUBZone small business concerns;

(vi) Total dollars planned to be subcontracted to small disadvantaged business concerns (including ANCs and Indian tribes); and

(vii) Total dollars planned to be subcontracted to women-owned small business concerns.

(3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to—

(i) Small business concerns;

(ii) Veteran-owned small business concerns;

(iii) Service-disabled veteran-owned small business concerns;

(iv) HUBZone small business concerns;

(v) Small disadvantaged business concerns; and

(vi) Women-owned small business concerns.

(4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.

(5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, SAM, veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations). A firm may rely on the information contained in SAM as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of SAM as its source list does not relieve a firm of its responsibilities (e.g., outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.

(6) A statement as to whether or not the Offeror included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with—

- (i) Small business concerns (including ANC and Indian tribes);
- (ii) Veteran-owned small business concerns;
- (iii) Service-disabled veteran-owned small business concerns;
- (iv) HUBZone small business concerns;
- (v) Small disadvantaged business concerns (including ANC and Indian tribes); and
- (vi) Women-owned small business concerns.

(7) The name of the individual employed by the Offeror who will administer the Offeror's subcontracting program, and a description of the duties of the individual.

(8) A description of the efforts the Offeror will make to assure that small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns have an equitable opportunity to compete for subcontracts.

(9) Assurances that the Offeror will include the clause of this contract entitled "Utilization of Small Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the Offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of the applicable threshold specified in FAR 19.702(a) on the date of subcontract award, with further subcontracting possibilities to adopt a subcontracting plan that complies with the requirements of this clause.

(10) Assurances that the Offeror will—

- (i) Cooperate in any studies or surveys as may be required;
- (ii) Submit periodic reports so that the Government can determine the extent of compliance by the Offeror with the subcontracting plan;
- (iii) After November 30, 2017, include subcontracting data for each order when reporting subcontracting achievements for indefinite-delivery, indefinite-quantity contracts with individual subcontracting plans where the contract is intended for use by multiple agencies;
- (iv) Submit the Individual Subcontract Report (ISR) and/or the Summary Subcontract Report (SSR), in accordance with paragraph (l) of this clause using the Electronic Subcontracting Reporting System (eSRS) at <http://www.esrs.gov>. The reports shall provide information on subcontract awards to small business concerns (including ANCs and Indian tribes that are not small businesses), veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns (including ANCs and Indian tribes that have not been certified by SBA as small disadvantaged businesses), women-owned small business concerns, and for NASA only, Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with this clause, or as provided in agency regulations;
- (v) Ensure that its subcontractors with subcontracting plans agree to submit the ISR and/or the SSR using eSRS;
- (vi) Provide its prime contract number, its unique entity identifier, and the e-mail address of the Offeror's official responsible for acknowledging receipt of or rejecting the ISRs, to all first-tier subcontractors with subcontracting plans so they can enter this information into the eSRS when submitting their ISRs; and



(vii) Require that each subcontractor with a subcontracting plan provide the prime contract number, its own unique entity identifier, and the e-mail address of the subcontractor's official responsible for acknowledging receipt of or rejecting the ISRs, to its subcontractors with subcontracting plans.

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated):

(i) Source lists (e.g., SAM), guides, and other data that identify small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, indicating—

(A) Whether small business concerns were solicited and, if not, why not;

(B) Whether veteran-owned small business concerns were solicited and, if not, why not

(C) Whether service-disabled veteran-owned small business concerns were solicited and, if not, why not;

(D) Whether HUBZone small business concerns were solicited and, if not, why not;

(E) Whether small disadvantaged business concerns were solicited and, if not, why not;

(F) Whether women-owned small business concerns were solicited and, if not, why not; and

(G) If applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact—

(A) Trade associations;

(B) Business development organizations;

(C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, service-disabled veteran-owned, and women-owned small business sources; and

(D) Veterans service organizations.

(v) Records of internal guidance and encouragement provided to buyers through—

(A) Workshops, seminars, training, etc.; and

(B) Monitoring performance to evaluate compliance with the program's requirements.

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.

(12) Assurances that the Offeror will make a good faith effort to acquire articles, equipment, supplies, services, or materials, or obtain the performance of construction work from the small business concerns that it used in preparing the bid or proposal, in the same or greater scope, amount, and quality used in preparing and submitting the bid or proposal. Responding to a request for a quote does not constitute use in preparing a bid or proposal. The Offeror used a small business concern in preparing the bid or proposal if–

- (i) The Offeror identifies the small business concern as a subcontractor in the bid or proposal or associated small business subcontracting plan, to furnish certain supplies or perform a portion of the subcontract; or
- (ii) The Offeror used the small business concern's pricing or cost information or technical expertise in preparing the bid or proposal, where there is written evidence of an intent or understanding that the small business concern will be awarded a subcontract for the related work if the Offeror is awarded the contract.

(13) Assurances that the Contractor will provide the Contracting Officer with a written explanation if the Contractor fails to acquire articles, equipment, supplies, services or materials or obtain the performance of construction work as described in (d)(12) of this clause. This written explanation must be submitted to the Contracting Officer within 30 days of contract completion.

(14) Assurances that the Contractor will not prohibit a subcontractor from discussing with the Contracting Officer any material matter pertaining to payment to or utilization of a subcontractor.

(15) Assurances that the offeror will pay its small business subcontractors on time and in accordance with the terms and conditions of the underlying subcontract, and notify the contracting officer when the prime contractor makes either a reduced or an untimely payment to a small business subcontractor (see [52.242-5](#)).

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(2) Provide adequate and timely consideration of the potentialities of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all "make-or-buy" decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(4) Confirm that a subcontractor representing itself as a HUBZone small business concern is certified by SBA as a HUBZone small business concern in accordance with [52.219-8\(d\)\(2\)](#).

(5) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owned small business, HUBZone small, small disadvantaged, or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(6) For all competitive subcontracts over the simplified acquisition threshold, as defined in FAR 2.101 on the date of subcontract award, in which a small business concern received a small business preference, upon determination of the successful subcontract offeror, prior to award of the subcontract the Contractor must inform each unsuccessful

small business subcontract offeror in writing of the name and location of the apparent successful offeror and if the successful subcontract offeror is a small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concern.

(7) Assign each subcontract the NAICS code and corresponding size standard that best describes the principal purpose of the subcontract.

(f) A master subcontracting plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the Offeror by this clause; provided—

(1) The master subcontracting plan has been approved;

(2) The Offeror ensures that the master subcontracting plan is updated as necessary and provides copies of the approved master subcontracting plan, including evidence of its approval, to the Contracting Officer; and

(3) Goals and any deviations from the master subcontracting plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Once the Contractor's commercial plan has been approved, the Government will not require another subcontracting plan from the same Contractor while the plan remains in effect, as long as the product or service being provided by the Contractor continues to meet the definition of a commercial item. A Contractor with a commercial plan shall comply with the reporting requirements stated in paragraph (d)(10) of this clause by submitting one SSR in eSRS for all contracts covered by its commercial plan. This report shall be acknowledged or rejected in eSRS by the Contracting Officer who approved the plan. This report shall be submitted within 30 days after the end of the Government's fiscal year.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) A contract may have no more than one subcontracting plan. When a contract modification exceeds the subcontracting plan threshold in FAR [19.702](#)(a), or an option is exercised, the goals of the existing subcontracting plan shall be amended to reflect any new subcontracting opportunities. When the goals in a subcontracting plan are amended, these goal changes do not apply retroactively.

(j) Subcontracting plans are not required from subcontractors when the prime contract contains the clause at [52.212-5](#), Contract Terms and Conditions Required to Implement Statutes or Executive Orders—Commercial Items, or when the subcontractor provides a commercial item subject to the clause at [52.244-6](#), Subcontracts for Commercial Items, under a prime contract.

(k) The failure of the Contractor or subcontractor to comply in good faith with (1) the clause of this contract entitled "Utilization Of Small Business Concerns," or (2) an approved plan required by this clause, shall be a material breach of the contract and may be considered in any past performance evaluation of the Contractor.

(l) The Contractor shall submit ISRs and SSRs using the web-based eSRS at <http://www.esrs.gov>. Purchases from a corporation, company, or subdivision that is an affiliate of the Contractor or subcontractor are not included in these reports. Subcontract awards by affiliates shall be treated as subcontract awards by the Contractor. Subcontract award data reported by the Contractor and subcontractors shall be limited to awards made to their immediate next-tier subcontractors. Credit cannot be taken for awards made to lower tier subcontractors, unless the Contractor or subcontractor has been designated to receive a small business or small disadvantaged business credit from an ANC or Indian tribe. Only subcontracts involving performance in the United States or its outlying areas should be included in these reports with the exception of subcontracts under a contract awarded by the State Department or

any other agency that has statutory or regulatory authority to require subcontracting plans for subcontracts performed outside the United States and its outlying areas.

(1) ISR. This report is not required for commercial plans. The report is required for each contract containing an individual subcontracting plan.

(i) The report shall be submitted semi-annually during contract performance for the periods ending March 31 and September 30. A report is also required for each contract within 30 days of contract completion. Reports are due 30 days after the close of each reporting period, unless otherwise directed by the Contracting Officer. Reports are required when due, regardless of whether there has been any subcontracting activity since the inception of the contract or the previous reporting period. When the Contracting Officer rejects an ISR, the Contractor shall submit a corrected report within 30 days of receiving the notice of ISR rejection.

(ii)(A) When a subcontracting plan contains separate goals for the basic contract and each option, as prescribed by FAR [19.704](#)(c), the dollar goal inserted on this report shall be the sum of the base period through the current option; for example, for a report submitted after the second option is exercised, the dollar goal would be the sum of the goals for the basic contract, the first option, and the second option.

(B) If a subcontracting plan has been added to the contract pursuant to [19.702](#)(a)(1)(iii) or [19.301-2](#)(e), the Contractor's achievements must be reported in the ISR on a cumulative basis from the date of incorporation of the subcontracting plan into the contract.

(iii) When a subcontracting plan includes indirect costs in the goals, these costs must be included in this report.

(iv) The authority to acknowledge receipt or reject the ISR resides—

(A) In the case of the prime Contractor, with the Contracting Officer; and

(B) In the case of a subcontract with a subcontracting plan, with the entity that awarded the subcontract.

(2) SSR.

(i) Reports submitted under individual contract plans.

(A) This report encompasses all subcontracting under prime contracts and subcontracts with an executive agency, regardless of the dollar value of the subcontracts. This report also includes indirect costs on a prorated basis when the indirect costs are excluded from the subcontracting goals.

(B) The report may be submitted on a corporate, company or subdivision (e.g. plant or division operating as a separate profit center) basis, unless otherwise directed by the agency.

(C) If the Contractor or a subcontractor is performing work for more than one executive agency, a separate report shall be submitted to each executive agency covering only that agency's contracts, provided at least one of that agency's contracts is over the applicable threshold specified in FAR 19.702 (a), and the contract contains a subcontracting plan. For DoD, a consolidated report shall be submitted for all contracts awarded by military departments/agencies and/or subcontracts awarded by DoD prime contractors.

(D) The report shall be submitted annually by October 30 for the twelve month period ending September 30. When a Contracting Officer rejects an SSR, the Contractor shall submit a revised report within 30 days of receiving the notice of SSR rejection.

(E) Subcontract awards that are related to work for more than one executive agency shall be appropriately allocated.

(F) The authority to acknowledge or reject SSRs in eSRS, including SSRs submitted by subcontractors with subcontracting plans, resides with the Government agency awarding the prime contracts unless stated otherwise in the contract.

(ii) Reports submitted under a commercial plan.

(A) The report shall include all subcontract awards under the commercial plan in effect during the Government's fiscal year and all indirect costs.

(B) The report shall be submitted annually, within thirty days after the end of the Government's fiscal year.

(C) If a Contractor has a commercial plan and is performing work for more than one executive agency, the Contractor shall specify the percentage of dollars attributable to each agency.

(D) The authority to acknowledge or reject SSRs for commercial plans resides with the Contracting Officer who approved the commercial plan.

(End of clause)

#### 52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING (JUN 2020)

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

Driving—

(1) Means operating a motor vehicle on an active roadway with the motor running, including while temporarily stationary because of traffic, a traffic light, stop sign, or otherwise.

(2) Does not include operating a motor vehicle with or without the motor running when one has pulled over to the side of, or off, an active roadway and has halted in a location where one can safely remain stationary.

Text messaging means reading from or entering data into any handheld or other electronic device, including for the purpose of short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication. The term does not include glancing at or listening to a navigational device that is secured in a commercially designed holder affixed to the vehicle, provided that the destination and route are programmed into the device either before driving or while stopped in a location off the roadway where it is safe and legal to park.

(b) This clause implements Executive Order 13513, Federal Leadership on Reducing Text Messaging while Driving, dated October 1, 2009.

(c) The Contractor is encouraged to--

(1) Adopt and enforce policies that ban text messaging while driving--

(i) Company-owned or -rented vehicles or Government-owned vehicles; or

(ii) Privately-owned vehicles when on official Government business or when performing any work for or on behalf of the Government.

(2) Conduct initiatives in a manner commensurate with the size of the business, such as--

(i) Establishment of new rules and programs or re-evaluation of existing programs to prohibit text messaging while driving; and

(ii) Education, awareness, and other outreach to employees about the safety risks associated with texting while driving.

(d) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (d), in all subcontracts that exceed the micro-purchase threshold, as defined in Federal Acquisition Regulation 2.101 on the date of subcontract award.

(End of clause)

#### 52.225-9 BUY AMERICAN—CONSTRUCTION MATERIALS (MAY 2014)

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

Commercially available off-the-shelf (COTS) item—

(1) Means any item of supply (including construction material) that is--

(i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4) such as agricultural products and petroleum products.

Component means an article, material, or supply incorporated directly into a construction material.

Construction material means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

Domestic construction material means--

(1) An unmanufactured construction material mined or produced in the United States;

(2) A construction material manufactured in the United States, if--

(i) The cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic; or

(ii) The construction material is a COTS item.

Foreign construction material means a construction material other than a domestic construction material.

United States means the 50 States, the District of Columbia, and outlying areas.

(b) Domestic preference.

(1) This clause implements 41 U.S.C. chapter 83, Buy American, by providing a preference for domestic construction material. In accordance with 41 U.S.C. 1907, the component test of the Buy American statute is waived for construction material that is a COTS item. (See FAR 12.505(a)(2)). The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to information technology that is a commercial item or to the construction materials or components listed by the Government as follows:

**NONE**

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act. (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including--

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American statute applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American statute applies, use of foreign construction material is noncompliant with the Buy American statute.

(d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) \1\
Item 1			
Foreign construction material....	_____	_____	_____
Domestic construction material...	_____	_____	_____
Item 2			
Foreign construction material....	_____	_____	_____
Domestic construction material...	_____	_____	_____

Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.

Include other applicable supporting information.

(End of clause)

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. **W912P820B0045** (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)

#### 52.236-1 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 **twenty percent (20%)** 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 Gulf of Mexico.
- (d) Condition of Channel. Depths within the channels are generally adequate for the movement of floating plant. 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 job basis have been made for the use of the Government. Copies of these quantity estimates may be viewed/obtained by contacting the Contract Specialist for this contract, same address as stated in subparagraph (a) above. 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.

(End of clause)

#### 52.236-13 ACCIDENT PREVENTION (NOV 1991) – ALTERNATE I (NOV 1991)

(a) The Contractor shall provide and maintain work environments and procedures which will

(1) safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to Contractor operations and activities;

(2) avoid interruptions of Government operations and delays in project completion dates; and

(3) control costs in the performance of this contract.

(b) For these purposes on contracts for construction or dismantling, demolition, or removal of improvements, the Contractor shall-

(1) Provide appropriate safety barricades, signs, and signal lights;

(2) Comply with the standards issued by the Secretary of Labor at 29 CFR Part 1926 and 29 CFR Part 1910; and

(3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.

(c) If this contract is for construction or dismantling, demolition or removal of improvements with any Department of Defense agency or component, the Contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, in effect on the date of the solicitation.

(d) Whenever the Contracting Officer becomes aware of any noncompliance with these requirements or any condition which poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer shall notify the Contractor orally, with written confirmation, and request immediate initiation of corrective action. This notice, when delivered to the Contractor or the Contractor's representative at the work site, shall be deemed sufficient notice of the noncompliance and that corrective action is required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this clause.

(e) The Contractor shall insert this clause, including this paragraph (e), with appropriate changes in the designation of the parties, in subcontracts.

(f) Before commencing the work, the Contractor shall-

(1) Submit a written proposed plan for implementing this clause. The plan shall include an analysis of the significant hazards to life, limb, and property inherent in contract work performance and a plan for controlling these hazards; and

(2) Meet with representatives of the Contracting Officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

(End of clause)

#### 52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)

(a) The Contractor shall, within five 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 three copies 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 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 above 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 base lines 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 the replacement from any amounts due or to become due to the Contractor.

(End of clause)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://www.acquisition.gov>

(End of clause)

#### 252.203-7004 DISPLAY OF HOTLINE POSTERS (AUG 2019)

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

United States means the 50 States, the District of Columbia, and outlying areas.

(b) Display of hotline poster(s).

(1)(i) The Contractor shall display prominently the DoD fraud, waste, and abuse hotline poster prepared by the DoD Office of the Inspector General, in effect at time of contract award, in common work areas within business segments performing work under Department of Defense (DoD) contracts.

(ii) For contracts performed outside the United States, when security concerns can be appropriately demonstrated, the contracting officer may provide the contractor the option to publicize the program to contractor personnel in a manner other than public display of the poster, such as private employee written instructions and briefings.

(2) If the contract is funded, in whole or in part, by Department of Homeland Security (DHS) disaster relief funds and the work is to be performed in the United States, the DHS fraud hotline poster shall be displayed in addition to the DoD hotline poster. If a display of a DHS fraud hotline poster is required, the Contractor may obtain such poster from—

(i) DHS Office of Inspector General/MAIL STOP 0305, Attn: Office of Investigations – Hotline, 245 Murray Lane SW, Washington, DC 20528-0305; or

(ii) Via the internet at [https://www.oig.dhs.gov/assets/Hotline/DHS\\_OIG\\_Hotline-optimized.jpg](https://www.oig.dhs.gov/assets/Hotline/DHS_OIG_Hotline-optimized.jpg).

(c)(1) The DoD hotline poster may be obtained from: Defense Hotline, The Pentagon, Washington, D.C. 20301-1900, or is also available via the internet at <https://www.dodig.mil/Resources/Posters-and-Brochures/>.

(2) If a significant portion of the employee workforce does not speak English, then the poster is to be displayed in the foreign languages that a significant portion of the employees speak.

(3) Additionally, if the Contractor maintains a company website as a method of providing information to employees, the Contractor shall display an electronic version of the required poster at the website.

(d) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (d), in all subcontracts that exceed the threshold specified in Defense Federal Acquisition Regulation Supplement 203.1004(b)(2)(ii) on the date of subcontract award, except when the subcontract is for the acquisition of a commercial item.

(End of clause)

#### 252.236-7001 CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 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 \$2,525.00 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.

#### 3. CONTRACT DRAWINGS AND SPECIFICATIONS (DFARS 252.236-7001 – 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:

<u>Title</u>	<u>File</u>	<u>Drawing No.</u>
Passes of the Mississippi River South Pass Maintenance Dredging, #20-2 Plaquemines Parish, Louisiana	H-16-48423	G-01 thru G-03 C-01 thru C-17

(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%)** 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.

(End of Clause)

**Note: The term "lump sum" is synonymous with the unit of measure "job", as stated on the bid schedules and throughout the specifications.**

#### UAI 5152.236-9009

#### 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 5152.222-9000

#### 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 5152.249-9000

#### UAI 5152.249-9000 BASIS FOR SETTLEMENT OF PROPOSALS

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.

(End of clause)

#### UAI 5152.231-9000

#### UAI 5152.231-9000 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE (MAR 95)

(a) This clause does not apply to terminations. See UAI 5152.249-5000, *Basis For Settlement of Proposals*, and FAR Part 49.

(b) Allowable cost 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 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 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)

NOTE1: 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](http://www.publications.usace.army.mil/Portals/76/Publications/EngineerPamphlets/EP_1110-1-8_Vol_03.pdf?ver=2017-05-15-131043-527)

(End of clause)

Superseded General Decision Number: LA20190007

State: Louisiana

Construction Type: Heavy Dredging Counties:

LouisianaStatewide.

DREDGING PROJECTS ALONG THE GULF COAST AREA INCLUDING THE  
MISSISSIPPI RIVER AND ITS TRIBUTARIES TO THE OHIO RIVER

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of 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). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/03/2020

\* SULA1994-001 04/01/1994

	Rates	Fringes
Derrick Operator.....\$	7.25	
Dozer Operator.....\$	7.25	
Dredge 16'" and Over		
Deckhand.....\$	7.25	
Dredge tender operator.....\$	7.25	
Fireman.....\$	7.25	
First assistant engineer....\$	7.25	
Leverman.....\$	7.25	
Oiler.....\$	7.25	
Second assistant engineer...\$	7.25	
Shoreman.....\$	7.25	

Third assistant engineer.....	\$	7.25	
Truckdriver .....	\$	7.25	
Welder.....	\$	7.25	
Dredge Under 16" Deckhand ...	\$		
Dredge tender operator.....	\$	7.25	
Leverman .....	\$	7.25	
Oiler .....	\$	7.25	
Welder.....	\$	7.25	
		7.25	
Hydraulic Dredging			
First cook.....	\$	7.25	
Handyman.....	\$	7.25	
Janitor, cabin person .....	\$	7.25	
Second cook .....	\$	7.25	
Marsh Buggy Dragline, Oiler .....	\$	7.25	
Marsh Buggy Dragline, Operator.....	\$	7.25	
Self-Propelled Hopper Dredge, Drag Tender.....	\$	9.70	3.45+a

FOOTNOTE: Fourteen paid vacation days and eight paid holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day & Christmas Day provided the employee has one year of service

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the

cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

## WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage  
and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W. Washington, DC  
20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W. Washington, DC  
20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W. Washington, DC  
20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION



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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 EM 385-1-1. The most current edition of the EM 385-1-1 can be found at the following link:

[http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM\\_385-1-1.pdf](http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_385-1-1.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 Reporting and Investigation. Accidents shall be investigated and reports completed by the immediate supervisor of the employee(s) involved and reported to the Contracting Officer or his/her representative within one (1) working day after the accident occurs. All data reported must be complete, timely and accurate. A follow-up report shall be submitted when the estimated lost time days differs from the actual lost time days.

(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 seven (7) days prior to the pre-work conference, an electronic copy 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.

(1) Executed CESO Form A-02), Accident Prevention Plan Checklist (the “fillable form” can be obtained from:

<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) Form, Figure 1-2 in Section 1 “Program Management” of EM 385-1-1 (Nov 2014) (Attached at the end of this section). The Contractor shall address each of the elements/sub-elements in the outline contained in Appendix A of EM 385-1-1 in the order that they are provided in the manual. If an item is not applicable because of the nature of the work to be performed, the Contractor shall state this exception and provide a justification

(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, Fuel Oil Transfer, (attached at the end of this section). (Refer to 33 CFR 156).

The Contractor shall have on the construction site during working hours a trained Site Safety and Health Officer (SSHO) in accordance with paragraph 01.A.17 of EM 385-1-1. The Contractor shall not commence physical work at the site until the Contracting Officer, or his/her authorized representative has accepted the program. 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 Section 1 of EM 385-1-1.

(c) Comprehensive Hazard Communication Program. The Contractor shall develop, implement, and maintain at the workplace a written, Comprehensive Hazard Communication Program (see Section 06.B.01 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. The Contractor shall note that "Safety Data Sheets (SDS) has replaced Material Safety Data Sheets (MSDS)" referenced in Section 06.B.01 of EM 385-1-1 meeting the criteria of the new OSHA globally harmonized system.

(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 Mary H. Ferry@ 504.862.2000.

(f) Ground Fault Protection. Electrical equipment used on this contract shall be equipped with ground fault circuit interrupters in accordance with EM 385-1-1, Section 11.D.05.

(g) 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 Section 19 of EM 385-1-1.

(h) 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 paragraph (a) above.

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

(i) 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 Program. This plan shall be submitted to the Contracting Officer, or his/her representative, for review prior to the preconstruction conference. No separate measurement and payment will be made for the Hurricane Plan. 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 Hurricane 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) An on-site review of the Hurricane Plan shall be conducted on June 1<sup>st</sup>, start of the Hurricane season, by the Contractor's supervisory personnel and the Government Inspector. This review should be documented on both the QA and QC reports.

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

(k) Drills. The Contractor shall conduct its drills in accordance with EM 385-1-1, Section 19.A.04e.

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

(m) Dive Plan. The Contractor shall submit a dive plan in accordance with Section 30 of EM 385-1-1.

(n) 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 this 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.

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

(p) Accident Prevention Plan Checklist. Attached at the end of this Section is an Accident Prevention Plan Checklist for submitting the required submittals to complete the Accident Prevention Program.

(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. The SSHO may have collateral duties in specific conditions as listed below.

b. Example of one dredging project site is reflected in each of the following:

- 1) a mechanical dredge, tug(s) and scow(s), scow route, and material placement site; or
- 2) a hydraulic pipeline dredge, attendant plant, and material placement site; or,
- 3) a hopper dredge (include land-base material placement site – if applicable.)

c. Individual dredging project sites with a work force of 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 a collateral – duty SSHO instead of having a full-time SSHO if the officer meets the SSHO training and experience requirements.

(s) SSHO Requirements

a. In addition to requirements stated elsewhere in this specification, the SSHO, or his/her alternate, shall be present at the project site at all times when work is being performed. The SSHO shall have full mobility and reasonable and timely access to all work operations. The SSHO shall be a full time, dedicated position. The SSHO shall report to senior project (or corporate) officials.

b. The SSHO shall inspect all work areas and operations during initial set-up and at least monthly observe and provide personal oversight on each shift during dredging operations for projects with many work sites, more often for those with less work sites.

c. For projects with multiple shifts or when SSHO is temporarily off-site, an Alternate SSHO will be assigned to insure SSHO coverage for the project at all times work activities are conducted. The Alternate SSHO shall meet the same requirements and assume the responsibilities of the project SSHO. The Alternate SSH position may be a collateral duty.

(t) Designated Representative (DR) Requirements.

a. Designated Representatives (DR) are collateral duty safety personnel, with safety duties in addition to their full-time occupation, and support and supplement the SSHO efforts in managing, implementing and enforcing the Contractor's Safety and Health Program. DRs shall be individual (s) with work oversight responsibilities, such as masters, mates, fill foremen, and superintendents. DRs should not be positions requiring continuous mechanical or equipment operations, such as equipment operators.

b. A DR shall be appointed for all remote work locations more than 45 minutes travel time from the SSHO's duty location, typically including dredged material placement sites, towing and scow operations, and other operations.

c. The DRs shall perform safety program tasks as designated by the SSHO and report safety findings to the SSHO/Alternate SSHO. The SSHO shall document results of safety findings and provide information for inclusion in the CQC reports to the Government Representative.



(u) Safety Personnel Training Requirements.

a. The SSHO, as a minimum, shall produce a copy of their instructor-signed OSHA 30 hour training card (or course completion if within 90 days of having completed the training and card has not yet been issued). This signifies that they will have completed:

(1) The 30-hour OSHA General Industry safety class (may be web-based training if the student is able to directly ask questions of the instructor by chat or phone) or

(2) 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

(3) As an equivalent, formal construction or industry safety and health training covering the subjects of the OSHA 30-hour course and EM 385-1-1 (see Appendix A, paragraph 3.d.(3)) applicable to the work to be performed and given by qualified instructors - may be web-base training if the student is able to directly ask questions of the instructor by chat/phone). SSHO's shall maintain competency through having taken 8 hours of documented formal, on-line, or self-study safety and health related coursework every year. Examples of continuing education activities that meet this requirement are: writing an article, teaching a class, reading/writing professional articles, attendance/participation in professional societies/meetings, etc.

b. The SSHO, Alternate SSHO, and Designated Representatives shall have a minimum of three (3) years continuous experience within the past five (5) years in supervising/managing dredging, marine or land-based construction, work managing safety programs or processes, or conducting hazard analyses and developing controls in activities or environments with similar hazards. This is in lieu of the construction experience required by paragraph 01.A.17, EM 385-1-1.

(v) Regulatory Requirements. In addition to the detailed requirements included in the provisions of this contract and the requirements as defined within 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.

### 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 and sleeping purposes. 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, a comfortable chair for each inspector, washing conveniences and daily janitorial services. If the dredge does not have suitable sleeping quarters, the contractor may elect to obtain a suitable sleeping facility on shore, such as hotel, motel, etc. 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 \$1.50 per person for each meal.

## 8. SEAWORTHINESS CERTIFICATION

EM 385-1-1, Section 19.A.01.b. 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, ENG 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.) 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 is not allowed to 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 perspective 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. 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.

## 20. 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 \$150,000.00, 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.

## 21. 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 Keith Wilson, 504.862.1372. 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.

## 22. 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.

## 23. DATUM RELATIONSHIPS

This paragraph provides datum relationships between the authorized Mean Low Gulf (MLG) datum and the National Spatial Reference System (NSRC). This information is provided to comply with the requirements outlined in Engineering Manual, EM 1110-2-6056 [https://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM\\_1110-2-6056.pdf](https://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_1110-2-6056.pdf). The datum relationships are shown as follows:

- WH-7 (staff gage)  
0.0' Gage Datum = 0.0' NAVD88 (2009.55) = +3.32' MLG = -0.18' MLLW (2007-2011)
- Mississippi River at Head of Passes (01545)  
0.0' Gage Datum = 0.0' NAVD88 (2009.55) = +3.32' MLG = -0.18' MLLW (2007-2011)
- Port Eads (01850)  
0.0' Gage Datum = 0.0' NAVD88 (2009.55) = +4.47' MLG

### PROJECT CONTROL POINTS

The following information describes the project control points (PCPs). These benchmarks have been incorporated in the NSRS database.

→ <b>DESIGNATION:</b>	<b>PILOT</b>	
PID:	BBCM63	
LAT/LON:	N 29 10 42.813 W 89 15 31.687	NAD83 (2011)
NORTH/EAST:	N 252,767.33' E 3,942,860.57'	SPC LA S (US feet)
ELEVATION:	5.52 feet	NAVD88 (2009.55)
MARKER:	SURVEY DISK	
STAMPING:	PILOT	

DESCRIPTION: The station is located in Plaquemines Parish, 8.6 miles Southeast of Venice, LA, 44.3 miles East-Southeast of Grand Isle, LA, and 0.2 miles South-Southwest of Pilottown, LA. To reach the station from the intersection of the Mississippi River and Grand Pass in Venice, LA, go South down the Mississippi River 8.5 miles to the station on the left. The station is a survey disk set on the Southwest corner of a concrete helicopter pad, 4.6 feet North-Northeast of the Southwest corner of the concrete pad, 27.7 feet South-Southeast of the Northwest corner of the concrete pad, and 24.9 feet Southwest of the Southeast corner of the concrete pad.

→ **DESIGNATION:**            **PBM EADS**  
    **PID:**                        **BBCG22**

LAT/LON:            N 29 01 01.54485    W 89 10 16.00196            NAD83 (2011)  
NORTH/EAST:    N 194,577.84'    E 3,971,949.05'            SPC LA S (US feet)  
ELEVATION:       1.02 feet                            NAVD88 (OPUS 2014)  
MARKER:           SURVEY DISK  
STAMPING:        EADS

DESCRIPTION: 3 inch Brass Survey Disk Located near Port EADS, LA on South Pass, Mississippi River. Mark is located Near 3 Camps at the intersection of South Pass and Port EADS Canal. Mark is 29 Feet Southwest of Shed, 26 Feet Southeast of a Light Pole, and 22 Feet Northeast of a palm tree.

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.						
<div style="display: flex; justify-content: space-between; align-items: flex-end; padding: 10px;"> <div style="width: 20%;">_____ Contractor's Signature</div> <div style="width: 20%;">_____ Date</div> <div style="width: 20%;">_____ C.O. or C.O.R. Signature</div> <div style="width: 20%;">_____ Date</div> </div>						

# Activity Hazard Analysis (AHA)

Activity/Work Task:		Overall Risk Assessment Code (RAC) (Use highest code)					
Project Location:		<b>Risk Assessment Code (RAC) Matrix</b>					
Contract Number:		<b>Severity</b>	<b>Probability</b>				
Date Prepared:			Frequent	Likely	Occasional	Seldom	Unlikely
Prepared by (Name/Title):		Catastrophic	E	E	H	H	M
		Critical	E	H	H	M	L
Reviewed by (Name/Title):		Marginal	H	M	M	L	L
		Negligible	M	L	L	L	L
<b>Notes:</b> (Field Notes, Review Comments, etc.)		Step 1: Review each <b>"Hazard"</b> with identified safety <b>"Controls"</b> and determine RAC (See above)					
		<b>"Probability"</b> is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.				<b>RAC Chart</b> <b>E = Extremely High Risk</b> <b>H = High Risk</b> <b>M = Moderate Risk</b> <b>L = Low Risk</b>	
		<b>"Severity"</b> 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.					
<b>Job Steps</b>	<b>Hazards</b>	<b>Controls</b>				<b>RAC</b>	
<b>Equipment to be Used</b>	<b>Training Requirements/Competent or Qualified Personnel name(s)</b>		<b>Inspection Requirements</b>				

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).

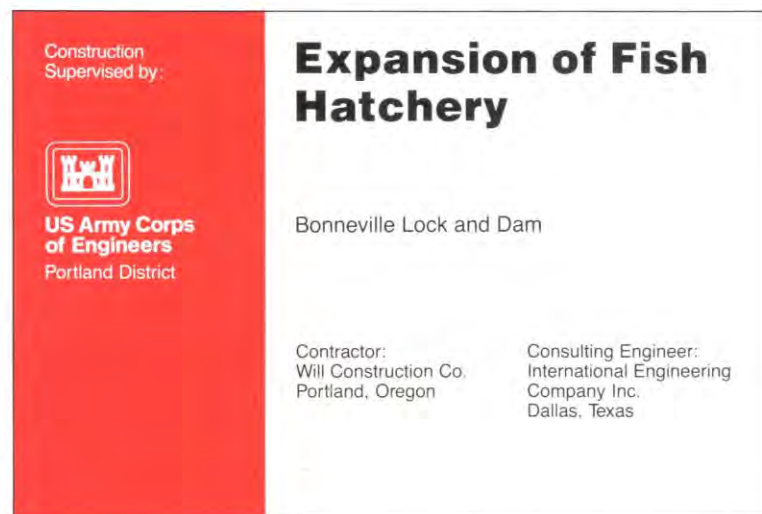
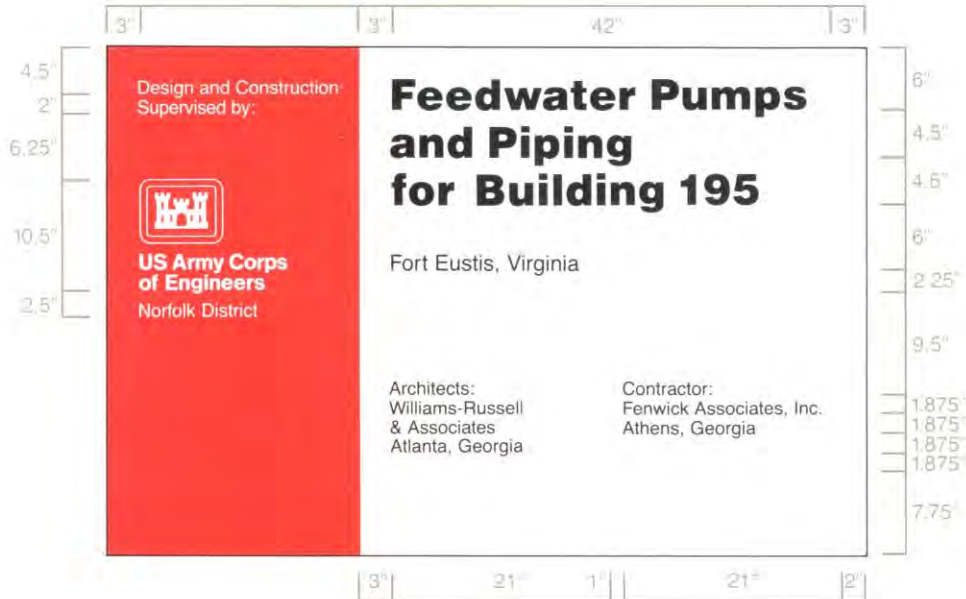
Color: Black  
Typeface: 1.5" Helvetica Regular  
Maximum line length: 42"

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 projects 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.

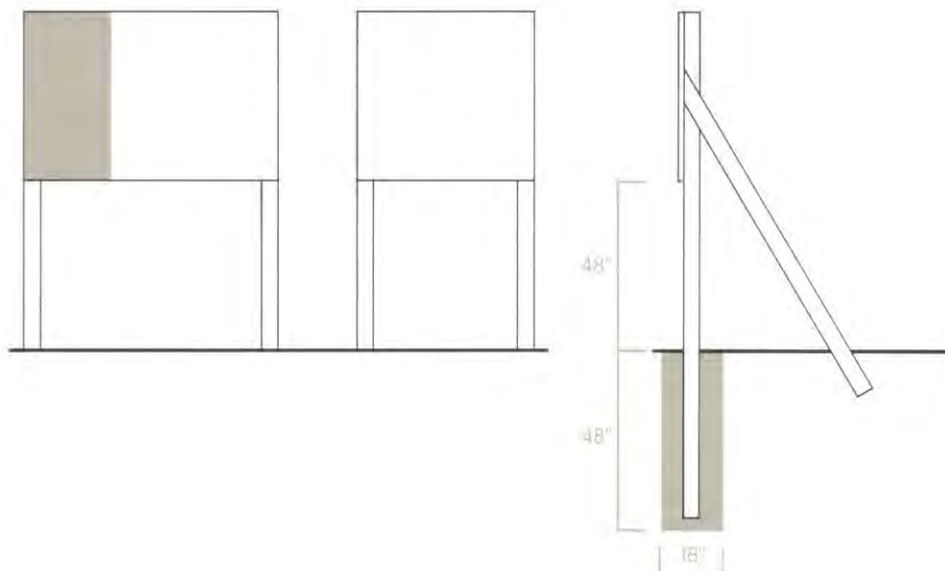
The 2' x 4' Communications Red panel (to match PMS-032) with full Corps signature (reverse version) is to be screen printed on the white background. Identification of the District or Division may be applied under the signature with white cut vinyl letters prepared to Corps standards. Large scale reproduction 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"	31"	3"	8"	3"														
6"	<h1>Safety is a Job Requirement</h1>  <p>Gap Closures at Pump Station #3, Interim Protection Plan, Phase 1</p> <p>U.D.H. Builders, Inc. Baton Rouge, Louisiana</p> <p>This project started</p> <table border="1"> <tr> <td></td><td>3</td> <td></td><td>5</td> <td>0</td><td>4</td> </tr> </table> <p>Date since last Lost time accident</p> <table border="1"> <tr> <td></td><td></td> <td></td><td></td> <td></td><td></td> </tr> </table> <p>Total lost time injuries</p> <table border="1"> <tr> <td></td><td>0</td> </tr> </table>						3		5	0	4								0
						3		5	0	4									
						0													
4.5"																			
10.5"																			
2.25"																			
3"																			
2.25"	<p>Example</p>																		
3"																			
4.875"																			
4.875"																			
5"																			
	3"	21"	24"																

(NOT TO SCALE)

.75"	0	0	0
3"	5	0	4
.75"	0	0	0
	2.5"	1.25"	2.5"

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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 33 00

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SECTION 01 33 00

SUBMITTAL PROCEDURES

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.
- Health and safety 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. 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

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. Submittals shall be made in the respective number of copies and to the respective Area Office address listed in Section 00100. INSTRUCTIONS TO BIDDERS, entitled SITE VISIT (CONSTRUCTION) (FAR 52.236-27). 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

At the end of this section is a Submittal Register showing items of equipment and materials for which submittals are required by the specifications; this Submittal Register may not be all inclusive and additional submittals may be required. The Contractor shall maintain a Submittal Register for the project in accordance with Section 01 45 00.15 10, RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE (RMS CM). The Government will provide the initial Submittal Register in electronic format. Thereafter, the Contractor shall maintain a complete list of all submittals, including completion of all data columns. Dates on which submittals are received and returned by the Government will be included in its export file to the Contractor. The Contractor shall track all submittals.

#### 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)

The transmittal form (ENG Form 4025) 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, with its complete backup material, in paper and electronic (.pdf) form. Electronic files shall be .pdf, .dgn, .doc, .docx, or other format acceptable to the Contracting Officer's Representative.

#### 1.11 SUBMITTAL PROCEDURES

Submittals shall be made as follows:

1.11.1 Procedures

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

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Five (5) copies of the submittal will be retained by the Contracting Officer and 2 copies of the submittal will be returned to the Contractor. The Contractor shall also submit electronic copies (i.e., .pdf files) of all submittals to expedite the review and approval process.

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 South Pass						CONTRACTOR											
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	GOVT OR CLASSIFICATION REVIEW	CONTRACTOR: SCHEDULE DATES			CONTRACTOR ACTION		APPROVING AUTHORITY						REMARKS
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTH/ DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RCD FROM OTH REVIEWER	ACTION CODE	DATE OF ACTION	MAILED TO CONTR/ DATE RCD FRM APPR AUTH	
(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		G ODT												
			Plan														
			SD-02 Shop Drawings														
			Bird Nesting Prevention Plan		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	3.1.3	G CD												
			Before and After Dredging Cross														
			Sections														
			Disposal Area Surveys	3.1.6.2													
			SD-05 Design Data														
			Compiled Survey Data CD Disk														
			Preliminary Field Surveys	3.1.3	G EDC												
			Preliminary Field Surveys	3.1.3	G EDC												
			Before and After Dredging Cross														
			Sections														
			Disposal Area Surveys	3.1.6.2													
			SD-09 Manufacturer's Field														
			Reports														

CONTRACT NO.

## South Pass

CONTRACTOR

[illegible]



## INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.
2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.
3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288-R for each entry on this form.
4. Submittals requiring expeditious handling will be submitted on a separate form.
5. Separate transmittal form will be used for submittals under separate sections of the specifications.
6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications--also, a written statement to that effect shall be included in the space provided for "Remarks".
7. Form is self-transmittal, letter of transmittal is not required.
8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.
9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

### THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

- |   |   |
|---|---|
| A -- Approved as submitted.   | E -- Disapproved (See attached).  |
| B -- Approved, except as noted on drawings.   | F -- Receipt acknowledged.  |
| C -- Approved, except as noted on drawings.<br>Refer to attached sheet resubmission required. | FX -- Receipt acknowledged, does not comply<br>as noted with contract requirements. |
| D -- Will be returned by separate correspondence.   | G -- Other ( <i>Specify</i> )   |

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

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-- End of Section Table of Contents --

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RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE(RMS CM)

PART 1 GENERAL

1.1 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 (2014) Safety and Health Requirements  
Manual

1.2 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for resident management system requirements as specified herein. Payment for the work covered under this section shall be distributed throughout the existing bid items.

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

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, access and installation instructions, program updates and training information are available from the RMS website (<http://rmsdocumentation.com>). 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.

Recommended 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 4 Mbs per user
Software	
MS Windows	Windows 7 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)

Recommended RMS System Requirements	
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. Insure 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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SECTION 01 45 04.00 10

CONTRACTOR QUALITY CONTROL

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 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 electronic transmission of the test report data in the prescribed formats with the original hard copy test report data to the government. Tests results shall be emailed to mvn-cd-q-testresults@usace.army.mil and also to the Government's Inspector and Project Engineer. 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, includes forms which shall be used to report the number of tests to be made, and includes forms which shall be used to report the test data. The technical specification sections may include testing and/or frequency requirements other than those listed in the NODCC manual. These additional requirements shall be followed in addition to the aforementioned. A copy of the NODCC manual is attached at the end of the section.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 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  
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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  $\pm 10$  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**

<b>Gradation</b>	
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- $\mu$ m) Sieve
ASTM D 6913	Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis
<b>Moisture Content</b>	
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
<b>Moisture/Density Relationship</b>	
ASTM D 698	Laboratory Compaction Characteristics of Soil Using Standard Efforts (12,400ft lbs/ft <sup>3</sup> (6000KN))
ASTM D 1557	Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft <sup>3</sup> (2,700 kN-m/m <sup>3</sup> ))
<b>Field Density</b>	
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)
<b>Materials Classification</b>	
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
<b>Organic Content</b>	
ASTM D 2974	Moisture, Ash, and Organic Matter of Peat and Other Organic Soils (Method C)
<b>Unconfined Compressive Strength</b>	
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/ft<sup>3</sup>.

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<sup>3</sup>.
- 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/ft<sup>3</sup>; (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/ft<sup>3</sup>.

- 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<sup>3</sup>)
- (b) Weight of Measure Box (lb)

- (c) Average weight per unit volume of densified sand (lb/ft<sup>3</sup>)
- (d) Wood or metal Pieces total weight (lb)
- (e) Wood or metal Pieces total volume (ft<sup>3</sup>)
- (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 (ft<sup>3</sup>)
- (b) Weight of Measure Box (lb)
- (c) Average weight per unit volume of densified sand (lb/ft<sup>3</sup>)
- (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 (ft<sup>3</sup>)
- (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**

<b>Concrete Lab Testing</b>	
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
<b>Concrete Field Testing</b>	
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.	On randomly selected batches for each separate concrete mix produced.
			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.	Cylinders used shall conform to paragraph 6.1 of ASTM C 31.
			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.	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	Additional sets when mix proportions change or low strengths are detected.	
			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.
Air Content Slump Temperature	MVNQC01 MVNQC02	ASTM C 231 ASTM C 143 ASTM C 1064	Plus 2 additional during each 8 hours of concrete production	Initial Cure in accordance with paragraph 10.1.2 of ASTM C 31.
			Additional tests if workability variation is excessive.	Cylinders to be field cured shall conform to 10.2 of ASTM C 31.
			1 every time concrete cylinders are molded	Cylinders used shall conform to paragraph 6.1 of ASTM C 31.

## 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 possess 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 addition 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 addition 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)]**

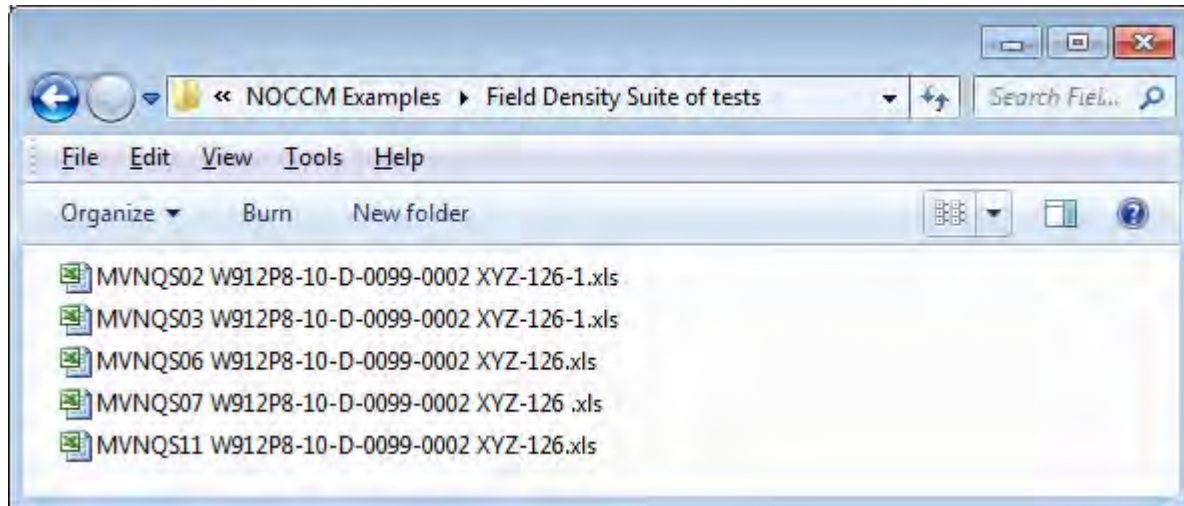
Each part of the filename should be separated by a single space only, not a dash or other delimiter. Details of each portion of the filename convention are given below.

- **[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.

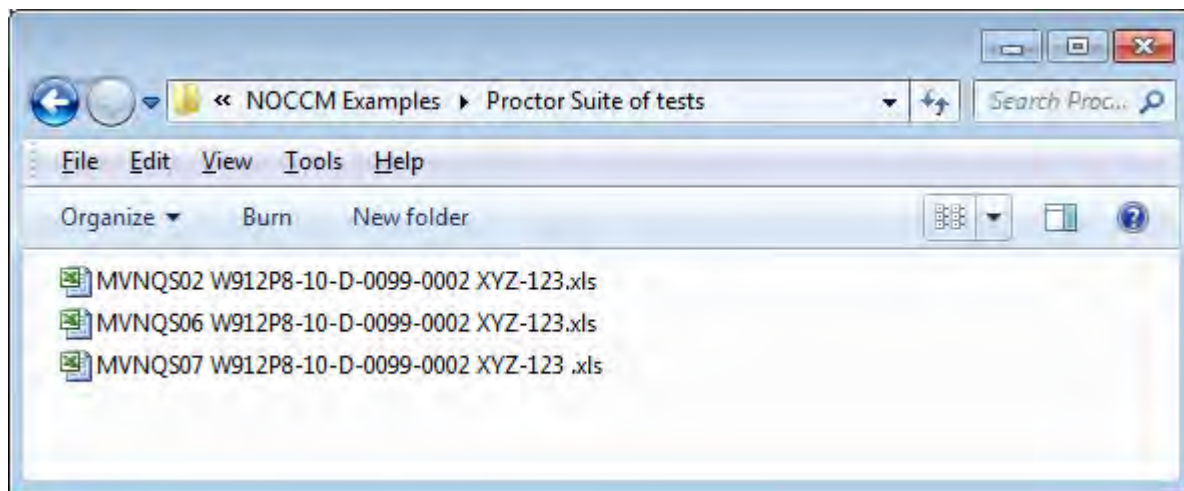
The exception to naming convention is dealing with forms that contain 1 test per test form such as MVNQS03 (Sand Cone tests), MVNQS02 (Compaction-Moisture Density Relationship) and MVNQS01 (Sieve Analysis). For these 3 Test Form types the file name will end with the Test No. The Test No is determined 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;	<a href="mailto:CEMVN-CD@Usace.Army.Mil">CEMVN-CD@Usace.Army.Mil</a>
MVN-CD Public Webpage;	<a href="http://www.mvn.usace.army.mil/About/Offices/Construction.aspx">http://www.mvn.usace.army.mil/About/Offices/Construction.aspx</a>
MVN QACC SharePoint;	<a href="https://partners.usace.army.mil/sites/MVN/QACC/default.aspx">https://partners.usace.army.mil/sites/MVN/QACC/default.aspx</a>

#### 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.erd.c.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](mailto: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
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### 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

*Contractor Quality Control*

*attachments*

*....follow this page....*

# CONTRACTOR QUALITY CONTROL PLAN

Contract No. W912P8-\_\_ - \_\_ - \_\_

Project Name: \_\_\_\_\_

Contractor: \_\_\_\_\_

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## 8.0 Quality Control Program

## 9.0 Forms

## 1.0 COMPANY POLICY

\_\_\_\_\_ Construction, Corp. considers quality control to be an inherent safeguard to ensure quality work and to guarantee that all work is done according to the contract documents in a professional manner. Noncompliance with plans and specifications must be detected promptly, and proper action taken to assure that this policy is a viable tool in monitoring the work.

## 2.0 PLAN PURPOSE

It is the intent of this Quality Control Plan (QCP) to establish and explain how this construction corporation plans to organize, control, and review all activities according to the plans and specifications provided by the U. S. Army Corps of Engineers with regard to quality for the above reference project. The plans primary purposes are to provide for the level of construction quality required by strict accordance with the plans and specifications.

## 3.0 QUALITY CONTROL ORGANIZATION

### 3.1 CQC System Manager

The CQC System Manager (CQCM) has front line responsibility for quality control. He will become thoroughly familiar with all aspects of the project and ultimately inspect all work to ensure quality is being maintained by all craftsmen, vendors and subcontractors. The CQCM is ultimately responsible for inspecting, documenting, and reporting to the contracting officer all aspects of the work described and detailed in the plans and specifications. He is responsible for implementing and enforcing the Quality Control Plan. His duties include, but are not limited to:

- a. Implementation of the 3-phase control system for all definable features of work.
- b. Day-to-day inspection of the work.
- c. Daily on site documentation
- d. Ensure that all in-place work meets or exceeds all minimum standards set forth in the plans and specifications.
- e. Detect discrepancies or problems on site and immediately bring the same to

the attention of the Contracting Officer's Representative, as should be necessary.

f. Preparation and review of submittals and certification of submittals prior to submission.

g. Maintain document control.

h. Maintain As-built conditions.

i. Interface with the owner and outside agencies as required.

The CQCM proposed for this project is \_\_\_\_\_. See section 4.0 for a copy of his resume'.

### 3.2 CQC System Manager Alternate

The CQC system manager alternate will assume responsibilities for all aspects of quality control as required by our Quality Control Plan and the Contract Documents should the CQCM not be able to perform his duties. The CQC system manager alternate for this project is \_\_\_\_\_.

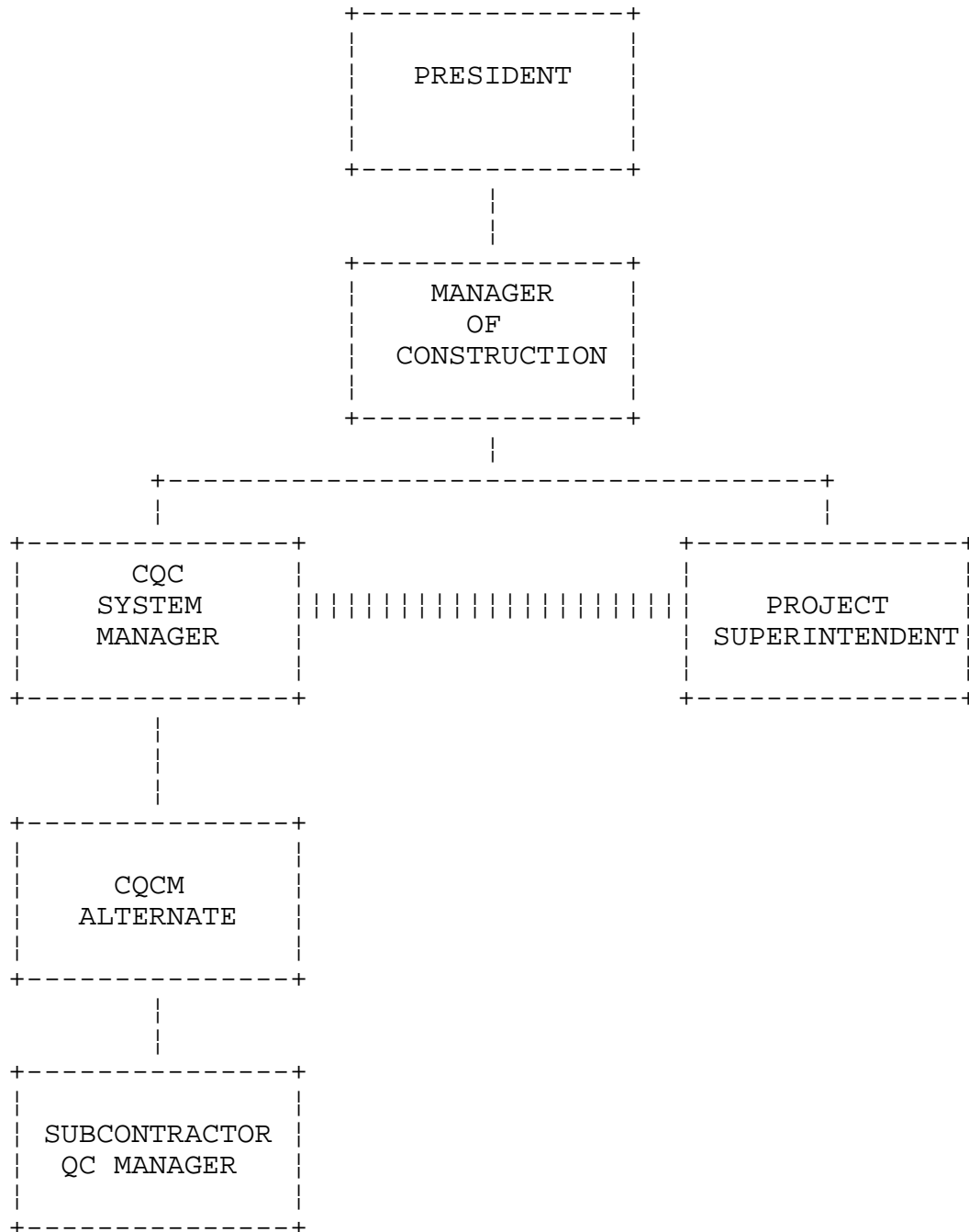
### 3.3 Manager of Construction

The Manager of Construction for this corporation is based in the home office in \_\_\_\_\_ and has a major responsibility for quality control through a supervisory role of the CQCM. The Manager of Construction will at all times keep the field forces focused on the company's commitment to quality in all phases of the work. The Manager of Construction will make routine visits to the site of work. The Manager of Construction for this company is \_\_\_\_\_.

## 4.0 RESUME OF PERSONNEL

Attached are resumes of all personnel in the above described organization. The Contracting Officer's approval will be requested before any staff changes occur, if they should become necessary.

**QUALITY CONTROL  
ORGANIZATIONAL CHART  
CONTRACT NO. W912P8-\_\_-\_\_-\_\_**



4.1 Resume' of \_\_\_\_\_, CQC System Manager

Personal Data and Education

Date of Birth:

Residence:

Graduate of:

Completed courses in:

Professional Experience

4.2 Resume' of \_\_\_\_\_, CQCM Alternate

Personal Data and Education

Date of Birth:

Residence:

Graduate of:

Completed courses in:

Professional Experience

4.3 Resume' of \_\_\_\_\_, Manager of Construction

Personal Data and Education

Date of Birth:

Residence:

Graduate of:

Completed courses in:

Professional Experience

5.0 DESIGNATION OF CQC SYSTEMS MANAGER

(Contractor)

Date

Mr. \_\_\_\_\_

(Mailing Address)

SUBJECT: Contract No. W912P8-\_\_-\_\_-\_\_\_\_  
(Project Name)

Mr. \_\_\_\_\_:

This letter is to designate you as the Contract Quality Control Systems Manager for the subject project. In this capacity, you will be responsible for all aspects of quality control as required by our Quality Control Plan and the Contract Documents. You have complete authority to implement these programs including authorization to stop work which fails to comply with the requirements of the Contract Documents.

Sincerely,

\_\_\_\_\_, President

## 6.0 DESIGNATION OF CQC SYSTEM MANAGER ATERNATE

(Contractor)

Date

Mr. \_\_\_\_\_

(Mailing Address)

SUBJECT: Contract No. W912P8-\_\_-\_\_-\_\_\_\_\_  
(Project Name)

Mr. \_\_\_\_\_

This letter is to designate you as the Quality Control System Manager Alternate for the subject project. Should for any reason Mr. \_\_\_\_\_ not be able to perform his duties as CQCM, you will assume responsibility for all aspects of quality control as required by our Quality Control Plan and Contract Documents. To enable you to fulfill this responsibility, you have complete authority to implement these programs including authorization to stop work which fails to comply with the requirements of the Contract Documents.

Sincerely,

\_\_\_\_\_, President

## 7.0 PROCEDURES

### 7.1 Scheduling and Managing Submittals.

The CQCM will be the submittal manager. The CQCM has full authority to act for the firm in all submittal matters. His responsibilities include scheduling, review, updating and any submittals required from subcontractors.

Within 7 days of the Notice to Proceed, the CQCM will complete the submittal register contained in Section 01300 and submit to the Contracting Officer 4 copies for approval. Contractor schedule dates will be coordinated with the progress schedule and shall reflect 30-day minimum period for review and approval.

The CQCM will review the submittal register a minimum of every 10 days. The submittal register will be utilized to plan and monitor submittal progress so as to ensure timely approval of methods/materials prior to their scheduled need times. The submittal register will be available for inspection by the Contracting Officer at all times. An updated submittal register will be forwarded to the CO at 60-day intervals or as requested.

The CQCM will review the submittal register during preparatory phase of quality control to ensure that all submittals for the ensuing feature of work are approved and will take action to correct any deficiencies in submittal requirements.

All submittals required by the specifications or as needed for approval of deviation will be submitted by the CQCM in original and 4 copies utilizing ENG form 4025 in accordance with submittal register schedule dates or sooner. Prior to submittal, all shop drawings, data, samples, certifications, and test reports will be reviewed by the CQCM to ensure compliance with the contract requirements. Corrections and revisions will be requested where necessary.

## 7.2 Control Testing

7.2.1 Test List - A listing of all tests indicated in the contract specifications and additional tests as needed to establish quality control will be incorporated in the Contractor Quality Control Program found in section 8.0 of this plan. This listing will include the name of the test, specification para. number, feature of work tested, responsible person, and frequency.

7.2.2 Testing Facilities - The proposed testing lab for use on this project is:

\_\_\_\_\_ Testing Laboratories  
PO Box \_\_\_\_\_  
\_\_\_\_\_, LA \_\_\_\_\_

If required, a resume' of \_\_\_\_\_ facilities and personnel qualifications will be furnished to the Contracting Officer.

7.2.3 Test Records - All testing activities will be recorded on the CQC report, indicating the name of the test performed, specification paragraph reference, and

location performed. Results of the tests will be recorded on the daily CQC report or attachments. Actual test reports will be furnished promptly to the Contracting Officer as directed by the specifications.

### 7.3 Inspection

7.3.1 Materials - The CQCM will inspect all material/equipment deliveries for: (1) compliance with approved submittals, (2) damage, (3) correct dimensions and quantities, and (4) required labeling and documentation. The Contracting Officer will be notified of any materials/equipment failing to meet requirements. A record of inspection will be noted in the CQC report and any necessary corrective action will be initiated. Proper storage will be checked.

7.3.2 Off-Site Inspection - The CQCM will inspect manufacturing facilities and material sources as specifically directed by the specifications. Additional inspections will be conducted as necessary to ensure compliance with the specifications. The CQCM will record off-site surveillance activities in the CQC report. Where instances of noncompliance are observed, corrective action will be initiated.

7.3.3 On-Site Inspection - Each craftsman will be charged with the responsibility of performing his or her work in a workman like manner and continually striving for the highest degree of quality. Only craftsman who exhibit an ability to perform and desire to achieve quality will be employed.

The CQCM will routinely and continually inspect the work for compliance with contract documents. His duties, as outlined in 3.1 above, are for the purpose of maintaining and documenting the work as required to achieve a high degree of quality.

The Contract Quality Control Program outlined in paragraph 8.0 of this plan will provide an outline for the CQCM with regard to all definable features of the work. The CQCM's inspection of these work features will be accomplished through implementation of the 3-phase control procedure outline in para 7.4.

7.3.4 Completion Inspection - After completion of all work, the CQCM will conduct a completion inspection of all work features. A punchlist will be developed to identify all items which are not in compliance with the specifications and drawings. The CQCM will establish a date by which each deficiency will be corrected and note such date on the punchlist. A follow-up inspection will be conducted to verify completion of all punchlist items. The completion inspection and any resulting corrective action will be accomplished within the contract performance period. The Contracting Officer will be notified upon completion of the punchlist and corrective work. The punchlist will be made part of the Quality Control documentation by attachment to the CQC report.



## 7.4 Control Procedures

A 3-phase control system shall be implemented by the Quality Control staff to ensure that construction, including subcontractors and suppliers, complies with the requirements of the contract documents. This system of management will address each definable feature of work beginning with early planning stage requirements and ending with the finished work. Each phase will allow the opportunity to prevent problems and deficiencies and ensure that the accident prevention program is implemented. The 3 control phases are outlined in para 7.4.1 thru 7.4.3.

7.4.1 Preparatory Phase - This phase will be performed prior to beginning work on each definable feature of work. This phase will be conducted at a meeting involving the CQCM/Project Superintendent, QA personnel, and the foreman involved in the particular work feature. The Contracting Officer will be notified 48 hours in advance of the preparatory phase. This phase will include:

- a. A review of the applicable section of the specifications and contract drawings. (review specs)
- b. A review of the submittal register to ensure that all required submittals are submitted and approved. Take corrective action when necessary. Submittal data will be discussed to acquaint all team members with technical aspects and points particular to the work feature. (review submittals)
- c. A check to ensure that materials and equipment are in compliance with approved submittals and specifications. Verify that required materials/equipment are on hand and properly stored. (check material)
- d. Verify that preliminary work is completed.
- e. Review control testing requirements and verify that testing facilities are approved. Verify that necessary provisions are made for testing. (review testing)
- f. A consensus will be reached on planned construction procedures and the required level of quality expected from the CQCM in order to meet contract specifications. (set standards)
- g. Review appropriate Activity Hazard Analysis to assure safety requirements are met. The CQCM will inspect all equipment to ensure that minimum requirements for safety provisions in accordance with EM 385-1-1 and applicable regulations are met. (safety check)
- h. The above described activities will be documented on the COE form

"Preparatory Phase Checklist". This form will be attached to the CQC report and furnished to the Contracting Officer. Problems and deficiencies apparent during the preparatory phase and corrective action initiated will be noted in this report.

7.4.2 Initial Phase - This phase is performed once a representative portion of work has taken place for each definable feature of work and will be conducted at a meeting involving the CQCM/Project Superintendent and foreman involved in the particular work feature. The Contracting Officer will be notified 48 hours in advance of this phase. Initial phase will include:

- a. A check to ensure that preliminary work is completed.
- b. Verify that materials/equipment and construction procedures are in compliance with the contract documents.
- c. Review control testing requirements.
- d. Set standards of quality required to meet contract specifications.
- e. Review the Activity Hazard Analysis to ensure safety requirements are met. Check equipment for safety provisions.
- f. The above described activities will be documented on the COE form "Initial Phase Checklist". This form will be attached to the CQC report and furnished to the Contracting Officer. Problems and deficiencies apparent during the initial phase and corrective actions initiated will be noted in this report. The initial phase will be repeated any time the CQCM feels that quality standards and safety requirements must be reinforced.

7.4.3 Follow-Up Phase - This phase is accomplished through the daily inspections by the CQCM, also through performance of the required control testing. Follow-up phase efforts will ensure a continuation of quality and safety standards established during preparatory and initial phases until completion of the work feature. The CQCM's follow-up phase activities, including deficiencies noted, corrective action taken, and control testing results will be recorded in the daily CQC report.

## 7.5 Reporting and Documentation

The CQCM will maintain records of all quality control activities including documentation of control testing and inspection, and maintain integrity of the contract documents through use of the following described forms and procedures. Additional reports will be formulated or added as needed.

7.5.1 Daily Record - The CQCM will utilize the COE furnished forms titled "*Contractor Quality Control CQC Form*" to record daily control activities and resources used, work performed, and other data indicated on this form. The original and two copies will be furnished to the Contracting Officer within 12 hours of the reporting date. The CQCM will maintain copies for his files. Test reports will be included in the CQC report.

7.5.2 Control Phase Checklists - The CQCM will utilize the COE furnished forms entitled "*Preparatory Phase Checklist*" and "*Initial Phase Checklist*" to document these control phase activities. Original and two copies will be attached to the CQC report for the date on which the control phase is completed. A log will be posted at the jobsite office in chart form to record the dates on which preparatory and initial phases were completed for each definable feature of work so as to allow easy verification of control activities.

7.5.3 Tracking Construction Deficiencies - The form for tracking construction deficiencies is the Deficiency Report (DR). A DR can be issued by the CQCM/Project Superintendent or Manager of Construction. All DR's shall be kept and updated by the CQCM. The DR log will be available for inspection by the Contracting Officer. See attached forms for the example of a DR.

The DR tracking log will be in chart form and bound in a log book maintained on site. See attached example of the deficiency report tracking log. The DR log book is available for inspection by the Contracting Officer at all times.

A construction deficiency for the purposes of this plan is defined as:

1. An occurrence in which defective work or work lacking some essential part has been covered or is otherwise left as complete.
2. Products are furnished to the site or incorporated into the work which do not meet the conditions of the contract documents.
3. Inspection points or contract requirements affecting quality of the work that have not been met. Minor defects in work on which construction is underway is not to be considered a Construction Deficiency.

7.5.4 Contract Document Control - The CQCM will maintain a record in log form of the most up-to-date documents issued for construction and adjustments. No contract documents will be replaced or revised without receipt of a modification or direction from the Contracting Officer. The CQCM will maintain As-Built contract drawings.

7.6 Changes to the CQC Plan - Periodically, and at least once weekly, the CQCM

will review the CQC plan with the possible need for changes in mind. During the course of work on this contract, it is reasonable to expect the need for some changes to arise. When they do, the QC Manager will incorporate these changes in the form of written amendments and copies will be furnished to the Contracting Officer.

## ***8.0 QUALITY CONTROL PROGRAM***

(Sample only, this is done for each definable feature of work)

**Q. C. ACTIVITIES & TESTING REQUIREMENTS  
FOR DEFINABLE FEATURES OF WORK**

**CONTRACT W912P8-\_\_-\_\_-\_\_**

**Definable Feature:** Cast In-Place Structural Concrete  
Section 03301

Definable Feature		Submittal	Quality Control Activities		
Description	Spec. Para.	Req'd	Description of Observation Procedure or Test Required	Freq.	Remarks
Concrete - Grout, Water	03301-15.1.4.1 03301-15.5.1.6	Submittal Register	Grout certificate, equipment & method used, & source of mixing & curing water	Once prior to placement	
Concrete - Finishing Formed Surfaces	03301-12.2	QC Report	Visually inspect all finishing is started within 24 hours of form removal, tie rod holes & defective concrete voids and honeycombs are filled properly, smooth surface	After each placement	
Concrete - Fine Aggregate	03301-15.2.1.1	QC Report	Sieve analysis and fineness modulus determination	At least once each delivery	Testing by _____ Laboratory
Concrete - Coarse Aggregate	03301-15.2.2	QC Report	Sieve Analysis	At least once each delivery	Testing by _____ Laboratory
Concrete - Moisture Test	03301-15.2.2.2	QC Report	Test for moisture content for each size coarse aggregate	At least once each delivery	Testing by _____ Laboratory
Concrete - Mixer Uniformity	03301-15.2.12	QC Report	Uniformity of concrete determined in accordance with ASTM C 94.	Prior to concrete placement & 1/ 6 mo	

**Q. C. ACTIVITIES & TESTING REQUIREMENTS  
FOR DEFINABLE FEATURES OF WORK**

**CONTRACT W912P8-\_\_-\_\_-\_\_**

Definable Feature: Cast In-Place Structural Concrete  
Section 03301

Definable Feature		Submittal	Quality Control Activities		
Description	Spec. Para.	Req'd	Description of Observation Procedure or Test Required	Freq.	Remarks
Concrete	03301-5.3	Submittal Register	Submit batch plant details, mixer details, conveying methods and equipment, placing, joint clean-up, curing, and weather requirements	once 14 days prior to placement	
Concrete	03301-3.1.1	Submittal Register	Submit 500 lb sample of aggregate to Waterway Experiment Station for testing if an approved supplier is not used	Once prior to concrete placement	
Concrete	03301-5.1.1	Submittal Register	Submit concrete mixture proportion	Once	
Concrete - Materials	03301-5.1.2	Submittal Register	Submit cement cert. of compliance	Once	Testing by supplier or _____ Lab
	03301-5.1.5		Submit sieve analysis for aggregates		
	03301-5.2.3		Submit air-entraining agent cert. of compliance		
	03301-5.2.5		Submit curing compound cert. of compliance		

**Q. C. ACTIVITIES & TESTING REQUIREMENTS  
FOR DEFINABLE FEATURES OF WORK  
CONTRACT W912P8-\_\_-\_\_-\_\_**

**Definable Feature:** Cast In-Place Structural Concrete  
Section 03301

Definable Feature		Submittal	Quality Control Activities		
Description	Spec. Para.	Req'd	Description of Observation Procedure or Test Required	Freq.	Remarks
Concrete - Placement Preparations	03301-15.2.7	QC Report & LMV Form 1246	Visually & Measure as needed, prior to placement, foundations, const. joints, forms, embedded items, etc., to verify that concrete placement OK	Prior to placement	
Concrete - Air Content	03301- 15.2.6.1	QC Report	Test Concrete for air content	Twice per day	Use _____ Laboratory
Concrete - Slump	03301- 15.2.5.2	QC Report	Test Concrete slump	Twice per day	Use _____ Laboratory
Concrete - Placement	03301-15.2.8	QC Report	Visually inspect placement operations to verify proper equipment, methods, time interval, temp., yardage placed, & placement method	Each Placement	
Concrete - Curing	03301-13.2,4	QC Report	Inspect all surfaces subject to moist curing & impervious sheet curing	At least once/day	Including weekend/hol.
Concrete - Curing	03301-13.3	QC Report	Assure that curing compound is mixed properly, & meets minimum pressure and coverage requirements	After removal of forms	Measure & visual
Concrete - Vibration	03301-15.2.9	QC Report	Test frequency and amplitude of vibrator	Prior to 1st use & 1/month	



## ***9.0 FORMS***

# CONTRACTOR QUALITY CONTROL (CQC) FORM

Contractor's Name

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Daily Report No: \_\_\_\_\_

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

Contract No: W912P8-\_\_-\_\_-\_\_

Project Title and Location: \_\_\_\_\_

Weather: \_\_\_\_\_ Rain: \_\_\_\_in. Temp: \_\_\_\_Min. \_\_\_\_ Max.

## 1. Contractor/Subcontractors and Area of Responsibility:

NUMBER	TRADE	HOURS	EMPLOYER	LOCATION/DESCRIPTION

## 2. Operating Plant of Equipment. (Not hand tools)

PLANT/ EQUIPMENT	DATE OF ARRIVAL/ DEPARTURE	LEASED/ OWNED L OR O	DATE OF SAFETY CHECK	HOURS USED	HOURS IDLE	HOURS REPAIR

## ***CQC Report Form (Cont'd)***

3. Work performed today: (Indicate location and description of work performed by prime and/or subcontractor by letter in table above.)

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4. Results of control activities: (Indicate whether P - preparatory, I - Initial, or F - Follow-up Phase. When a P or I meeting is conducted, complete appropriate forms, attached.)

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5. Test performed as required by plans and/or specifications:

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6. Materials received:

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## **CQC REPORT FORM (CONT'D)**

### 7. Submittals Reviewed:

(a) Submittal No.	(b) Spec/Plan Reference	(c) By Whom	(d) Action

### 8. Off-site surveillance activities, including action taken:

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### 9. Job Safety: (Report violations; Corrective instructions given, taken.)

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### 10. Environmental Protection: (Report violations; Corrective instructions given, taken.)

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### 11. Remarks: (Instructions received or given. Conflicts in Plans and/or Specifications.)

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Contractor's Verification: On behalf of the contractor, I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the plans and specifications, to the best of my knowledge, except as noted above.

\_\_\_\_\_  
Authorized CQC System Manager

\_\_\_\_\_  
Date

## **PREPARATORY PHASE CHECKLIST FORM**

Contract No.: W912P8-\_\_ - \_\_

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

Definable Feature:

\_\_\_\_\_

Government Representative Notified 48 Hours in Advance

Yes\_\_\_\_ No \_\_\_\_

### **I. Personnel Present:**

Name	Position	Company/Government

(List Additional Personnel on reverse side)

### **II. Submittals**

1. Review Submittals and/or submittal log 4288. Have all submittals been approved? Yes\_\_\_\_ No\_\_\_\_

If No, what items have not been submitted?

a.

\_\_\_\_\_

b.

\_\_\_\_\_

c.

\_\_\_\_\_

2. Are all materials on hand? Yes\_\_\_\_ No\_\_\_\_

If No, what items are missing?

a.

\_\_\_\_\_

b.

\_\_\_\_\_

c.

\_\_\_\_\_

## ***PREPARATORY PHASE CHECKLIST FORM (CONT'D)***

3. Check approved submittals against delivered material. (This should be done as material arrives.) Comments:

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### **III. Material storage**

Are materials stored properly? Yes\_\_\_ No\_\_\_

If No, what action will be taken?

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### **IV. Specifications:**

1. Review each paragraph of specifications.

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2. Discuss procedure for accomplishing the work. (Include labor and equipment to be used)

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3. Clarify any differences from specifications.

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### **V. Preliminary Work - Ensure preliminary work is correct.**

If not, what action will be taken?

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## ***PREPARATORY PHASE CHECKLIST FORM (CONT'D)***

### **VI. Testing**

1. Identify test to be performed, frequency and by whom.

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2. When required?

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3. Where required?

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4. Review Testing Plan.

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### **VII. Safety**

1. Review applicable portion of COE EM 385-1-1.

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2. Activity Hazard Analysis Approved? Yes\_\_\_ No\_\_\_

3. All equipment checked and checklists recorded? Yes\_\_\_ No\_\_\_  
If not, what action will be taken?

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### **VIII. Corps of Engineers comments during meeting.**

\_\_\_\_\_  
CQC Representative

**INITIAL PHASE CHECKLIST FORM**

Contract No.: W912P8-\_\_-\_\_-\_\_

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

Definable Feature:  
\_\_\_\_\_

Government Representative Notified 48 Hours in advance Yes\_\_\_ No\_\_\_

I. Personnel Present:

Name	Position	Company/Government

(List Additional Personnel on Reverse Side)

II. Is work in full compliance with plans, specifications and submittals. Are procedures and quality control measures being used acceptable.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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## **INITIAL PHASE CHECKLIST FORM (CONT'D)**

III. Preliminary work. Ensure preliminary work is complete and correct. If not, what action will be taken?

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IV. Establish Level of Workmanship.

1. Where is work located?

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2. Quantity of work performed?

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3. Is a sample panel required? Yes\_\_\_ No\_\_\_

4. Will the initial work be considered as a sample? Yes\_\_\_ No\_\_\_

V. Are standards of acceptance mutually agreed upon? Resolve any differences.

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VI. Check Safety.

Review job condition using COE EM 385-1-1 and job hazard analysis. Comments:

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CQC Representative

## **DEFICIENCY REPORT**

Contract No.: W912P8-\_\_-\_\_-\_\_

DCR NO.: \_\_\_\_\_

Project  
Name: \_\_\_\_\_

Contractor:  
\_\_\_\_\_

Description of Deficiency:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Sketch Attached: Yes\_\_\_ No\_\_\_

Issued By: \_\_\_\_\_ Date: \_\_\_\_\_

Approved and Logged By: \_\_\_\_\_ Date: \_\_\_\_\_  
CQCM

~~~~~  
Planned Corrective Action:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CO or Representative: \_\_\_\_\_ Date: \_\_\_\_\_

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

Corrective Action Implemented: \_\_\_\_\_ Date: \_\_\_\_\_  
Project Super.

Corrective Action Inspected: \_\_\_\_\_ Date: \_\_\_\_\_  
CQCM

# DEFICIENCY REPORT TRACKING LOG

Contract No. W912P8-\_\_-\_\_-\_\_\_\_

| DR<br>NUMBER | DATE<br>ISSUED | ISSUED<br>BY<br>(Initial) | WORK FEATURE<br>(See DR Report<br>for details) | DATE<br>CORRECTED | DATE<br>INSPECTED | INSPECTOR<br>(INITIAL) |
|--------------|----------------|---------------------------|------------------------------------------------|-------------------|-------------------|------------------------|
|              |                |                           |                                                |                   |                   |                        |
|              |                |                           |                                                |                   |                   |                        |
|              |                |                           |                                                |                   |                   |                        |
|              |                |                           |                                                |                   |                   |                        |
|              |                |                           |                                                |                   |                   |                        |
|              |                |                           |                                                |                   |                   |                        |
|              |                |                           |                                                |                   |                   |                        |
|              |                |                           |                                                |                   |                   |                        |
|              |                |                           |                                                |                   |                   |                        |
|              |                |                           |                                                |                   |                   |                        |
|              |                |                           |                                                |                   |                   |                        |

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-- End of Section Table of Contents --

SECTION 01 57 20.01 12

ENVIRONMENTAL PROTECTION

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 a result of construction operations under this contract except as noted elsewhere. 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, except for "Bird Nesting Prevention and Avoidance Measures". Payment for the work covered under this section shall be distributed throughout the existing bid items.

1.3.1.1 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 shall constitute full compensation for furnishing all equipment, labor, materials, supplies, supervision, and all operations incidental thereto.

1.3.2 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.

### 1.3.3 Hazardous/Regulated Waste

If the Contractor uncovers an existing hazardous/regulated waste not Contractor generated, not shown on the drawings, or 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 specified in this paragraph 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

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 birds from nesting within the minimum distances.

### 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 Environment Pollution Control Plan/Environmental Protection Plan For Contractor on-site activities that pose a risk of an oil spill, include in the plan a Spill Reporting and Response Plan.
- (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 will 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

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. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 153.203

Procedure for the Notice of Discharge

#### 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 will 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 will 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 or Email: Jeffrey.M.Corbino@usace.army.mil. 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.

### 3.3.2 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 will 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 animals, 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 Mr. Jeffrey Corbino at (504) 862-1958 or Email: Jeffrey.M.Corbino@usace.army.mil.

#### 3.3.3 Pallid and Gulf Sturgeon

The Contractor should minimize potential impacts to pallid and gulf sturgeon associated with cutterhead dredging. 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 Mr. Jeffrey Corbino at (504) 862-1958 or Email: Jeffrey.M.Corbino@usace.army.mil.

(1) the cutterhead should remain completely buried in the bottom material during dredging operations. If pumping water through the cutterhead is necessary to dislodge material or to clean the pumps or cutterhead, etc., the pumping rate should be reduced to the lowest rate possible until the cutterhead is at mid-depth, where the pumping rate can then be increased.

(2) during dredging, the pumping rates should be reduced to the slowest speed feasible while the cutterhead is descending to the channel bottom.

#### 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. For the hazardous waste generated on-site by the Contractor must 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 is required to 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

The Contractor shall train his/her 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

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e. recognition and protection of archaeological sites, artifacts, and  
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CLOSEOUT SUBMITTALS

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 distributed amongst the existing bid items.

1.2 SUBMITTALS

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

SD-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. Before and 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 circle is to be placed is crowded. Smaller size circle shall be used for crowded areas.

#### 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

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before final payment is made to the Contractor.

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SURVEYS

PART 1 GENERAL

1.1 SCOPE

The work provided for in this section 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. All associated costs shall be included in the contract unit price per cubic yard 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 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 Surveys")

Before and After Dredging Cross Sections

Before and after dredging cross sections of the South Pass 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. (See paragraph "Data")

Preliminary Field Surveys; G, CD

Preliminary Field Surveys; G, EDC

Before and After Dredging Cross Sections

Disposal Area Surveys

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 "General")

#### 1.4 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.

#### 1.5 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.

#### 1.6 SURVEY EQUIPMENT

##### 1.6.1 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.

#### 1.6.1.1 Additional Capacity

Due to shallow depths within the proposed disposal areas, surveys may have to be performed with shallow draft equipment such as airboats, skiffs, marsh buggies, ATV's, etc. and/or conventional means of data collection.

#### 1.6.2 Fathometer

##### 1.6.2.1 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 insure the settings meet the surveying parameters.

##### 1.6.2.2 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 Government 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.

#### 1.6.2.3 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 =  $2/24,000 \text{ Hz} = 83.3 \text{ microseconds}$ ).

#### 1.6.3 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.

#### 1.6.4 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.

#### 1.6.5 Positioning Equipment

##### 1.6.5.1 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".

##### 1.6.5.2 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 via email to [mvn-cd-q-testresults@usace.army.mil](mailto:mvn-cd-q-testresults@usace.army.mil). 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 Government 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 as specified in paragraph "Format of Surveys".

#### 1.6.5.3 Format of Surveys

Survey data shall be collected in accordance with the "USACE New Orleans District Minimum Survey Standards", and delivered in USACE EM Format as described in "Engineering Manual File Format Specifications". The links to these documents are

<http://www.mvn.usace.army.mil/Missions/Engineering/SurveySection/SurveyingGuidelines.aspx> and

[http://www.mvn.usace.army.mil/portals/56/docs/engineering/Geospatial/EM\\_Format09.pdf](http://www.mvn.usace.army.mil/portals/56/docs/engineering/Geospatial/EM_Format09.pdf)

USACE Survey Drivers shall be used to check for proper formatting. The drivers can be downloaded from

<http://www.mvn.usace.army.mil/Missions/Engineering/GeospatialSection/USACESurveyDrivers.>

## 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 controlled preliminary field surveys locating the centerline control points, and all towers, pipelines, buoys and channel markers within the limits of the work. Controlled cross sections of the channel, 600 feet in width (300 feet each side of centerline), shall be taken at approximately 1000 foot intervals within the limits of dredging.

The data from this survey shall be plotted on a layout sheet (Track Plotter Chart) and submitted to the Contracting Officer for determination of the final channel alignment. The Contractor shall not proceed with any dredging work until the Contracting Officer determines the final channel alignment and furnishes this information to the Contractor.

### 3.1.4 Before and After Dredging Cross Sections

"Before and After" dredging cross sections of the channel for measurement of work shall be taken at approximately 200-foot intervals along the channel and at all P.I.'s, P.C.'s and P.T.'s. The soundings shall be made with a depth-sounding instrument described in paragraph "Fathometer". Distances between soundings on each cross section shall not exceed 5 feet 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. 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-feet. In areas of consolidated bottom material, the digitized and recorded depth soundings shall indicate the true channel bottom. However, in survey areas containing unconsolidated bottom materials, acoustic measurements must be augmented with lead line measurements. These lead line measurements must be notated on the fathometer paper chart. 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 IBM compatible ASCII format on magnetic media as specified in paragraph "Data". A layout of the before dredging cross sections

shall be prepared and plotted on a layout sheet (Track Plotter Chart) showing the ranges plotted in plan view. In addition, the cross section information shall also be plotted on a printout sheet, 1 inch = 100 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 quantity surveys have been completed over an acceptance reach, as specified in Section 35 20 23.00 12, paragraph entitled "Acceptance Reach", these surveys shall be supplemented by profiles taken over the same acceptance reach. The depth sounding instrument used to make the before 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 not exceed 5 feet. A tolerance of +/-20 feet normal to and between the designated station and the actual survey line will be permitted. Controlled profiles of the channel shall be made along the channel centerline and one 20-feet inside of each outside bottom edge of the cut at each outside bottom edge of the cut. For channels greater than 300-feet wide, two (2) additional profiles shall be made and they shall be located midway between the centerline of the channel and the 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. Acceptance profiles shall be used in preparation of the As-Built profile drawing(s).

### 3.1.6 Before and After Disposal Area Surveys

#### 3.1.6.1 Before Disposal Surveys

##### 3.1.6.1.1 General

Before Disposal surveys are not required at all potential disposal areas. However, surveys as described below are required at the specified areas whether or not used by the Contractor for disposal.

##### 3.1.6.1.2 Marsh Creation Platforms

Before disposal area surveys shall be taken on approximate 1000 foot intervals at the four (4) marsh creation platform sites North Cell, Castille Disposal Area, Leblanc Disposal Area, and Windham Disposal Area, whether or not used by the Contractor. The required cross sections shall reference channel centerline stationing. Approximately four (4) cross sections shall be taken at the North Cell, as shown on drawings, extending from the existing dike/embankment to the southeastern limit of disposal. Approximately five (5) cross sections shall be taken at the Castille Disposal Area, as shown on drawings, extending from the existing marsh on the southwestern limit of disposal into the disposal area to the southeastern limit of disposal. Approximately eight (8) cross sections shall be taken at the Leblanc Disposal Area, as shown on drawings, extending from the existing marsh on the southwestern limit of disposal into the disposal area approximately 1500 feet. Approximately three (3) cross sections shall be taken at the Windham Disposal Area, as shown on drawings, extending from the existing marsh on the southwestern limit of disposal into the disposal area approximately 1500 feet. The distance

between soundings and/or rod readings shall be approximately 50 feet, and adjusted to capture all abrupt breaks in grade. Soundings and/or rod readings shall be recorded to the nearest tenth of a foot. All survey data shall be promptly plotted and furnished to the Contracting Officer's Representative. All survey data shall be recorded as specified in paragraph "Data".

#### 3.1.6.1.3 West Side Islands

Two (2) 24 acre island development areas are proposed west of the navigation channel at the approximate latitude of C/L Station 300+00. Three (3) before disposal area surveys shall be taken on approximate 2000 foot intervals, whether or not used by the Contractor. The required cross sections shall reference channel centerline stationing. Cross sections shall be approximate 1000 feet in length, centered on the theoretical island alignment at the approximate locations shown on the drawings. The distance between soundings and/or rod readings shall be approximately 50 feet. Soundings and/or rod readings shall be recorded to the nearest tenth of a foot. All survey data shall be promptly plotted and furnished to the Contracting Officer's Representative. All survey data shall be recorded as specified in paragraph "Data". The location of the Initial Discharge Points (IDP's) and direction of material placement may be adjusted as a result of survey data obtained.

#### 3.1.6.2 After Disposal Surveys

After disposal area surveys shall be taken only at disposal sites used by the Contractor. In general, after disposal surveys shall consist of cross sections taken at approximate 500 foot intervals across the areas that received dredged material placement. The number of required cross sections at each site shall be determined by the extent of disposal performed. The width of each cross section taken shall be adequate to encompass the entire resulting dredge fill. The number, length, and location of proposed after disposal cross sections shall be approved by the on-site Government Inspector prior to initiation of survey activities. After disposal cross sections of the limits of disposal area used shall be taken and plotted as soon as practicable upon completion of deposition within the area. The distance between soundings and/or rod readings shall not exceed 50 feet, and shall capture all abrupt breaks in grade. Soundings and/or rod readings for all disposal area surveys shall be recorded to the nearest tenth of a foot. All survey data shall be promptly plotted and furnished to the Contracting Officer's Representative. All survey data shall be recorded as specified in paragraph "Data". Copies of the plotted "After-Disposal" sections and profiles shall be included in the required AS-Built Drawings.

For Scott and Ed Islands (if used), a minimum of three after disposal cross sections shall be taken, referenced to the channel centerline. The cross sections shall be taken at 500 foot intervals, or adjusted as necessary if the placement area does not result in an adequate length to accommodate 500 foot spacing. In addition to these cross sections, an island profile shall be taken perpendicular to the cross sections for each created island. The profile shall begin 500 feet beyond newly established waters edge on each end.

Surveys of East Bird Island and South Pass Spit shall begin at each respective Single Point Discharge (SPD) location, and proceed at 500 foot intervals along the newly developed spit alignment. The final cross section shall be taken beyond the limits of dredged material placement, to

capture one (1) cross section of pre-existing spit condition data.

### 3.1.7 Access Corridors

The Contractor shall perform before and after construction surveys of all access corridors to be used. All surveys data shall be provided in electronic format as specified in paragraph "Data"). The before construction surveys shall consist of a centerline profile of each proposed access corridor. The after construction surveys shall consist of a centerline profile and cross sections at 200 foot intervals. The cross sections shall be adequate to encompass the areas impacted by excavation and stockpiled material(if allowed). All profiles shall be taken with shots at 20 foot intervals. The cross section surveys shall be taken perpendicular to and extending a minimum of 100-feet from either side of the centerline. Soundings and/or rod readings shall be taken every 20 feet, with zero(0) distance at the centerline of the cross sections. All soundings and/or rod readings shall be recorded to the nearest tenth of a foot and expressed in feet referenced to MLG.

The Contractor shall provide plan plots of the access corridors, showing "after" construction elevations. The plots shall be to a scale approved by the Contracting Officer's Representative. The plots shall be included in the required As-Built drawings.

### 3.1.8 Retention Dikes, Freshwater Reservoir (Castille Disposal Area)

To verify that the Contractor's retaining dikes have been constructed and/or maintained to meet minimum specifications, the Contractor shall submit a centerline profile of the Castille Disposal Area perimeter dike. Cross sections shall also be taken for all required rehabilitation reaches of dike. These surveys shall follow the following criteria: C/L profile - rod readings taken at 50 foot intervals along the dike crown C/L; cross-sections taken at 300 foot intervals perpendicular to the dike C/L, defining the crown width, side slopes, and elevations, including all abrupt changes in grade. The cross sections shall extend far enough to capture the limits of the borrow pits. The data from these surveys shall be given to the Contracting Officer for review and approval prior to discharge operations commencing in any confined disposal area.

### 3.1.9 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 --

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SECTION 35 20 23.00 12

DREDGING

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. Prior to any activities on the Pass A Loutre Wildlife Management Area (PLWMA), U.S. Army Corps of Engineers (USACE) and the Contractor shall conduct a pre-construction coordination meeting with PLWMA personnel. USACE will contact Mr. Cassidy Lejeune at 337-373-0032 or Mr. Todd Baker at 225-765-2814 to arrange a coordination meeting.

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 October 2019 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 and shall replace 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 "Acceptance 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 and after 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" 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-foot 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 and after 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 Flotation Access Channel/Access Corridor

No measurement will be made for excavation of flotation access channels and access corridor work.

#### 1.2.8 Dike and Closure Construction/Maintenance

No measurement will be made for dike and closure construction, maintenance to existing dikes/closures, and or deflection dikes/weirs necessary to control flow of dredged material.

#### 1.2.9 Radio And Telephone Communication Equipment

No separate measurement and payment will be made for furnishing and maintaining radio and telephone communication equipment.

### 1.3 PAYMENT

#### 1.3.1 Mobilization And Demobilization

Initial mobilization and final demobilization of the Contractor's plant and equipment under this contract 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 required for surveying, including any additional soundings that may be directed, grab sampling, excavation, disposal of materials, furnishing diesel powered crewboats fully operated, providing aluminum skiffs 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.

#### 1.3.3 Flotation Access Channel/Access Corridors

Payment for excavation of all flotation access channels and access corridors will be made at the contract job price for "Flotation Access Channel/Access Corridor". Price and payment shall constitute full compensation for furnishing all plant, labor, and materials required to perform excavation of the required flotation channel(s) for access, and for all work required for access improvements, for Contractor access the disposal sites.

#### 1.3.4 Dike and Closure Construction/Maintenance

Payment for dike and closure construction/maintenance will be made at the contract job price for "Dike and Closure Construction/Maintenance". Price and payment shall constitute full compensation for furnishing all plant, labor, equipment and materials for construction of the new dike and closures, maintenance of existing dikes and/or closures, and dredge effluent disposal; as specified herein and as shown on the drawings.

### 1.4 SUBMITTALS

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

#### SD-01 Preconstruction Submittals

##### Dredge Plant Data

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; G, ED

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,ED

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 DREDGE MATERIAL)

Access Plan; G,ED

See subparagraph "Access Plan" of Paragraph "QUALITY CONTROL", and Section 01100 GENERAL PROVISIONS, entitled ACCESS PLAN.

Construction Schedule; G,CT

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 subparagraph "Report Of Operations" of Paragraph "QUALITY CONTROL")

### 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) Retaining Dikes and Closures. The location, widths, grade, and side slopes of retaining dikes, deflection dikes, weirs, and closures, associated borrow, and maintenance of integrity of retaining dikes and closures during pumping operations.
- (3) Flotation Channels and Access Corridors. The location, grade, disposal requirements, and adherence to usage of allowable access corridors and flotation channels.
- (4) Dredged Material Disposal. Limits of dredged material as deposited in a disposal area, alignment, and location. Surveillance and location of the dredge discharge outlet. Surveillance of elevation of material placed within disposal areas.

(5) Discharge Effluent. Any shoaling or leak in pipeline, and operation of waste weirs where constructed.

(6) Reporting

#### 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 (ENG 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 ENG 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  
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 proposes 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 FAR Clause 52.236-15 "SCHEDULES FOR CONSTRUCTION CONTRACTS".

### 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.

## 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

The Contractor shall furnish, throughout the contract period, for the exclusive use of the Government: a motorboat, minimum 18 foot in length, with enclosed cabin, a minimum of a 50 horsepower motor and equipped with safety equipment as required by EM 385-1-1. The Contractor shall also furnish fuel, oil, and maintenance of the motorboat throughout the contract period. The Contractor shall assume full responsibility for the storage and security of the motorboat when not in use by the Government employees. There shall be no separate payment for these items and the cost shall be distributed throughout the existing bid items. 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. No smoking shall be allowed inside the cabin and operator's space while occupied by Government personnel. No Smoking signs shall be posted.

#### 1.7.5 Miscellaneous Equipment

The Contractor shall maintain, at a minimum, the following equipment at the worksite throughout the duration of work:

(1) Necessary shore equipment to accomplish the work in the disposal area(s) which may include, but is not limited to, excavating equipment, earth moving equipment, pipeline handling equipment and other equipment as needed, and all shall be fully operated and maintained;

(2) One (1) 18-foot aluminum skiff, fully operated, with enclosed cabin, with an engine meeting the maximum horsepower rating of the skiff; and,

(3) One (1) airboat within 12 hours after receiving notice from the Contracting Officer's Representative. The airboat shall be fully operational, with operator, fuel, and shall be equipped with noise protection for passengers. The airboat shall be available from 7AM to 7PM and be capable of transporting the operator and three (3) passengers, and shall be equipped to US Coast Guard standards for vessels of its size class. Airboats shall not be operated in conditions where waves exceed two (2) feet in height.

#### 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

(2014) Safety -- Safety and Health  
Requirements

#### PART 2 PRODUCTS

##### 2.1 GAGES

Staff gages required within the disposal area shall consist of 3-inch white PVC pipe, 4 inch x 4 inch treated wooden posts, or other material as approved by the Contracting Officer's Representative.

#### 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 Station 30+00, to Station 725+00. All work shall be performed as specified herein and as shown on the contract drawings.



### 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 unit price for "Dredging."

### 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<br>Dredged | Design<br>Elevation<br>Depth (ft-MLG) | Width<br>Dimensions |
|----------------------------------|-----------------|---------------------------------------|---------------------|
| C/L Stas.<br>280+00<br>to 760+00 | June 2000       | -20.0'                                | 300'                |
| C/L Stas.<br>240+00<br>to 740+00 | Jan 2007        | -20.0'                                | 300'                |

Virgin material may be encountered above or below the channel dimensions listed above. The table above indicates the last maintenance dredging event performed. Dredging history of South Pass 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: -20.0 feet MLG x 300 feet width between C/L Stations 20+00 and 725+00. The Contractor shall submit for approval by the Contracting Officer a detailed Plan of Operations 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 referencing the following information:

- \* The anticipated date the dredge will work over the pipeline/utility;
- \* The depth and width of the dredge cut over the pipeline/utility;
- \* Points of contact and telephone numbers;
- \* Emergency procedures; and,
- \* Any other information from the Contractor that the pipeline/utility owner may consider significant for safe dredging operations over the crossing.

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.

The Government will not be responsible for any damages to structures or pipelines/utilities due to the Contractor's deviation from the approved plan.

### 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 the 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. 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:

Passes of the MR, South Pass, Maintenance Dredging #20-2  
Ed 20-075

| Utility Or Structure                     | Approximate Station | Elevation M.L.G. | Name and Address of Owner                                                                                                                                                                                                                                             |
|------------------------------------------|---------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1-12" Oil P/L                            | 72+64               | -45.0'           | Crimson Gulf<br>April Harvey<br>496 Corporate Drive<br>Houma, LA 70360<br>Cell: 562-285-4112<br>AHarvey@crimsonpl.com                                                                                                                                                 |
| 1-12" Oil P/L                            | 92+51               | -80.0'           | Crimson Gulf<br>(see above)                                                                                                                                                                                                                                           |
| 1-6 5/8" Gas P/L                         | 119+92              | -100.0'          | Fieldwood Energy<br>2014 W. Pinhook Rd<br>Suite 800<br>Lafayette, LA 70508<br><br>Brian Molaison<br>(Off) 337-354-8118<br>(Cell) 337-258-5078<br>bryan.molaison@fwellc.com<br><br>Reggie Quinn<br>(Off) 337-354-8134<br>(Cell) 337-315-9526<br>reggi.quinn@fwellc.com |
| 2-16" Gas P/L's                          | 280+00              | -40.0'           | High Point<br>Robin Asevado<br>2402 Bayou Rd<br>St. Bernard, LA 70085<br>601-799-4069, x-2023<br>Email:<br>rasevado@americanmidstream.com                                                                                                                             |
| 6" Oil Pipeline<br>abandoned in<br>place | 350+87              | -40.0'           | Texaco P/L Co.<br>P.O.Box 60252<br>New Orleans, LA 70160<br>Mr. Jim Holder<br>504-680-1000                                                                                                                                                                            |
| 12" Oil P/L<br>abandoned in place        | 479+75              | -45.0'           | Statoil Inc (old<br>Texaco P/L)<br>Houston, TX 77002<br>Mr. Ed Scott<br>713-843-1800<br><br>Mr. Gary James<br>504-534-9312<br>Port Sulphur, LA or<br>Mr. Richard Drost<br>(Field Rep)<br>318-234-0100<br>OCS Inc.<br>P.O. Box 525247<br>Lafayette, LA 70505           |
| 8 5/8" Gas P/L                           | 553+00              | -40.0'           | Louisiana State Gas, LLC                                                                                                                                                                                                                                              |

|                                                                                                                        |                                                         |                                                                 |                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                        |                                                         |                                                                 | Hwy 23<br>Nairn, LA<br>Mr. Steve Small<br>Office: 504-564-9816<br>Cell: 504-915-0902<br>Email:<br>ssmallllsgc@yahoo.com                                                                                             |
| Submerged power<br>cable<br>Overhead powerline<br>(along westbank)<br>DE-ENERGIZED<br>south of Port Eads<br>lighthouse | 576+20<br>South of<br>submerge<br>crossing              | -55.0'                                                          | Entergy<br>3734 Tulane Ave<br>L-TUL-113<br>New Orleans, LA 70119<br>Jeremy Rich<br>(of) 504-595-3816<br>Email:<br>jrichl@entergy.com                                                                                |
| Submerged power<br>cable<br>Abandoned in place                                                                         | 691+03                                                  | Unknown<br>Dredged<br>over<br>previously<br>without<br>incident | 8th Coast Guard Dist<br>Private Aid Station<br>501 Magazine St<br>New Orleans, LA 70130<br>Lt. Kenneth Marien<br>Civil Engineer<br>15609 SW 117th Ave<br>Miami, Fla 33177-1630<br>305-278-6734, Fax<br>305-278-6704 |
| 4-6" Flowlines                                                                                                         | Within<br>Disposal<br>Area                              | Permitted<br>3' below<br>mudline                                | Dune Operating Co.<br>777 Walker Street<br>Suite 2450<br>Houston, TX 77002<br>Chip Peltier<br>Ph: 337-315-0657<br>Email:<br>cpeltier@duneenergy.com                                                                 |
| 4-6" Flowlines                                                                                                         | Within<br>Disposal<br>Area                              | Permitted<br>3' below<br>mudline                                | Dune Operating Co.<br>(see above)                                                                                                                                                                                   |
| 6" Pipeline                                                                                                            | crossing<br>access<br>corridor                          | Unknown                                                         | Davis Oil<br>777 Walker Street<br>Suite 2450<br>Houston, TX 77002                                                                                                                                                   |
| 1-4" Flowline                                                                                                          | around the<br>perimeter<br>of Castille<br>disposal area | Permitted<br>-4.0 in<br>open water<br>& -8.0 in<br>canals       | Whitney Oil & Gas, LLC<br>400 Poydras Street<br>Suite 1440<br>New Orleans, LA 70130<br><br>Michael Francis<br>985-799-1647<br>mfrancis@whitneyoiland<br>gasllc.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 as shown on the contract drawings and as specified herein. The Contractor shall submit to the Contracting Officer for review and approval a plan for disposal of dredged material within the disposal areas provided herein, a minimum of seven (7) days prior to commencement of the work. This is to insure that the retention of material is maximized. This plan shall include dredge discharge locations, methods for protecting the integrity of retaining dikes, and proposals for restricting dredged material within allowable disposal boundaries. Access to the disposal sites will be restricted to the access corridors shown on the drawings and existing water bodies. Excavation of specific access corridors will be allowed. In the event the Contractor elects to utilize Outlet 10.0E for flotation access; excavation, if required, shall be performed along the apparent C/L of the waterway and the excavated material placed on the south side of the existing outlet. The Contractor shall establish and maintain staff gages at each discharge location and throughout each disposal area as needed in order to monitor the elevation of the material for compliance with the plans and specifications; specifically to assure that maximum allowable elevations are not exceeded. The staff gages shall be marked at one-half foot intervals, extending from water's surface to at least one (1) foot above the maximum allowable disposal elevations.

#### 3.3.1.1 Disposal Area Capacity

The Contracting Officer's Representative will determine when an area has been utilized to the optimum capacity, prior to the Contractor utilizing another area.

#### 3.3.1.2 Freshwater Reservoir (Castille Disposal Area)

Dredged material shall be deposited along dike/embankment separating the North Cell and Castille Disposal Area as depicted on Sheet Identification No. C-04 to a maximum elevation of +8.0 feet MLG. The intent of this

Disposal Plan is to develop a marsh creation site beginning in the northeast corner of the Castille disposal area, with filling of the site in an westerly direction. Filling shall be from east to west, gradually working south towards Cadro Pass. Access to the disposal area will be via the 150 foot access corridor from South Pass to Cadro Pass and via a submerged disposal line under Cadro Pass. The Contractor is allowed to establish his/her pipeline into the disposal area where desired, as long as no impacts result to the navigability of Cadro Pass. The 150-foot access corridor adjacent to approximate mile 5.5-L of South Pass, as shown on the drawings, shall be used for access of all pipeline and equipment, and airboat access necessary for pipeline installation and maintenance during disposal operations, and removal of pipe. No excavation within this access corridor will be allowed. Pipeline crossing Cadro Pass shall be submerged properly and marked as to not block boat traffic. Once dredging operations are complete, the 150 foot access corridor shall then be backfilled with disposal material to a maximum of two (2) feet above existing adjacent marsh. All other access to the disposal area in the Freshwater Reservoir shall be by airboat or skiff. During peak camp ground usage, including waterfowl season which includes the months of September, November, December, and January, nighttime usage will be restricted to personnel access only. Nighttime is defined as the hours between sunset and sunrise and shall be limited to ATV's such as four-wheelers. However, this does not prohibit the Contractor from using equipment already on-site within the disposal area. Prior to depositing material in the disposal area, retention dikes shall be constructed and/or maintained as required by the Contractor, so that dredged material shall be confined to the Castille disposal area and not enter Cadro Pass, Cadro Pass Extension or other adjacent waterways and passes shown on the drawings. **The exception to the retention requirement will be the existing (approximately 1500 foot) gap along the southeast side of the pond where no closure is required.**

### 3.3.1.3 Freshwater Reservoir (North Cell Disposal Area)

Dredged material shall be deposited at either of the SPD (Single Point Discharge) location in the North Cell disposal area, as shown on drawings, to a elevation of +8.0' feet NAVD88. The intent of this disposal plan is to develop a marsh creation platform. The dredged material shall be placed in a manner such that the material expands in a northeasterly direction. Access to the disposal area may either be via the 150 foot access corridor from South Pass to Cadro Pass, or across Castille Disposal Area via 150 access corridor crossing dike/embankment separating the North Cell and Castille Disposal area. A submerged disposal line shall be used to cross Cadro Pass. The Contractor is allowed to establish his/her pipeline into the disposal area where desired, as long as no impacts result to the navigability of Cadro Pass. The pipeline crossing of Cadro Pass shall be submerged properly and marked as to not reduce the depth of the pass and impede boat traffic. Once dredging operations are completed, the 150 foot access corridor off of South Pass, if used, shall be backfilled with disposal material to a maximum of two (2) feet above existing adjacent marsh. All other access to the disposal area in the North Cell shall be by airboat or skiff.

During peak campground usage, including waterfowl season which includes the months of September, November, December, and January, nighttime usage will be restricted to personnel access only. Nighttime is defined as the hours between sunset and sunrise and shall be limited to ATV's such as four-wheelers. However, this does not prohibit the Contractor from using equipment already on-site within the disposal area. No airboat activity will be allowed on the Pass A Loutre Wildlife Management Area during

waterfowl season during the months of September, November, December and January unless approved by the Department of Wildlife and Fisheries. Prior to depositing material in the North Cell disposal area, retention dikes shall be constructed and/or maintained as required by the Contractor, so that dredged material shall be confined to the North Cell disposal area and not enter Cadro Pass, Cadro Pass Extension or other adjacent waterways and passes depicted on the contract drawings.

#### 3.3.1.4 Leblanc Disposal Area

(1) The Contractor is allowed to fill disposal area to capacity. However, it is mandatory that material dredged between approximate C/L Stations 385+30 and 488+64 be placed within "Leblanc Disposal Area". The intent of this disposal plan is to place continuous fill paralleling the marsh along the east bank of Cadro Pass, initiating at the northern limit and proceeding in a southerly or southeasterly direction adjacent to existing marsh along the east bank of Cadro Pass. Disposal elevation shall not exceed +8.0' NAVD88. As this maximum elevation is reached, the discharge line shall then be moved towards the south-southeast as necessary to maintain the construction of a continuous disposal platform, in compliance with the above elevation, up to the southern limit of the Leblanc disposal area. In the event the Contractor should reach the southern limit of the Leblanc disposal area and additional material remains within the specified reach to be dredged and placed at this site, the Contractor shall move the pipe back to the northern limit of the Leblanc disposal area with the discharge to recommence east of the previously placed material. Discharge shall then proceed south-southeasterly as defined above. This sequence shall be followed until all material specified for placement at the Leblanc disposal area is completed. Pipeline placement adjustments and/or retention/deflection dike construction may be required to keep disposal material confined to the Leblanc disposal site and not enter other adjacent waterways and passes depicted on the contract drawings.

(2) Access to the Leblanc disposal area shall be via the access corridor from South Pass in the general vicinity of C/L PI Station 431+36.71, through open water to Cadro Pass, and across Cadro Pass. Pipeline crossing Cadro Pass shall be submerged as to not block boat traffic. See drawings for further details, (i.e. dimensions, coordinates, theoretical sections, etc). This access corridor may be excavated as necessary to the maximum dimensions shown on the contract drawings, but every effort shall be taken to minimize excavation required for disposal area access. All excavated material shall be placed on the south side of access corridor, however material will be allowed to be placed on the north side of access corridor for the first 100-feet. Where the access corridor cuts through shallow open water, the material shall be placed on the south side of the cut with 50 foot gaps left every 300-feet. Excavated material within open water area S shall be left in place. Once dredging operations are complete the two (2) legs of access corridor which cross either bankline of Cadro Pass shall be backfilled with disposal material to a maximum of two (2) feet above existing adjacent marsh. If disposal material enters Cadro Pass and/or Dennis Pass, the Contractor shall return Cadro Pass and/or Dennis Pass to its pre-disposal depth. Access corridors shall be used for all pipeline and equipment, and airboat or skiff access necessary for pipeline installation and maintenance during disposal operations, and removal of pipe.

#### 3.3.1.5 Windham Disposal Area

Dredged material shall be deposited east of the adjacent marsh and along

the west boundary of the Windham disposal area, to a maximum elevation of + 8.0' NAVD88. The intent of this disposal plan is to create a marsh creation platform beginning along the west side of Windham Disposal Area, with maximum filling of the site beginning along the west bank, with a maximum filling of the site in a easterly direction. Pipeline placement adjustments and/or retention/deflection dike construction may be required to keep disposal material confined to the Windham disposal site and not enter other adjacent waterways and passes depicted on the contract drawings. Multiple access corridors are available to the Contractor to access the Windham Disposal Area. These access corridors shall be used for all pipeline and equipment, and airboat or skiff access necessary for installation and maintenance during disposal operations and removal of pipe. The Contractor may access Windham Disposal Area via Outlet 11.8E, Outlet 10.0E, and/or the overbank corridor located at approximate C/L station 607+54.78. If the existing Outlet 11.8E or 10.0E is used, the Contractor is forewarned that there are existing rock structures at the mouths of these channels. The Contractor shall verify the existence and elevations of these rock structures in determining his/her plan for access; as the structures are not to be disturbed. Excavation of a maximum 40 foot wide bottom width flotation channel is allowed within outlet 10.0E to a maximum elevation of -4.0' MLG. Excavated material shall be neatly stockpiled along the south bank of the existing channel. Two (2) of the viable access corridors require traversing over existing marsh. If used, no excavation of the existing marsh platform is allowed. Upon completion of disposal, the marsh platform impacted by equipment usage and pipeline placement shall be backfilled to two (2) feet in elevation above the existing marsh.

#### 3.3.1.6 East Bird Island

Dredged material shall be deposited in such a manner as to enhance the East Bird Island on the east side of the channel. The maximum top elevation of the island shall not exceed +8.0' feet NAVD88. Dredged material shall be initially discharged at the Single Point Discharge (SPD) location shown on the drawings. The dredged material shall be placed along the gulf side of the island in a manner such that the island's footprint expands in a easterly direction. The Contractor shall monitor and move, if necessary, the discharge location to assure channel and/or existing outlet 12.0E are not impacted. The Contractor may access the East Bird Island via Outlet 11.8E and/or across rock jetty and/or Gulf of Mexico. Access corridor shall be used for all pipeline and equipment, and airboat or skiff access necessary for installation and maintenance during disposal operations, and removal of pipe. No excavation of Outlet 11.8E is allowed.

#### 3.3.1.7 South Pass Spit

Dredged material shall be deposited in such a manner as to enhance the South Pass Spit on the west side of the channel. The maximum top elevation of the spit shall not exceed +8.0 feet NAVD88. Dredged material shall be initially discharged at the Single Point Discharge (SPD) location shown on the drawings. The dredged material shall be placed on South Pass Spit in a manner such that the spit's footprint expands in a westerly direction. The Contractor may access the South Pass Spit via Outlet 12.6W and/or Gulf of Mexico. Access corridor shall be used for all pipeline and equipment, and airboat or skiff access necessary for pipeline installation and maintenance during disposal operations, and removal of pipe. If the Outlet has a submerged weir, no excavation will be allowed. The Contractor shall verify the existence and elevation of this rock structure in determining his/her plan for access; as the structures are not to be disturbed.



### 3.3.1.8 Bird Island Location (Scott and Ed Island)

Scott Island is first priority. Dredge material is limited to a maximum initial elevation of +8.0' NAVD88. The islands footprint shall be no larger than 24 acres at elevation +1.0' NAVD88 as shown on Sheet Identification No. C-09. Once material reaches maximum elevation (at 24 acre size) at the Scott Island location, the Contractor shall move the discharge location to Ed island. Ed island construction shall proceed with the same construction sequence as the first. A distance of 2000 feet at waters surface shall be maintained at all times between the islands. The location of Ed Island shall be field adjusted to accommodate this 2000 foot buffer based off how Scott Island develops. The Contractor shall use the access corridor shown on Sheet Identification No. C-09. No excavation is allowed. The Contractor shall establish and maintain staff gages at discharge location and throughout disposal area as needed in order to monitor the elevation of the material for compliance as specified herein and as shown on the drawings. The staff gages shall be marked at one-half foot intervals, extending from the waters's surface to at least 1-foot above the maximum allowable disposal elevations.

### 3.3.2 Prevention Of Damage

The dredged material shall be transported and deposited in such a manner as to insure that no damage will occur to growing crops, highways, levees, drainage systems, pipelines, utility lines, structures, or other marked by the Contractor with conspicuous buoys or stakes.

### 3.3.3 Retaining Dikes And Closures (Castille Disposal Area)

(a) With the exception of a few gaps, shallow perimeter dikes currently exist surrounding the Castille Disposal Area. Prior to depositing material in the Castille Disposal Area, retaining dikes and closures shall be constructed, strengthened and/or maintained by the Contractor as required, along the existing perimeter, such that dredged material will not be allowed to enter Cadro Pass. No closure will be required at the gap on the southeast side of Freshwater Reservoir, where shown on the drawings. However, a silt screen shall be installed at the gap in the north bank of the Bayou south-east of this gap in the Castille Disposal Area (see drawings for details). Materials necessary for dike construction or maintenance shall be obtained either from within the disposal area or from the adjacent waterways.

(b) Retention dikes and closures shall have a minimum crown width of five (5) feet. A minimum of two (2) foot of freeboard shall be maintained at all times for confined disposal area(s) used, and the side slopes of the retaining dikes shall be no steeper than 1V on 3H. All borrow material for dike and closure construction/repair that is taken from the interior of the disposal area, unless otherwise allowed/specified, shall be taken at a minimum distance of 40-feet from the inside toe of the dike/closure so as not to de-stabilize the dike. These dike/closure parameters are given as minimum requirements and are not to be interpreted as Government designed. The Contractor shall design, build, and maintain the dikes and closures to safely retain the deposited dredged material. The Contractor shall submit to the Contracting Officer for review prior to construction, a typical sketch of the dike and closure repair/renovation and/or new dike/closure construction showing all slopes, distances, elevations, discharge pipe location(s).

#### 3.3.4 Dredge Effluent Disposal

Undisturbed plugs/natural crossings at least every 500-feet are required in any borrow pits excavated for the perimeter retaining dikes/closures to prevent erosive channeling by the effluent waters and to increase retention time. The discharge line into a disposal area shall have manifolds or baffles on the point discharge. The point discharge shall be at least 1,000 feet from the effluent outlet structure/location. No separate payment will be made for work required under this paragraph, and the cost thereof shall be included in the contract job price for "Dike and Closure Construction/Maintenance".

#### 3.3.5 Failure of Retaining Dikes

If the retaining dikes fail for any reason during hydraulic dredging operations, whether constructed by the Contractor or maintained by others, the Contractor shall immediately cease pumping at the site until the retaining dikes have been adequately restored or raised and the dikes can successfully fulfill the purpose for which they were intended. Any material which is deposited in any area not designated as a disposal area as a result of any such failure is the Contractor's responsibility and shall be removed at the Contractor's expense.

#### 3.3.6 Excessive Discharge Pipe Leakage

Excessive leakage of the discharge pipe or seepage at the waste weir or effluent outlet locations, at or in the immediate vicinity of the dike, shall be sufficient cause for the Contracting Officer to require the Contractor to cease pumping until corrective measures can be taken.

#### 3.3.7 Effluent Sedimentation

In areas not yet accepted for payment or in areas not yet dredged, the Contractor shall remove all effluent sedimentation from the channel at no additional expense to the Government. In areas previously accepted for payment, and in adjacent areas of the channel where no work is required, the Contractor shall remove all effluent sedimentation from the channel within 500-feet of the point where the waste water is returned to the channel at no additional expense to the Government.

#### 3.3.8 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.

#### 3.3.9 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.

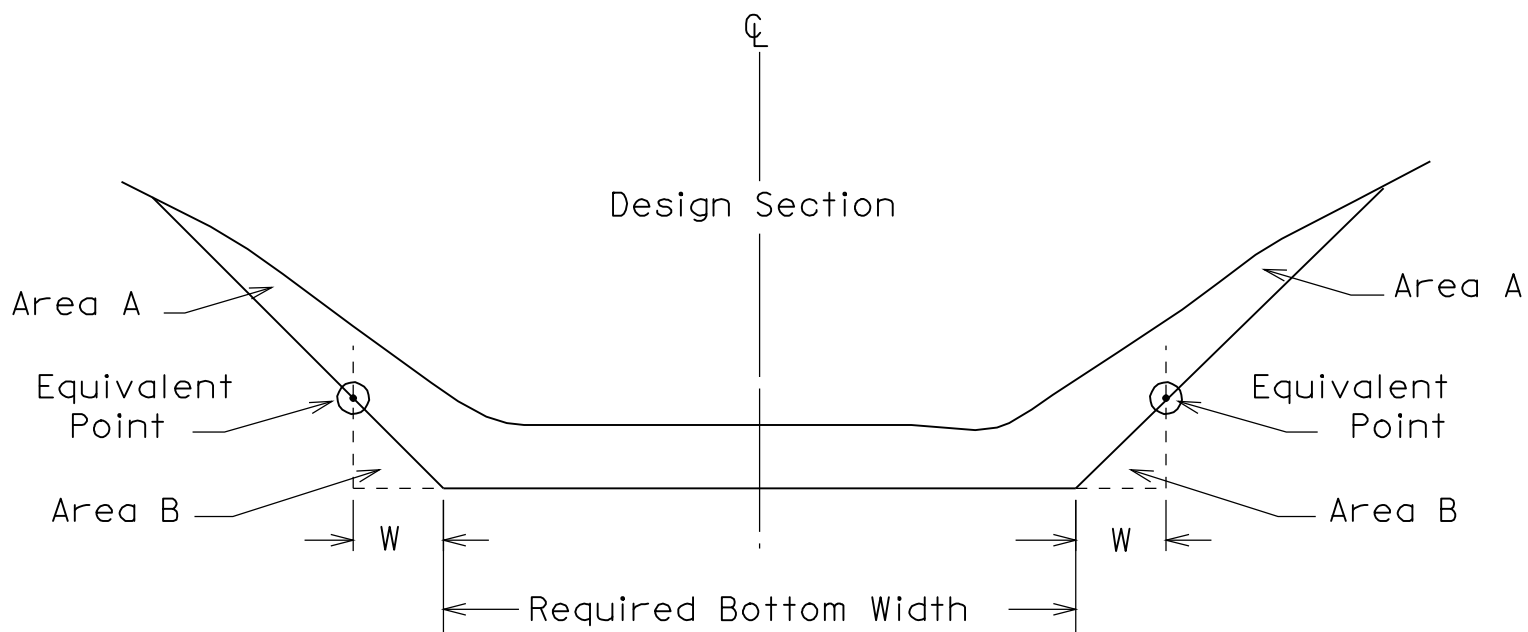
### 3.3.10 Submerged Discharge Lines

South Pass intersects multiple connecting tributaries within the required reaches of work. If a submerged discharge line is used along South Pass, it shall at no time reduce the depth or width at the mouth of these existing channels. 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 150 foot intervals for the entire length of the pipeline with United States Coast Guard approved fluorescent orange buoys and signs stating "DANGER SUBMERGED PIPELINE." Pipelines placed in allowable open water access corridors shall be located in a manner to minimize impacts to local mariners. Cadro Pass, with the exception of the Freshwater Reservoir area will be allowed to be closed during disposal. However, prior to any closure of Cadro pass during disposal, a two (2) week notice shall be given to Pass A Loutre Wildlife Management Area (PLWMA). Contact Mr. Todd Baker at 225-281-2066 or Cassidy Lejeune at 337-373-0032 to arrange a coordination meeting. Pipeline crossing Cadro Pass at the Freshwater Reservoir location shall be submerged as to not block boat traffic.

### 3.3.11 Work In The Vicinity Of Other Government Contractors

The Government may award other contracts for additional work in the area, or undertake work with its own personnel and equipment. The Contractor shall fully cooperate with such Contractors or Government forces, and shall neither commit nor permit any act that may interfere with the performance of work by any other Contractor or Government forces. The Contractor shall coordinate his/her operations, through the Contracting Officer's Representative, with any other Government work efforts in the vicinity (i.e. dredging, surveys, revetment, jetty repairs, dike construction, etc.).

-- 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

# WORK SHEET FOR PREPARING CONSOLIDATED FORM 4267

Contract No.: W912P8- Period:

Dredge:

| Date  | Advance | Assign Width | Elevation<br>BD AD | Cubic<br>Yards | C.V.<br>Hour | Pump<br>Time | HP | HAL | CPPL | CGSH | CLPJ | MOR | SISW | WIP | LDNE | PMUT | MISC | Delay<br>Time | Portion | Shore | Sub | Total | Tide<br>Gauge | Discharge Lines<br>Fuel Oil Grease Water | Pump<br>RPM | Dredge<br>Crew | Assignment<br>West East |
|-------|---------|--------------|--------------------|----------------|--------------|--------------|----|-----|------|------|------|-----|------|-----|------|------|------|---------------|---------|-------|-----|-------|---------------|------------------------------------------|-------------|----------------|-------------------------|
| 1     |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 2     |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 3     |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 4     |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 5     |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 6     |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 7     |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 8     |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 9     |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 10    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| Total |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| Ave.  |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 11    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 12    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 13    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 14    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 15    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 16    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 17    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 18    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 19    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 20    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| Total |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| Ave.  |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 21    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 22    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 23    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 24    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 25    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 26    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 27    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 28    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 29    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 30    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| 31    |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| Total |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| Ave.  |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| G.T.  |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |
| Ave.  |         |              |                    |                |              |              |    |     |      |      |      |     |      |     |      |      |      |               |         |       |     |       |               |                                          |             |                |                         |

NOTES:

| REPORT OF OPERATIONS -- PIPELINE, DIPPER OR BUCKET DREDGES |  |                                      |                                                                                                               |             |                        |                                                         |                                                                          |                           |                                              |                      |                          | REPORTS CONTROL SYMBOL<br>ENGW-0-13 |                  |               |               |
|------------------------------------------------------------|--|--------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------|------------------------|---------------------------------------------------------|--------------------------------------------------------------------------|---------------------------|----------------------------------------------|----------------------|--------------------------|-------------------------------------|------------------|---------------|---------------|
| THRU:                                                      |  |                                      | TO:                                                                                                           |             |                        | FROM:                                                   |                                                                          |                           | REPORT NO.                                   |                      |                          |                                     |                  |               |               |
| CHARACTER OF REPORT                                        |  |                                      | [ ]                                                                                                           | MAINTENANCE | [ ]                    | NEW WORK                                                | [ ]                                                                      | DAILY                     | [ ]                                          | COMPLETION           | [ ]                      | ANNUAL                              | DATE OR PERIOD   |               |               |
| DREDGE                                                     |  | NAME AND TYPE                        |                                                                                                               |             | SIZE →                 |                                                         | PIPELINE                                                                 |                           | inch dia. disch.                             |                      | DREDGE ADVANCE MECHANISM |                                     | DIPPER OR BUCKET |               | cu. yds. cap. |
|                                                            |  | HORSEPOWER OF →                      | DREDGE PUMP                                                                                                   |             |                        | SUCTION PIPE JET                                        |                                                                          |                           | CUTTER OR BUCKET                             |                      |                          | PROPULSION                          |                  |               |               |
|                                                            |  | NUMBER OF CREWMEMBERS                | DREDGE                                                                                                        |             | SHORE                  |                                                         | OTHER                                                                    |                           | TOTAL                                        |                      | WORK SCHEDULE →          | SHIFTS PER DAY                      |                  | DAYS PER WEEK |               |
|                                                            |  |                                      |                                                                                                               |             |                        |                                                         |                                                                          |                           |                                              |                      |                          |                                     |                  |               |               |
| PROJECT AND BAR                                            |  |                                      |                                                                                                               |             |                        |                                                         | AUTH. DIMENSIONS →                                                       | WIDTH                     |                                              | DEPTH                |                          | OVERDEPTH                           |                  |               |               |
|                                                            |  | LOCATION (INCLUDE STATIONS NUMBERS)  |                                                                                                               |             | >                      |                                                         |                                                                          | FULL WIDTH                |                                              | WIDTH OF SWING:      | RANGES - RT, CL, LT      |                                     |                  |               |               |
|                                                            |  | C/L STATIONS                         |                                                                                                               |             | >                      |                                                         |                                                                          | FULL WIDTH                |                                              |                      | RANGES - RT, CL, LT      |                                     |                  |               |               |
| CHARACTER OF MATERIAL                                      |  | ABSOLUTE DENSITY                     |                                                                                                               |             | IN PLACE DENSITY       |                                                         |                                                                          | VOIDS RATIO               |                                              |                      |                          |                                     |                  |               |               |
|                                                            |  | GMS/liter                            |                                                                                                               |             | GMS/liter              |                                                         |                                                                          |                           |                                              |                      |                          |                                     |                  |               |               |
|                                                            |  | GRAIN SIZE                           |                                                                                                               |             |                        |                                                         |                                                                          | GEOLOGICAL CLASSIFICATION |                                              | TYPE                 |                          |                                     |                  |               |               |
|                                                            |  | MM                                   |                                                                                                               |             | MM                     |                                                         |                                                                          |                           |                                              | TYPE                 |                          |                                     |                  |               |               |
| CONTRACT OR ORDER NUMBER                                   |  | NUMBER                               |                                                                                                               |             |                        |                                                         | <input type="checkbox"/> CONTRACTOR <input type="checkbox"/> 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                                             |  |                                      |                                                                                                               |             |                        |                                                         |                                                                          |                           |                                              | DISTRIBUTION OF TIME |                          |                                     |                  |               |               |
| ITEM                                                       |  |                                      | UNIT                                                                                                          | QUANTITY    |                        | EFFECTIVE WORKING TIME (chargeable to cost of work)     |                                                                          |                           |                                              |                      | AMOUNT                   |                                     |                  |               |               |
| AVERAGE WIDTH OF CUT (SWING)                               |  |                                      | FEET                                                                                                          |             |                        | PUMPING OR DREDGING                                     |                                                                          |                           |                                              |                      |                          |                                     |                  |               |               |
| TOTAL ADVANCE THIS PERIOD                                  |  |                                      | FEET                                                                                                          |             |                        | PCT. OF EFFECTIVE RENTAL TIME                           |                                                                          |                           |                                              |                      |                          |                                     |                  |               |               |
| TOTAL ADV. PREVIOUS TO THIS PERIOD                         |  |                                      | FEET                                                                                                          |             |                        | BOOSTER (in line):                                      |                                                                          |                           |                                              |                      |                          |                                     |                  |               |               |
| TOTAL ADVANCE TO DATE                                      |  |                                      | FEET                                                                                                          |             |                        | NON-EFFECTIVE WORKING TIME (chargeable to cost of work) |                                                                          |                           |                                              |                      | NO. OF TIMES             |                                     |                  |               |               |
| TOTAL LENGTH OF DISCHARGE PIPE: *SEE REVERSE SIDE          |  |                                      |                                                                                                               |             |                        | HANDLING PIPE LINES                                     |                                                                          |                           |                                              |                      | HPL                      |                                     |                  |               |               |
| AVERAGE LIFT                                               |  |                                      | FEET                                                                                                          |             |                        | HANDLING ANCHOR LINES                                   |                                                                          |                           |                                              |                      | HAL                      |                                     |                  |               |               |
| AVERAGE PUMP SPEED                                         |  |                                      | R.P.M.                                                                                                        |             |                        | CLEARING PUMP AND PIPE LINE                             |                                                                          |                           |                                              |                      | CPPL                     |                                     |                  |               |               |
| AVERAGE GROSS CY'S DREDGED / PER PUMP HRS.                 |  |                                      | CU. YDS.                                                                                                      |             |                        | CLEARING CUTTER OR SUCTION HEAD                         |                                                                          |                           |                                              |                      | CCSH                     |                                     |                  |               |               |
| SCOWS LOADED                                               |  |                                      | NUMBER                                                                                                        |             |                        | WAITING FOR SCOWS                                       |                                                                          |                           |                                              |                      | WFS                      |                                     |                  |               |               |
| AVERAGE LOAD PER SCOW                                      |  |                                      | CU. YDS.                                                                                                      |             |                        | TO AND FROM WHARF OR ANCHORAGE                          |                                                                          |                           |                                              |                      | TFWA                     |                                     |                  |               |               |
| CUBIC YARDS REMOVED                                        |  |                                      |                                                                                                               |             |                        |                                                         | CHANGING LOCATION OF PLANT ON JOB                                        |                           |                                              |                      |                          | CLPJ                                |                  |               |               |
| AMOUNT DREDGED THIS PERIOD:                                |  |                                      |                                                                                                               |             |                        |                                                         | LOSS DUE TO OPPOSING NATURAL ELEMENTS                                    |                           |                                              |                      |                          | LDNE                                |                  |               |               |
| (1) GROSS (computed amount)                                |  |                                      |                                                                                                               |             |                        |                                                         | LOSS DUE TO PASSING VESSELS                                              |                           |                                              |                      |                          | WVP                                 |                  |               |               |
| (2) CREDITED (pay place)                                   |  |                                      |                                                                                                               |             |                        |                                                         | SHORE LINE AND SHORE WORK                                                |                           |                                              |                      |                          | SLSW                                |                  |               |               |
| AMOUNT PREVIOUSLY REPORTED:                                |  |                                      |                                                                                                               |             |                        |                                                         | WAITING FOR BOOSTER                                                      |                           |                                              |                      |                          | WFB                                 |                  |               |               |
| (1) GROSS (computed amount)                                |  |                                      |                                                                                                               |             |                        |                                                         | MINOR OPER. REPAIRS (explain in remarks)                                 |                           |                                              |                      |                          | MOR                                 |                  |               |               |
| (2) CREDITED (pay place)                                   |  |                                      |                                                                                                               |             |                        |                                                         | WAITING FOR ATTENDANT PLANT                                              |                           |                                              |                      |                          | WAP                                 |                  |               |               |
| TOTAL AMOUNT DREDGED TO DATE:                              |  |                                      |                                                                                                               |             |                        |                                                         | PREPARATION AND MAKING UP TOW                                            |                           |                                              |                      |                          | PMUT                                |                  |               |               |
| (1) GROSS (computed amount)                                |  |                                      |                                                                                                               |             |                        |                                                         | TRANSFERRING PLANT BETWEEN WORKS                                         |                           |                                              |                      |                          | TPBW                                |                  |               |               |
| (2) CREDITED (pay place)                                   |  |                                      |                                                                                                               |             |                        |                                                         | LAY TIME OFF SHIFT AND SATURDAYS                                         |                           |                                              |                      |                          | LTOSS                               |                  |               |               |
| ATTENDANT PLANT                                            |  |                                      |                                                                                                               |             |                        |                                                         | SUNDAYS AND HOLIDAYS                                                     |                           |                                              |                      |                          | SH                                  |                  |               |               |
| ITEM                                                       |  |                                      | NAME OR NUMBER                                                                                                |             | HOURS                  |                                                         | FIRE DRILL                                                               |                           |                                              |                      |                          | FD                                  |                  |               |               |
| DREDGE                                                     |  |                                      |                                                                                                               |             |                        |                                                         | MISCELLANEOUS (explain in remarks)                                       |                           |                                              |                      |                          | MISC                                |                  |               |               |
| TENDER #1                                                  |  |                                      |                                                                                                               |             |                        |                                                         | TOTAL NON-EFFECTIVE WORKING TIME                                         |                           |                                              |                      |                          |                                     |                  |               |               |
| TENDER #2                                                  |  |                                      |                                                                                                               |             |                        |                                                         | PCT. OF NON-EFFECTIVE RENTAL TIME                                        |                           |                                              |                      |                          |                                     |                  |               |               |
| SKIFF                                                      |  |                                      |                                                                                                               |             |                        |                                                         | TOTAL EFFECTIVE AND NON-EFFECTIVE TIME (chargeable to cost of work)      |                           |                                              |                      |                          |                                     |                  |               |               |
| CREW                                                       |  |                                      |                                                                                                               |             |                        |                                                         | PCT OF TOTAL TIME IN PERIOD                                              |                           |                                              |                      |                          |                                     |                  |               |               |
| SURVEY                                                     |  |                                      |                                                                                                               |             |                        |                                                         | LOST TIME (not chargeable to cost of work)                               |                           |                                              |                      |                          |                                     |                  |               |               |
| BARGES                                                     |  |                                      |                                                                                                               |             |                        |                                                         | MAJOR REPAIRS AND ALTERATIONS                                            |                           |                                              |                      |                          |                                     |                  |               |               |
| CRANE BARGE                                                |  |                                      |                                                                                                               |             |                        |                                                         | CESSATION                                                                |                           |                                              |                      |                          |                                     |                  |               |               |
| IDLER BARGE                                                |  |                                      |                                                                                                               |             |                        |                                                         | COLLISIONS                                                               |                           |                                              |                      |                          |                                     |                  |               |               |
| CUTTER-TYPE                                                |  |                                      |                                                                                                               |             |                        |                                                         | MISCELLANEOUS (explain in remarks)                                       |                           |                                              |                      |                          |                                     |                  |               |               |
| SPUD LENGTH                                                |  |                                      |                                                                                                               |             |                        |                                                         | TOTAL LOST TIME                                                          |                           |                                              |                      |                          |                                     |                  |               |               |
| NUMBER OF INSPECTIONS                                      |  |                                      | BY DISTRICT PERSONNEL                                                                                         |             | BY DIV & OCE PERSONNEL |                                                         | PERCENTAGE OF TOTAL TIME                                                 |                           |                                              |                      |                          |                                     |                  |               |               |
| CONTRACT USE ONLY                                          |  |                                      | HAS ANYTHING DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM? (If "YES", explain under remarks on back) |             | ( )                    |                                                         | NO                                                                       |                           |                                              |                      |                          | 00:00                               |                  |               |               |
|                                                            |  |                                      |                                                                                                               |             | ( )                    |                                                         | YES                                                                      |                           |                                              |                      |                          |                                     |                  |               |               |
|                                                            |  |                                      |                                                                                                               |             |                        |                                                         | TOTAL TIME IN PERIOD                                                     |                           |                                              |                      |                          |                                     |                  |               |               |

[illegible]





## 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: ( \_\_\_\_\_ ) \_\_\_\_\_

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SECTION 35 20 23.33

NATIONAL DREDGING QUALITY MANAGEMENT PROGRAM  
PIPELINE HYDRAULIC DREDGE

PART 1 GENERAL

1.1 DESCRIPTION

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.

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 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

1.3 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".

1.4 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".

#### 3.1.1.1.1 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.

##### 3.1.1.1.1.1 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 with an RJ 45 connector                      |
| Video adapter    | Must support a resolution of 1024x768 at 16-bit color depth                                 |
| 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 connectors; 1 free USB port                         |

|                |                                                                                                                       |
|----------------|-----------------------------------------------------------------------------------------------------------------------|
| 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 contract, 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 per clause 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>.

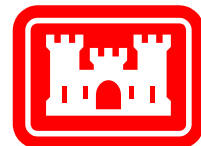
### 3.6 CONTRACTOR QUALITY CONTROL

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 --




US Army Corps  
of Engineers  
New Orleans District

PASSES OF THE MISSISSIPPI RIVER  
SOUTH PASS  
MAINTENANCE DREDGING #20-2  
PLAQUEMINES PARISH, LOUISIANA

SOLICITATION NO: W912P820B0045  
CONTRACT NO: W912P820CXXXX  
JUNE 2020

THIS PROJECT WAS DESIGNED BY THE  
NEW ORLEANS DISTRICT CORPS OF  
ENGINEERS. THE INITIALS OR SIGNA-  
TURES AND REGISTRATION DESIGNA-  
TIONS OF INDIVIDUALS APPEAR ON  
THESE PROJECT DOCUMENTS WITHIN  
THE SCOPE OF THEIR EMPLOYMENT AS  
REQUIRED BY ER 1110-1-8152. SIGNA-  
TURES INDICATE OFFICIAL RECOMMEN-  
DATION OF ALL DRAWINGS IN THIS SET.

APPROVED BY:

  
COL 83

DISTRICT COMMANDER

APPROVAL RECOMMENDED BY:

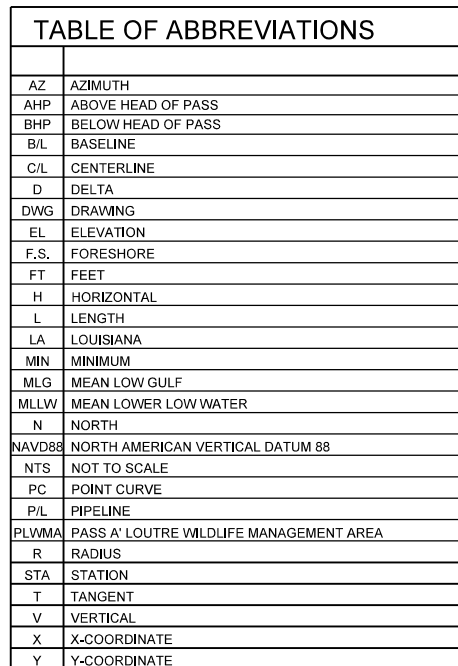
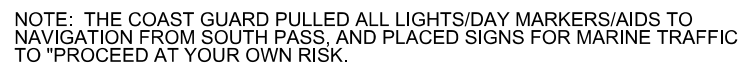
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| CHIEF | CIVIL       | BRANCH   |
| CHIEF | ENGINEERING | DIVISION |

ASSES OF THE MISSISSIPPI RIVER  
SOUTH PASS  
MAINTENANCE DREDGING #20-2

COVER SHEET

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SHEET  
IDENTIFICATION  
**G-01**





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GENERAL NOTES:

1. COLONIAL NESTING WADING BIRDS SHOULD BE AVOIDED. SEE SPECIFICATIONS SECTION 01 57 20.01 12 FOR FURTHER GUIDANCE.
2. THE CONTRACTOR SHOULD BE AWARE THAT NO AIRBOAT ACTIVITY WILL BE ALLOWED ON THE PASS A LOUTRE WILDLIFE MANAGEMENT AREA DURING WATERFOWL SEASON DURING THE MONTHS OF SEPTEMBER, NOVEMBER, DECEMBER AND JANUARY UNLESS APPROVED BY THE DEPARTMENT OF WILDLIFE AND FISHERIES.
3. ALL WORK IS WITHIN THE PASS A LOUTRE WILDLIFE MANAGEMENT AREA.
4. NO DIRECT DISCHARGE OF DREDGED MATERIAL IS ALLOWED WITHIN 300' OF ANY EXISTING PIPELINES OR UTILITIES THAT MIGHT BE ENCOUNTERED.

DRAWING C-04:

1. CONTRACTOR IS TO TAKE PRE AND POST SURVEYS OF CADRO PASS AND CADRO PASS EXTENSION. IF DISPOSAL MATERIAL ENTERS CADRO PASS, THE CONTRACTOR IS TO RETURN CADRO PASS AND CADRO PASS EXTENSION TO PRE-DISPOSAL DEPTH.
2. THE CONTRACTOR SHALL CONSTRUCT/ REPAIR EARTHEN DIKES AS NECESSARY, TO PREVENT DISPOSAL MATERIAL FROM ENTERING ADJACENT WATERWAYS AND PASSES. HOWEVER, NO DIKE WORK WILL BE NECESSARY ON THE SOUTHEAST SIDE OF THE CASTILLE DISPOSAL AREA, MATERIAL WILL BE ALLOWED TO ENTER THIS AREA.
3. DURING PEAK CAMPGROUND USAGE TIMES, INCLUDING WATERFOWL SEASON WHICH INCLUDES THE MONTHS OF SEPTEMBER, NOVEMBER, DECEMBER AND JANUARY, NIGHT TIME USAGE SHALL BE RESTRICTED TO PERSONNEL ACCESS ONLY. NIGHT TIME IS DEFINED AS THE HOURS BETWEEN SUNSET AND SUNRISE AND SHALL BE LIMITED TO ATVS SUCH AS 4-WHEELERS. THESE TRIPS SHOULD BE KEPT TO MINIMUM.
4. ACCESS TO THE NORTH AND CASTILLE DISPOSAL AREAS WILL BE VIA 150 FOOT ACCESS CORRIDOR FROM SOUTH PASS TO CADRO PASS. SUBMERGED PIPELINE SHALL BE USED TO CROSS CADRO PASS. ACCESS TO NORTH CELL WILL BE VIA CADRO PASS OR ACROSS CASTILLE VIA 150' ACCESS CORRIDOR SHOWN ON DRAWING. ONCE DREDGING OPERATIONS WITHIN THE NORTH CELL AND CASTILLE DISPOSAL AREAS ARE COMPLETED, THE 150 FOOT ACCESS CORRIDORS ARE REQUIRED TO BE BACKFILLED WITH DISPOSAL MATERIAL TO A MAXIMUM OF 2 FEET ABOVE EXISTING ADJACENT MARSH. NO EXCAVATION OF THIS ACCESS CORRIDOR WILL BE ALLOWED, NOR IS EXCAVATION ALLOWED WITHIN THE SUBAERIAL PERIMETER BOUNDARY OF EITHER DISPOSAL AREAS.
5. DREDGED MATERIAL SHALL BE DEPOSITED AT EITHER OF THE SPD (SINGLE POINT DISCHARGE) SITES LOCATED WITHIN NORTH CELL DISPOSAL AREA, WITH A INITIAL ELEVATION OF +8.0' NAVD88. THE INTENT OF THIS DISPOSAL PLAN IS TO CREATE A MARSH CREATION PLATFORM. THE DREDGE MATERIAL SHALL BE PLACED IN A MANNER SUCH THAT THE MATERIAL EXPANDS IN A NORTHEASTERLY DIRECTION.
6. DREDGED MATERIAL SHALL BE DEPOSITED ALONG DIKE/EMBANKMENT SEPARATING THE NORTH CELL AND CASTILLE DISPOSAL AREA TO A MAXIMUM ELEVATION OF +8.0' NAVD88. BEGINNING IN THE NORTHEAST CORNER OF CASTILLE DISPOSAL AREA, WITH MAXIMUM FILLING OF THE SITE IN A SOUTHWESTERLY DIRECTION.

DRAWING C-05 AND C-06:

7. IN GENERAL, ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE SOUTH SIDE OF THE ACCESS CORRIDORS, HOWEVER MATERIAL WILL BE ALLOWED TO BE PLACED ON THE NORTH SIDE OF ACCESS CORRIDOR FOR THE FIRST 100 FEET OFF SOUTH PASS. WHERE THE ACCESS CORRIDORS CUT THROUGH SHALLOW OPEN, WATER THE MATERIAL SHALL BE PLACED ON THE SOUTH SIDE OF THE CUT WITH 50 FOOT GAPS LEFT EVERY 300 FEET. EXCAVATED MATERIAL IS NOT TO EXCEED 60 FEET WIDE OR 4.5 FEET ABOVE EXISTING MARSH.
8. ACCESS CORRIDORS ARE TO BE EXCAVATED TO A MAXIMUM BOTTOM WIDTH OF 40 FEET WITH A MAXIMUM ELEVATION OF -4.0' M.L.G. WIDTH AT WATER SURFACE NOT TO EXCEED 150 FEET. SEE DRAWING C-17 FOR THEORETICAL SECTION.
9. THE CONTRACTOR IS ALLOWED TO FILL DISPOSAL AREA TO CAPACITY. HOWEVER, IT IS MANDATORY THAT MATERIAL DREDGED BETWEEN APPROXIMATE C/L STATIONS 365+30 AND 488+64 BE PLACED WITHIN "LEBLANC DISPOSAL AREA". THE INTENT OF THIS DISPOSAL PLAN IS TO PLACE CONTINUOUS FILL PARALLELING THE MARSH ALONG THE EAST BANK OF CADRO PASS INITIATING AT THE NORTHERN LIMIT AND PROCEEDING IN A SOUTHERLY OR SOUTHEASTERLY DIRECTION ADJACENT TO EXISTING MARSH ALONG THE EAST BANK OF CADRO PASS. DISPOSAL ELEVATION SHALL NOT EXCEED+8.0' NAVD88.
10. PIPELINE PLACEMENT ADJUSTMENTS AND RETENTION/DEFLECTION DIKE CONSTRUCTION SHALL BE PERFORMED AS NECESSARY TO CONFINE DREDGES MATERIAL TO THE LEBLANC DISPOSAL SITE AND NOT ENTER OTHER ADJACENT WATERWAYS AND PASSES.
11. AFTER DREDGING OPERATIONS ARE COMPLETED, THE ACCESS CORRIDORS WHICH CROSS THE BANKS OF CADRO PASS ARE REQUIRED TO BE BACKFILLED WITH DISPOSAL MATERIAL TO A MAXIMUM OF 2 FEET ABOVE EXISTING ADJACENT MARSH.
12. CONTRACTOR IS TO TAKE PRE AND POST SURVEYS OF CADRO AND DENNIS PASS. IF DISPOSAL MATERIAL ENTERS CADRO PASS OR DENNIS PASS, THE CONTRACTOR IS TO RETURN CADRO PASS AND DENNIS PASS TO PRE-DISPOSAL DEPTH.
13. THE APPROXIMATE CLEARANCE OF THE ENTENGY POWER LINE IS BETWEEN 20 AND 25-FEET.

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DRAWING C-07:

14. FLOTATION CHANNEL AT MILE 10.0E MAY BE EXCAVATED TO A MAXIMUM BOTTOM WIDTH OF 40' FEET WITH A MAXIMUM ELEVATION OF -4.0' M.L.G. WIDTH AT WATER SURFACE IS NOT TO EXCEED 150- FEET. EXCAVATED MATERIAL NOT TO EXCEED 60- FEET IN WIDTH AND 5- FEET ABOVE EXISTING MARSH. SEE DRAWING C-17 FOR THEORETICAL SECTION. EXCAVATED MATERIAL IS TO REMAIN ON CHANNEL BANK.
15. DREDGED MATERIAL SHALL BE DEPOSITED ALONG THE WEST BANK OF WINDHAM DISPOSAL AREA, WITH A MAXIMUM ELEVATION OF +8.0' NAVD88. THE INTENT OF THIS DISPOSAL PLAN IS A MARSH CREATION SITE BEGINNING ALONG THE WEST BANK, WITH A MAXIMUM FILLING OF THE SITE IN A EASTERLY DIRECTION.
16. ONCE DREDGING OPERATIONS WITHIN WINDHAM DISPOSAL AREA IS COMPLETED, THE 150 FOOT ACCESS CORRIDOR IS REQUIRED TO BE BACKFILLED WITH DISPOSAL MATERIAL TO A MAXIMUM OF 2 FEET ABOVE EXISTING ADJACENT MARSH.
17. PIPELINE PLACEMENT OR RETENTION DIKES SHALL/MAY NEED TO BE CONSTRUCTED TO KEEP DISPOSAL MATERIAL CONFINED TO THE WINDHAM DISPOSAL SITE AND NOT ENTER OTHER ADJACENT WATERWAYS AND PASSES.
18. DREDGED MATERIAL SHALL BE DEPOSITED IN SUCH A MANNER AS TO ENHANCE THE EAST BIRD ISLAND ON THE EAST SIDE OF THE CHANNEL. THE MAXIMUM TOP ELEVATION OF THE ISLAND SHALL NOT EXCEED +8.0' NAVD88. DREDGED MATERIAL SHALL BE INITIALLY DISCHARGED AT THE SINGLE POINT DISCHARGE (SPD) LOCATION. THE DREDGE MATERIAL SHALL BE PLACED ALONG THE GULF SIDE OF THE ISLAND IN A MANNER SUCH THAT THE ISLAND'S FOOTPRINT EXPANDS IN A EASTERLY DIRECTION. THE CONTRACTOR IS TO MONITOR AND MOVE, IF NECESSARY, THE DISCHARGE LOCATION TO ASSURE CHANNEL IS NOT IMPACTED.
19. THERE ARE EXISTING OUTLET ROCK STRUCTURES AT THE MOUTHS OF OUTLETS 10.0E AND 11.8E. THESE STRUCTURES ARE NOT TO BE DISTURBED. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND ELEVATION OF ALL ROCK STRUCTURES IN DETERMINING HIS PLAN FOR ACCESS TO THE DISPOSAL SITE(S) FROM THE PASS.

DRAWING C-08:

20. THERE ARE EXISTING OUTLET ROCK STRUCTURES AT THE MOUTH OF OUTLET 12.6W. THESE STRUCTURES ARE NOT TO BE DISTURBED. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND ELEVATION OF ROCK STRUCTURE(S) IN DETERMINING HIS PLAN FOR ACCESS TO THE DISPOSAL SITE(S) FROM THE PASS.
21. DREDGED MATERIAL SHALL BE DEPOSITED IN SUCH A MANNER AS TO ENHANCE THE PASS SPIT ON THE WEST SIDE OF THE CHANNEL. THE MAXIMUM TOP ELEVATION OF THE PASS SHALL NOT EXCEED 8 FEET ABOVE MVD88. DREDGED MATERIAL SHALL BE INITIALLY DEPOSITED AT THE SINGLE POINT (S) LARGE (S) SOUTHERN LOCATION. DREDGED MATERIAL SHALL ON SOUTH PASS SPIT IN A MANNER SUCH THAT THE SPIT'S FOOTPRINT EXPANDS IN A DIRECTION.

DRAWING C-09:

22. DREDGE MATERIAL WILL BE LIMITED TO A MAXIMUM INITIAL ELEVATION OF +8.0' NAVD88 FOR SCOTT AND ED ISLAND LOCATIONS. THE ISLANDS FOOTPRINTS SHALL BE NO LARGER THAN 24 ACRES AT ELEVATION 1.0' NAVD88. ONCE MATERIAL REACHES MAXIMUM ELEVATION (AT 24 ACRE SIZE) AT THE SCOTT ISLAND LOCATION, THE CONTRACTOR IS TO MOVE DISCHARGE LOCATION TO THE ED ISLAND LOCATION. A MINIMUM DISTANCE OF 2000 FEET AT ELEVATION +1.0' NAVD88 SHALL BE MAINTAINED BETWEEN THE ISLANDS. THE LOCATION OF ED ISLAND SHALL BE FIELD ADJUSTED, IF NECESSARY, IN ORDER TO ACCOMMODATE THIS 2000' BUFFER BASED OFF OF HOW SCOTT ISLAND DEVELOPS.
23. THE CONTRACTOR SHALL USE THE ACCESS CORRIDOR SHOWN ON THIS DRAWING. NO EXCAVATION OF CORRIDOR WILL BE ALLOWED.
24. THE CONTRACTOR SHALL ESTABLISH, MAINTAIN AND MONITOR STAFF GAGES AT DISCHARGE LOCATION(S) AND THROUGHOUT DISPOSAL AREA AS NEEDED IN ORDER TO MONITOR THE ELEVATION OF THE MATERIAL FOR COMPLIANCE. THE STAFF GAGES SHALL BE MARKED AT ONE-HALF FOOT INTERVALS, EXTENDING FROM WATER'S SURFACE AND AT LEAST 1-FOOT ABOVE THE MAXIMUM ALLOWABLE DISPOSAL ELEVATIONS.



**US Army Corps  
of Engineers®**  
NEW ORLEANS DISTRICT

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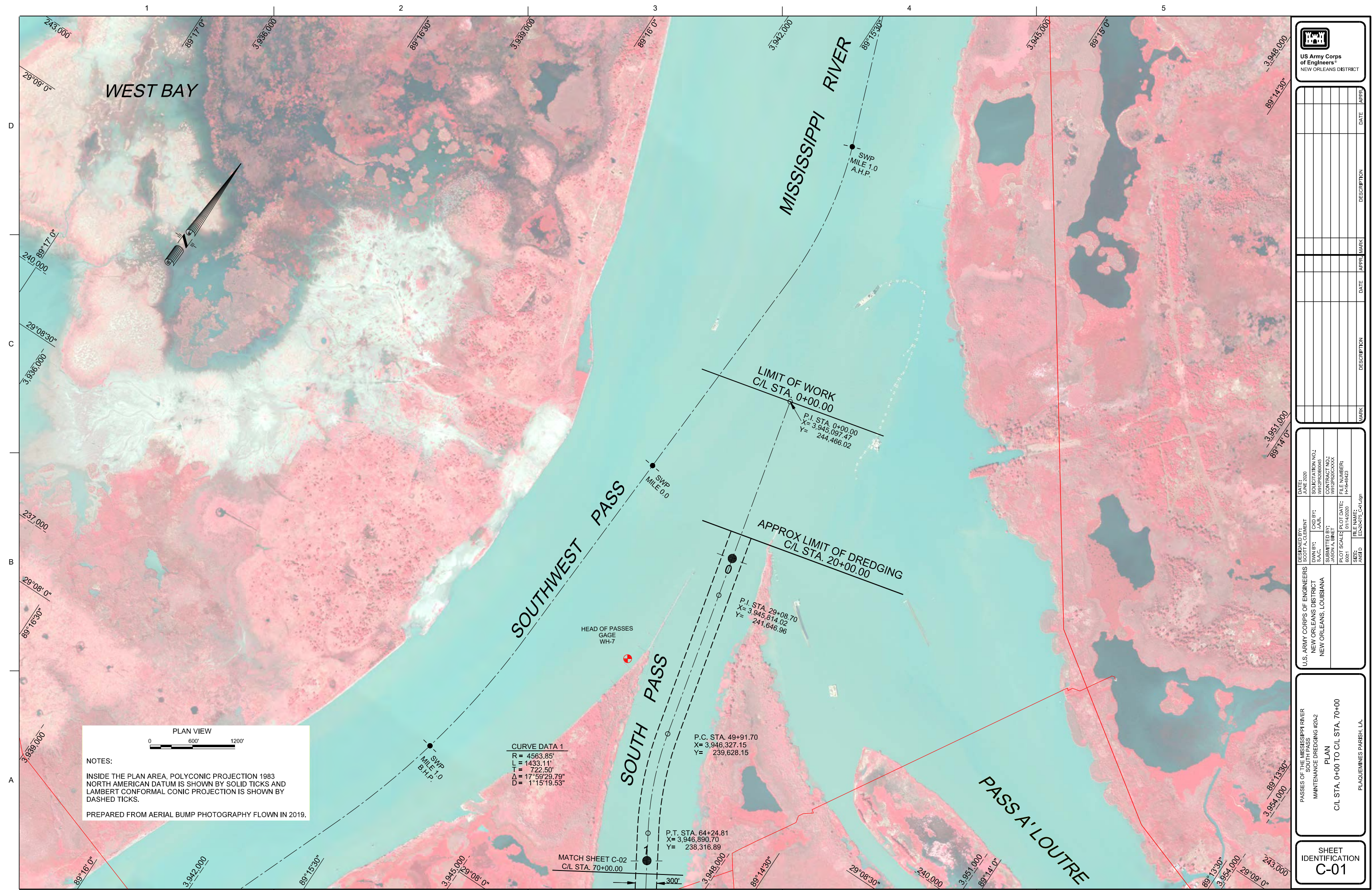
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| U.S. ARMY CORPS OF ENGINEERS |  | DESIGNED BY:      | DATE:             |
| NEW ORLEANS DISTRICT         |  | SCOTT A. CLEMENT  | JUNE 2020         |
| NEW ORLEANS, LOUISIANA       |  | DWN BY:           | SOLICITATION NO.: |
|                              |  | SAC, SAC          | W192P0000015      |
|                              |  | DEPT. OF THE ARMY | W192P0000015      |
|                              |  | JASON A. BENET    | W192P0000015      |
|                              |  | PLOT SCALED       | FILE NUMBER:      |
|                              |  | 1" = 600'         | H-16-45423        |
|                              |  | PLOT DATE:        | FILE NAME:        |
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PASSES OF THE MISSISSIPPI RIVER  
SOUTH PASS  
MAINTENANCE DREDGING #20-2

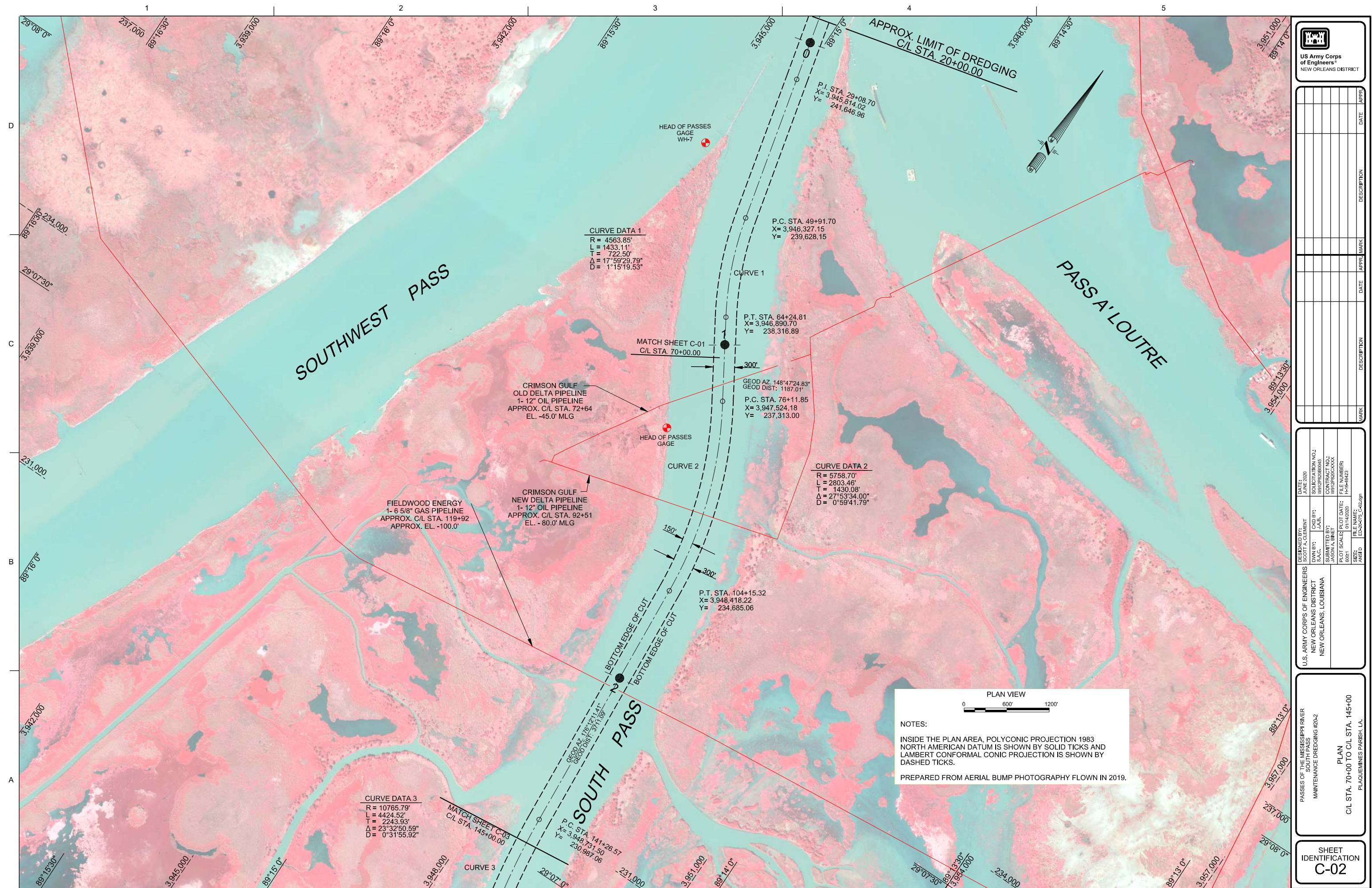
GENERAL NOTES

SHEET  
IDENTIFICATION  
**G-03**









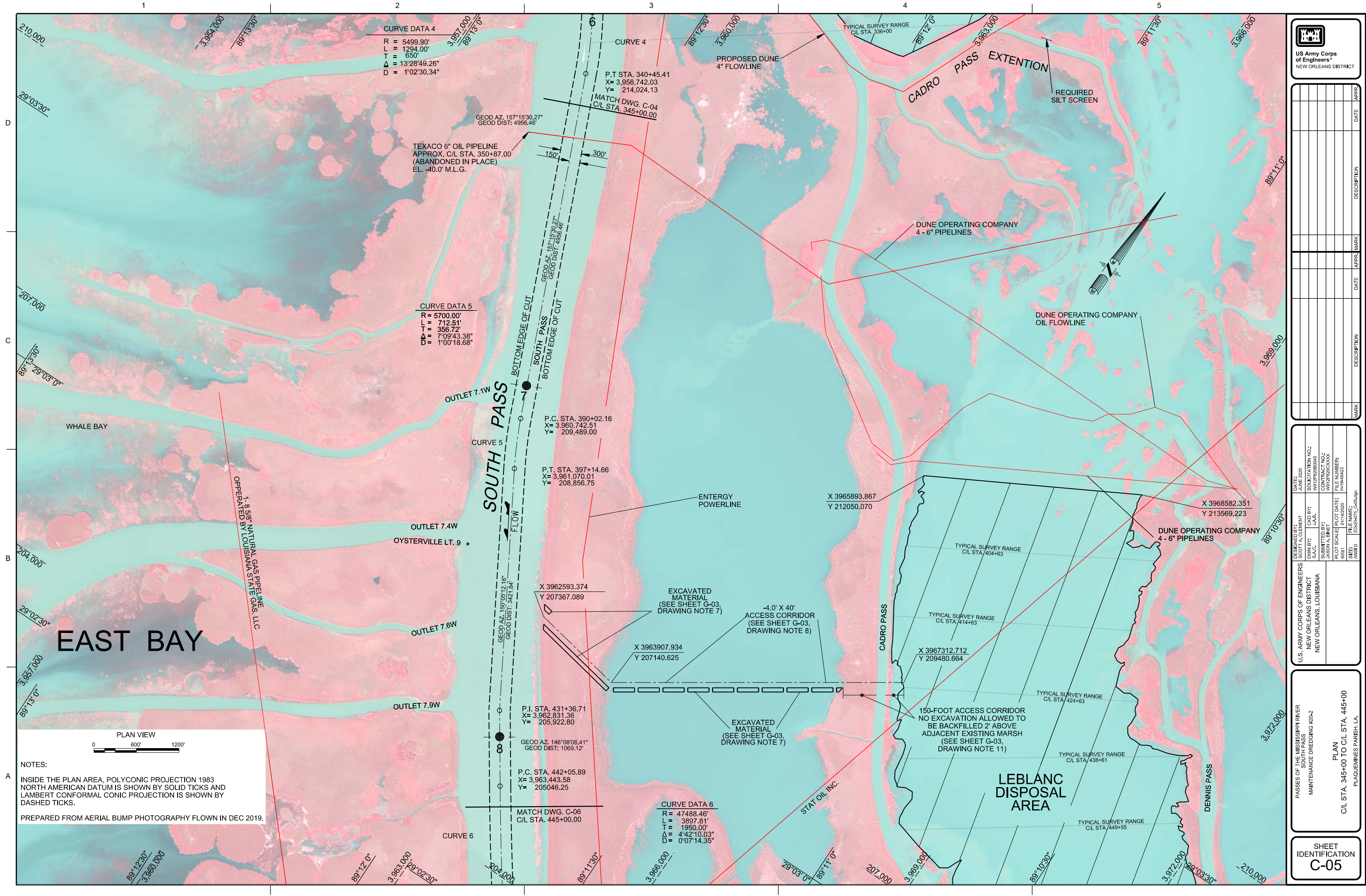




















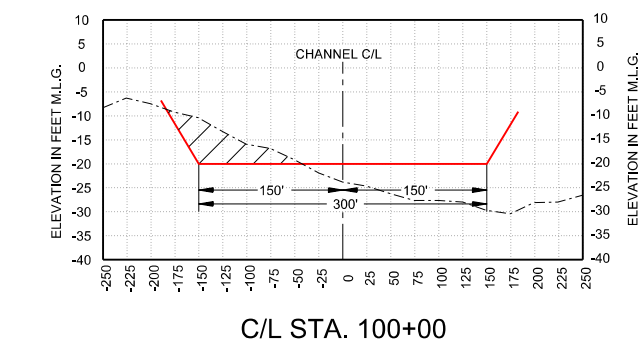
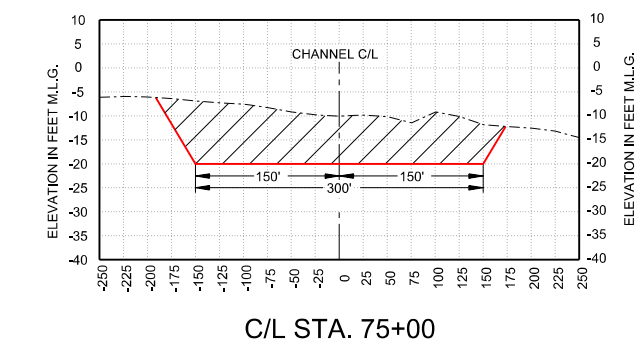
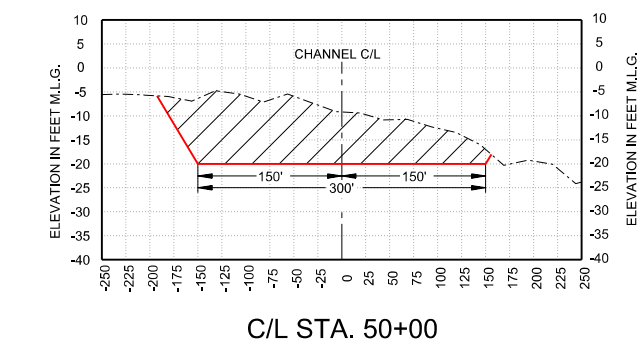
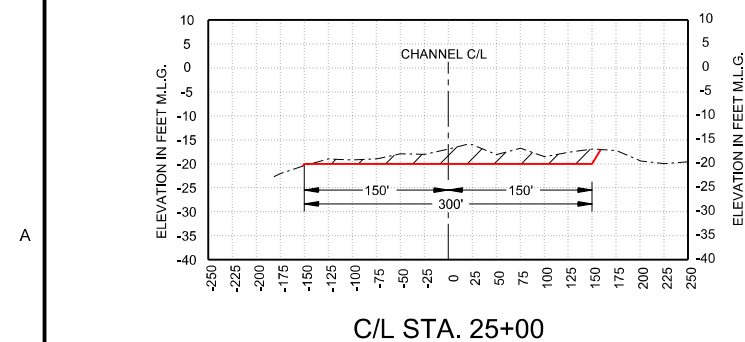
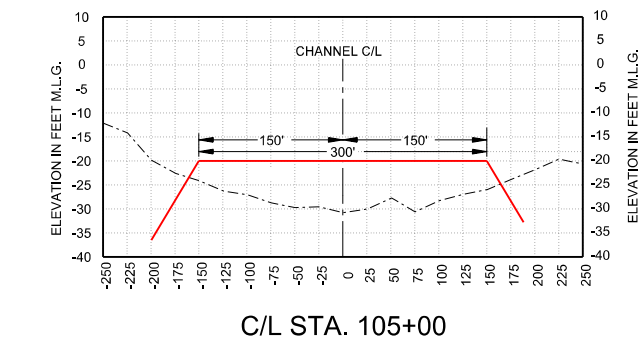
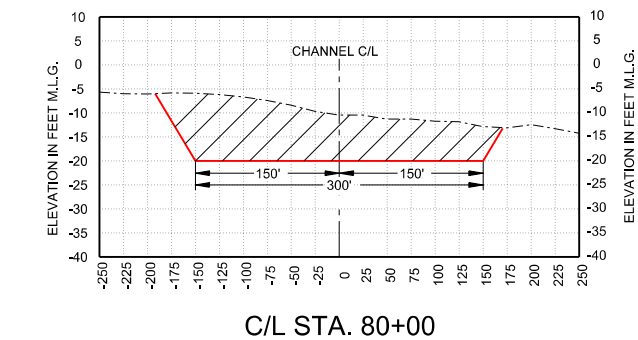
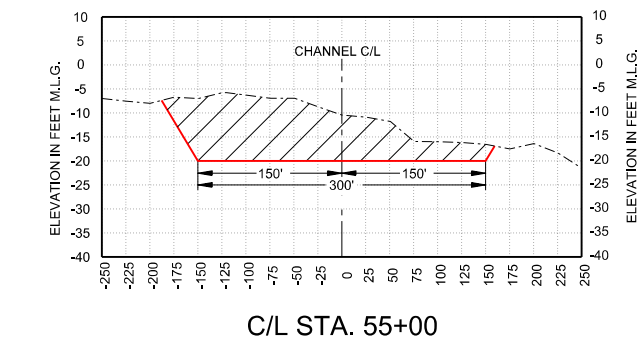
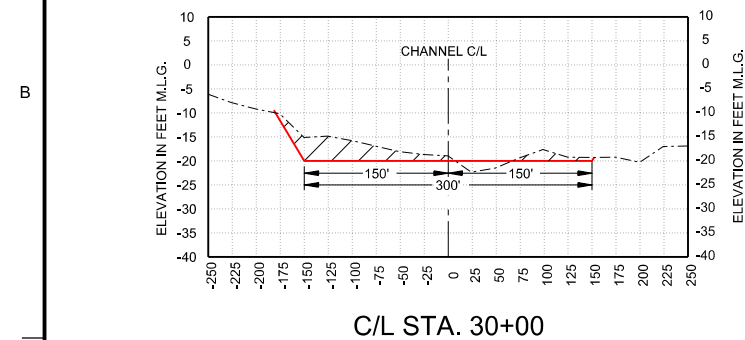
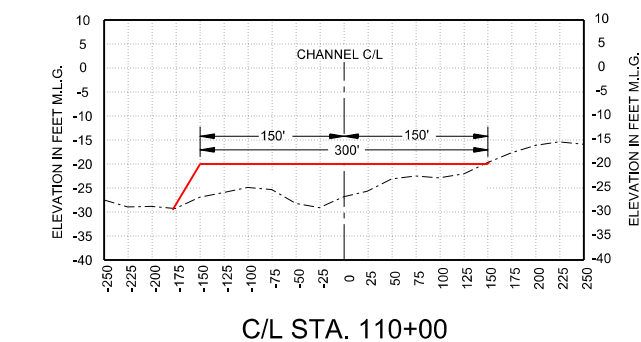
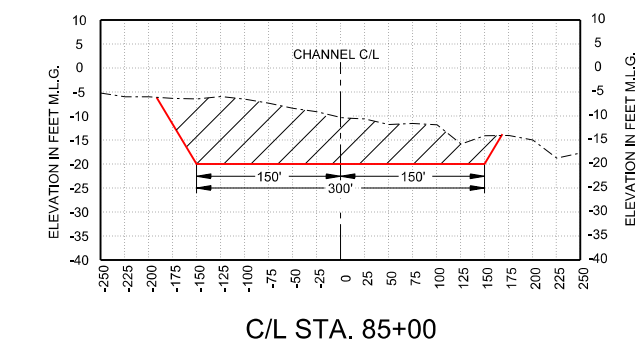
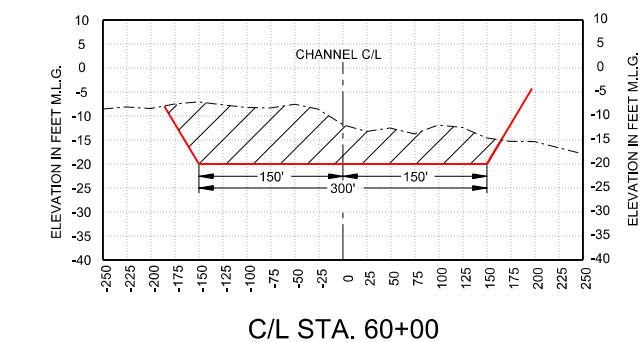
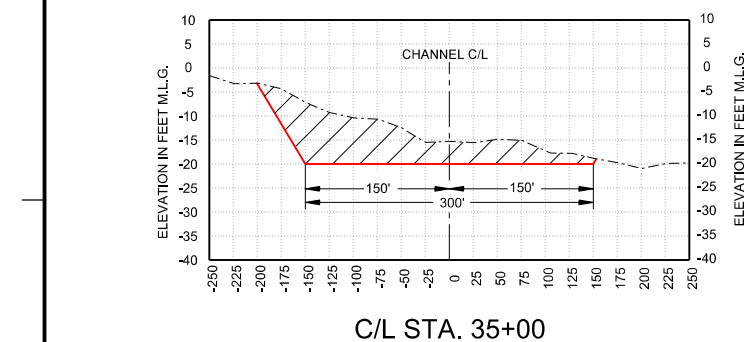
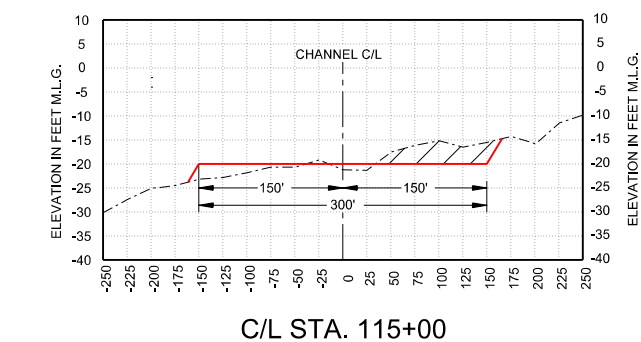
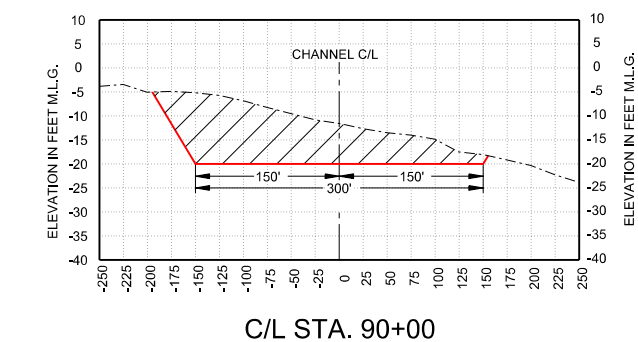
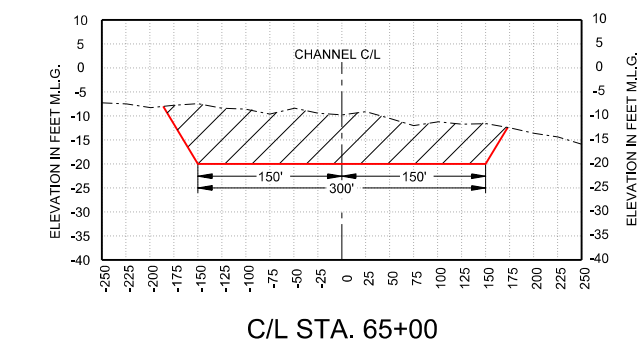
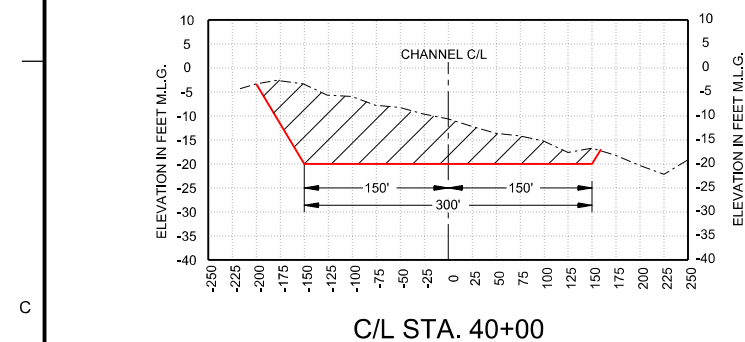
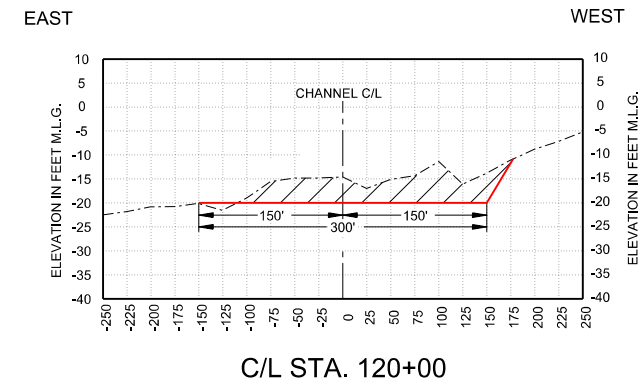
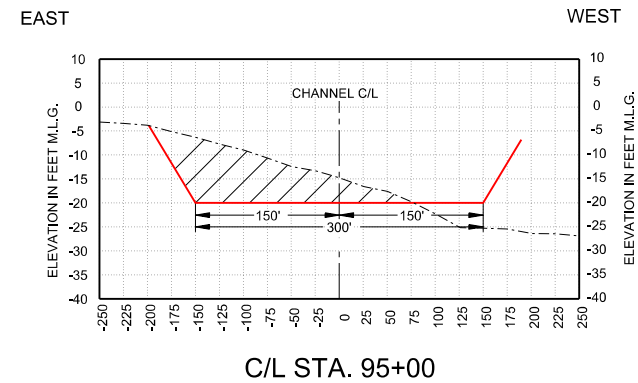
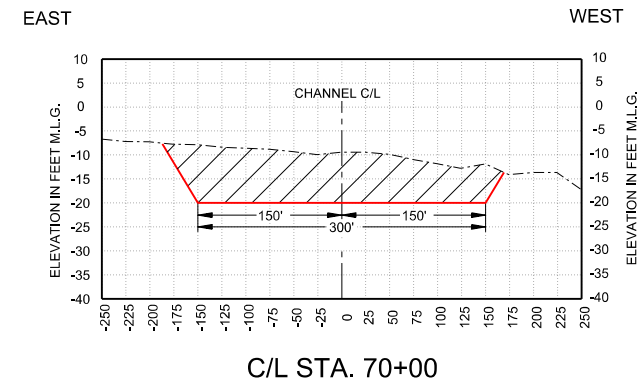
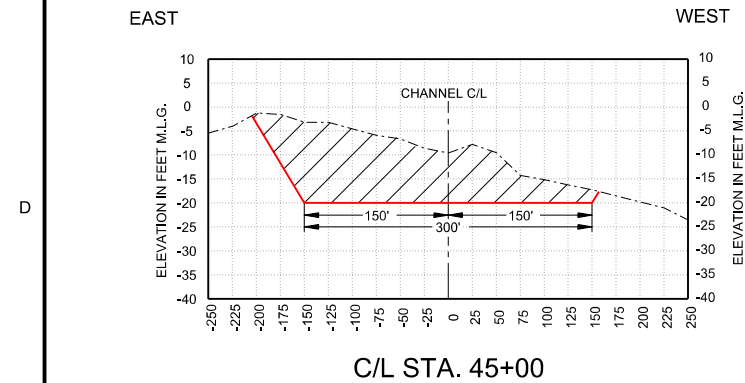












NOTES:

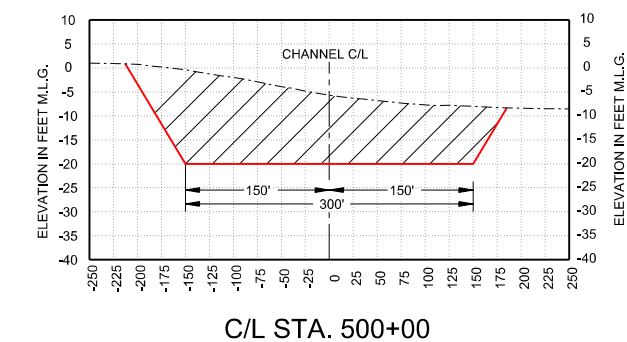
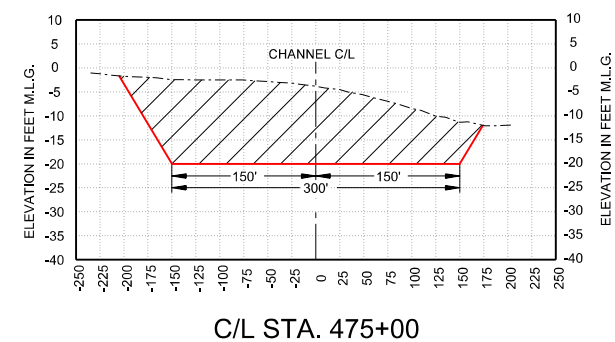
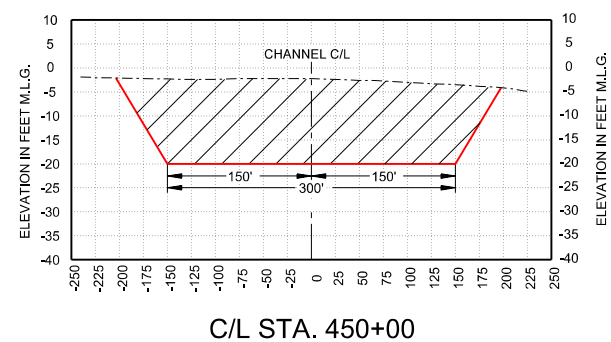
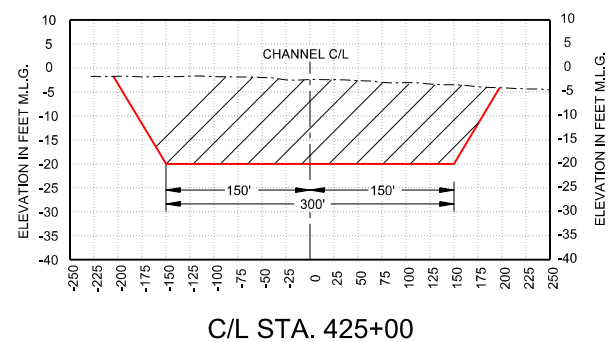
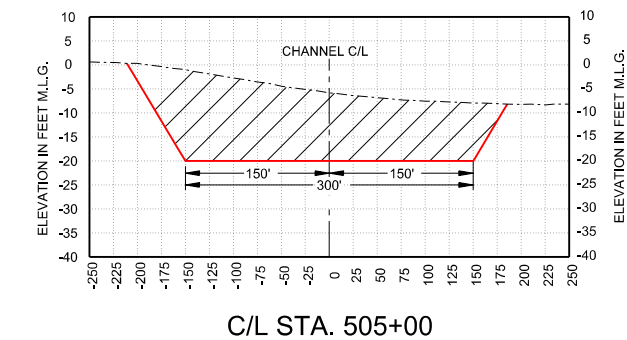
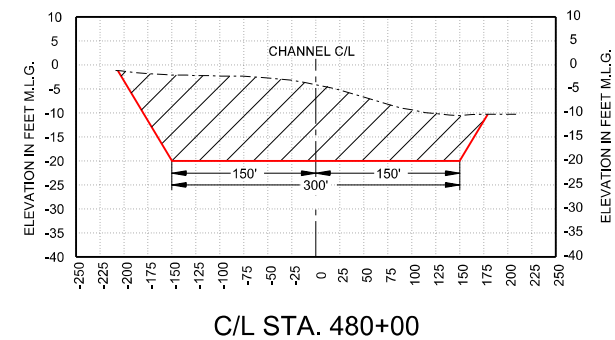
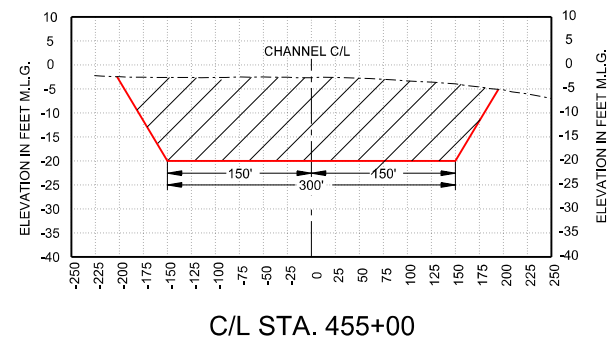
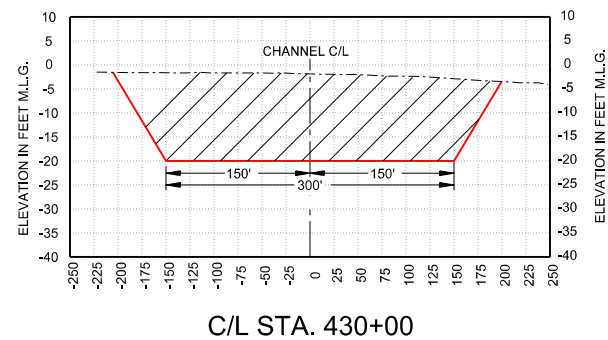
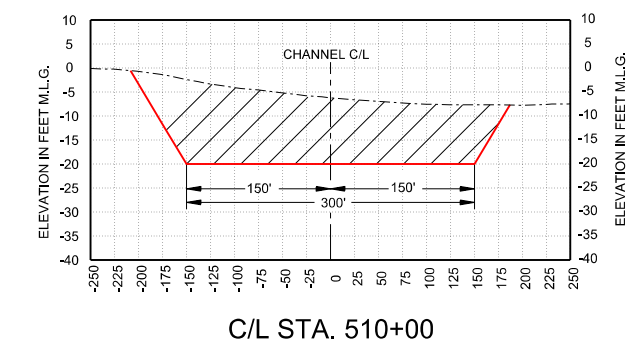
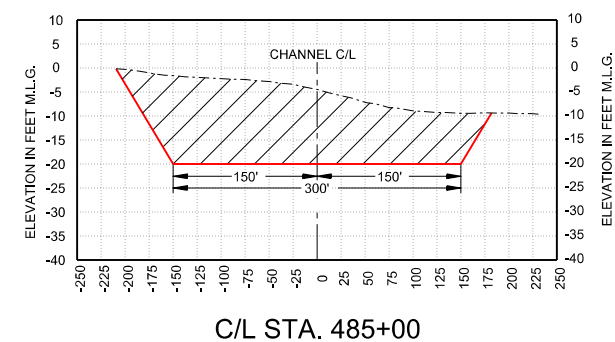
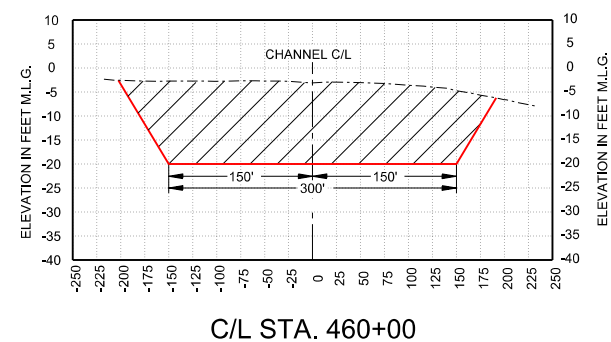
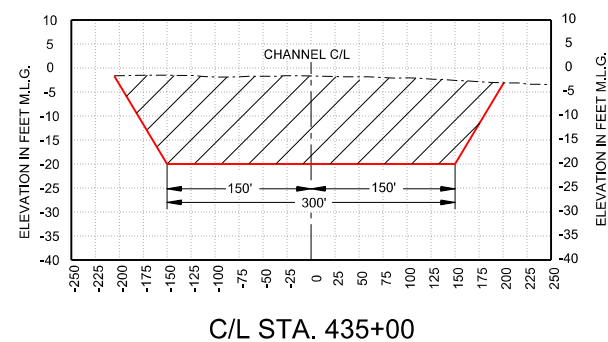
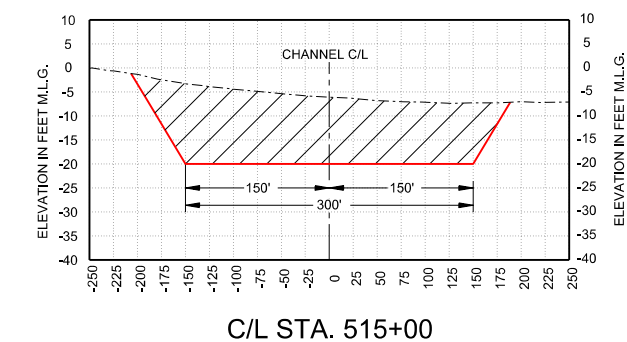
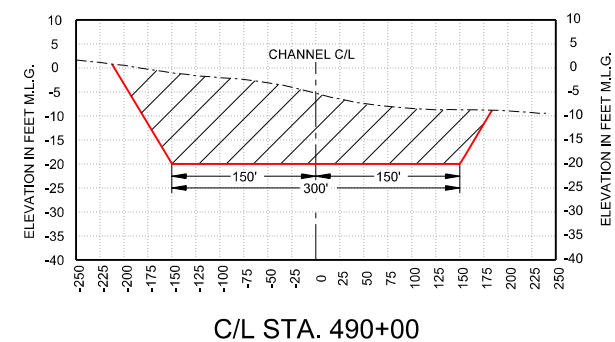
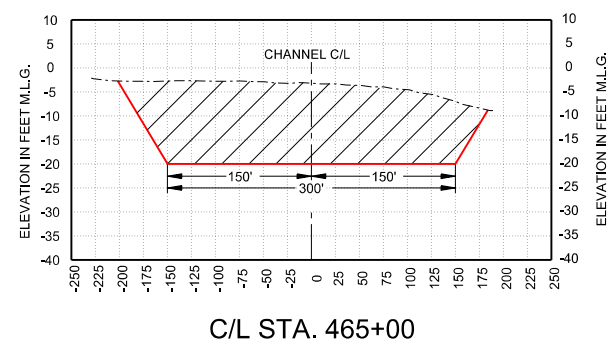
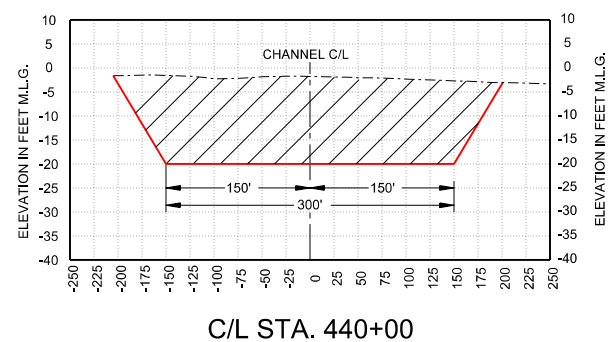
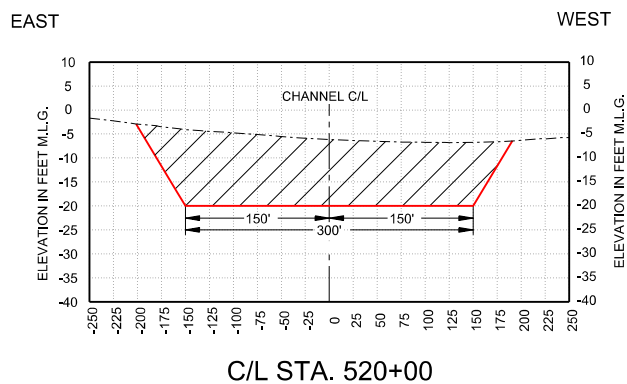
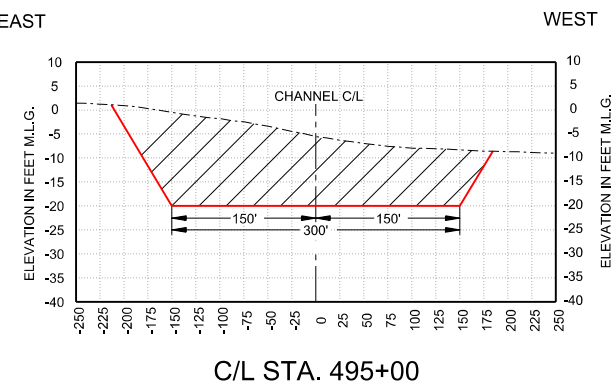
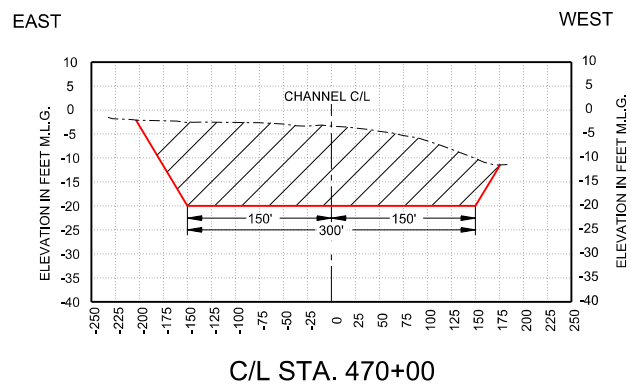
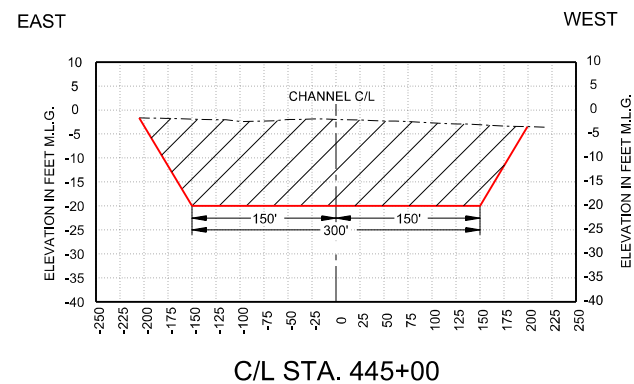
1. REQUIRED SIDE SLOPES ARE 1V ON 3H.
2. CROSS SECTIONS SHOWN ARE REPRESENTATIVE OF CONDITIONS THAT EXISTED IN OCTOBER 2019. SURVEYS AND CHANNEL CONDITIONS WILL BE UPDATED PRIOR TO BID OPENING.











NOTES:

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[illegible]

|                                                                                |                                                       |                                            |                                                                                                 |
|--------------------------------------------------------------------------------|-------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>NEW ORLEANS DISTRICT<br>NEW ORLEANS, LOUISIANA | DESIGNED BY:<br>SCOTT F. CLARK                        |                                            | DATE:<br>JUNE 2000                                                                              |
|                                                                                | DWN BY:<br>S.A.C.,<br>SUBMITTED BY:<br>JASON A. BINET | CHKD BY:<br>J.A.S.<br>PLOT SCALE:<br>100:1 | SOLICITATION NO.:<br>W912P0280046<br>CONTRACT NO.:<br>W912P028XXXX<br>FILE NUMBER:<br>H-1648423 |
|                                                                                | SIZE:                                                 | FILE NAME:                                 |                                                                                                 |

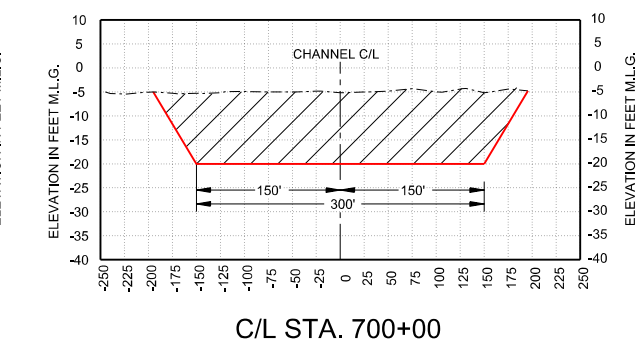
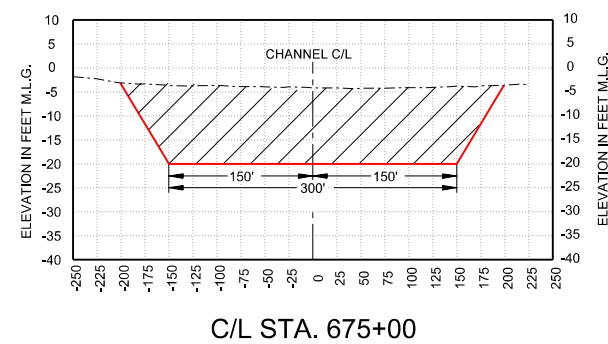
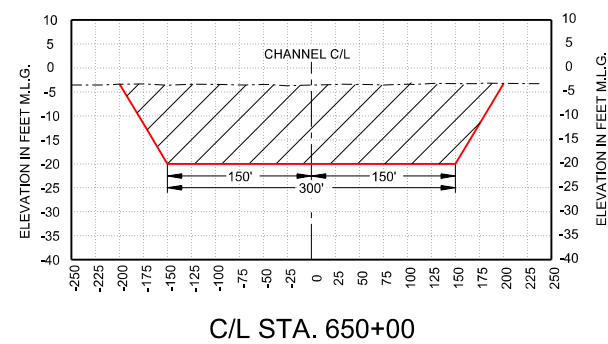
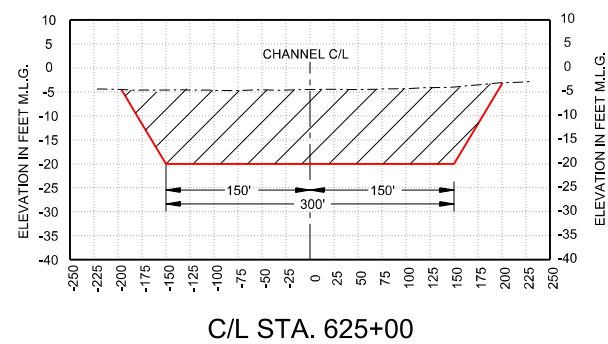
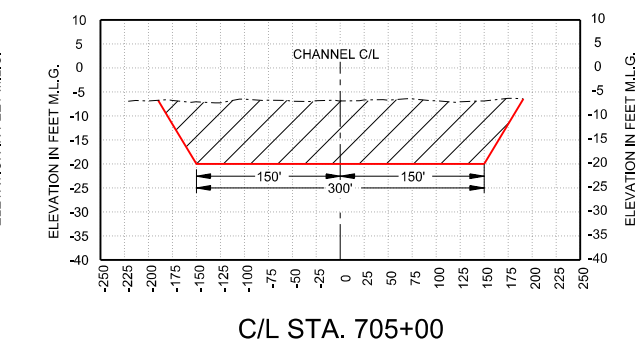
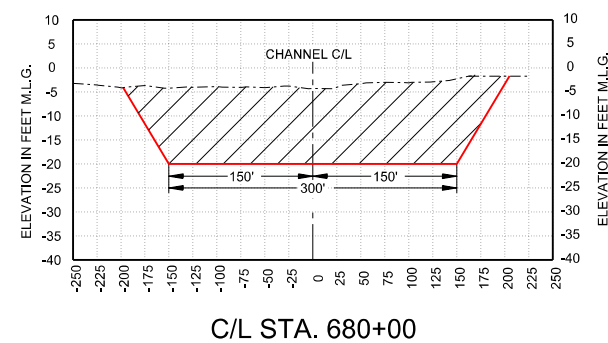
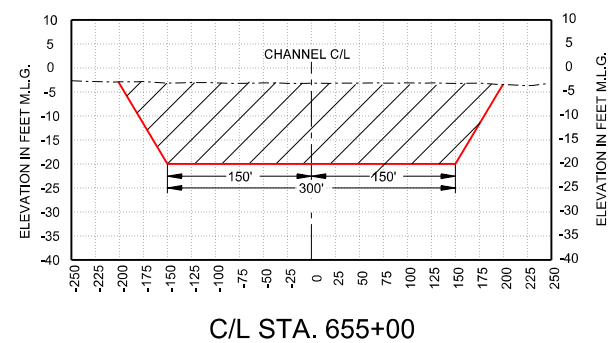
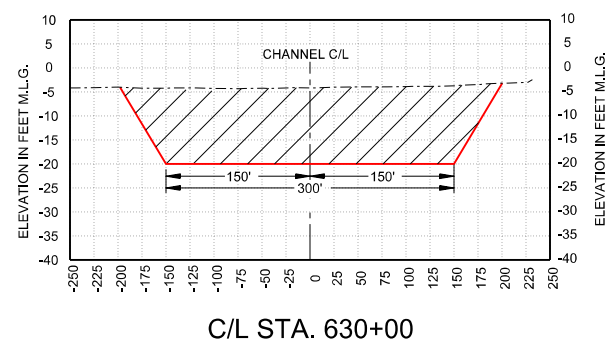
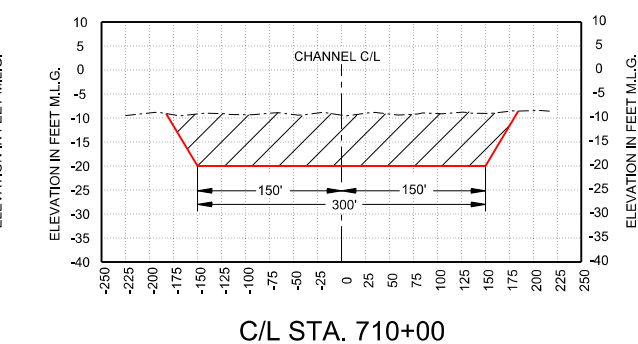
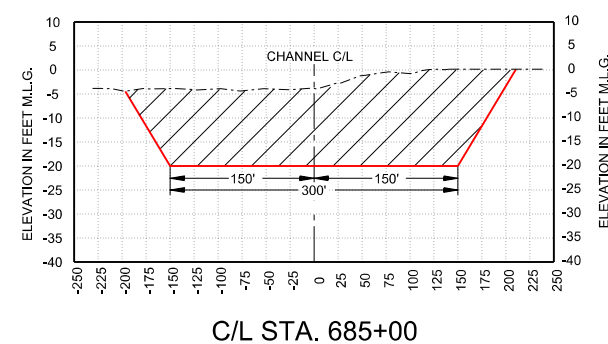
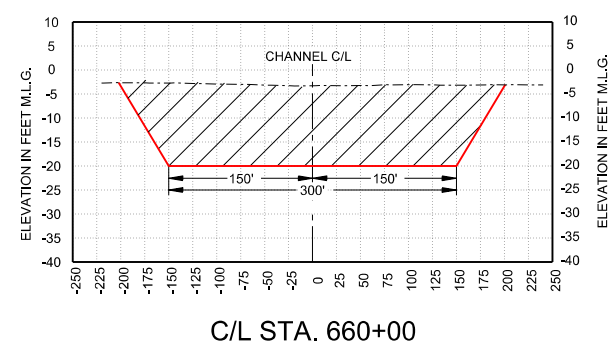
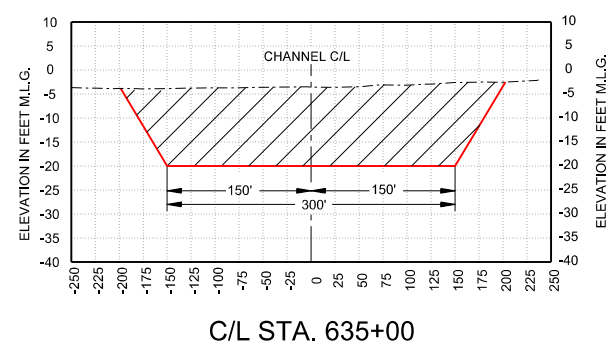
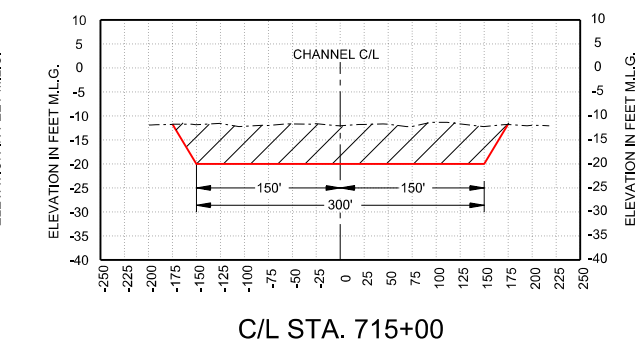
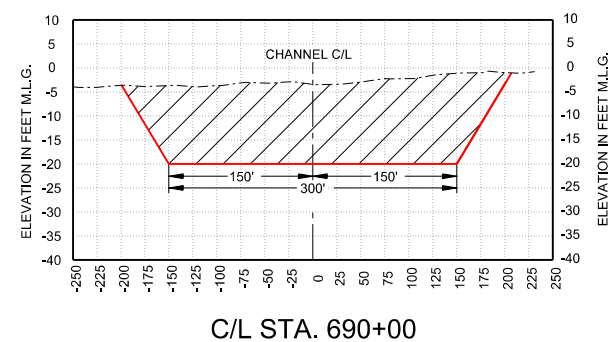
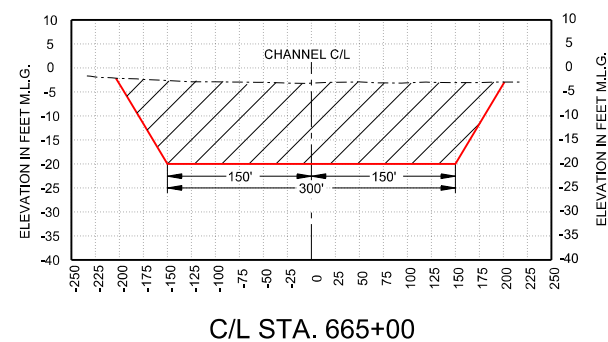
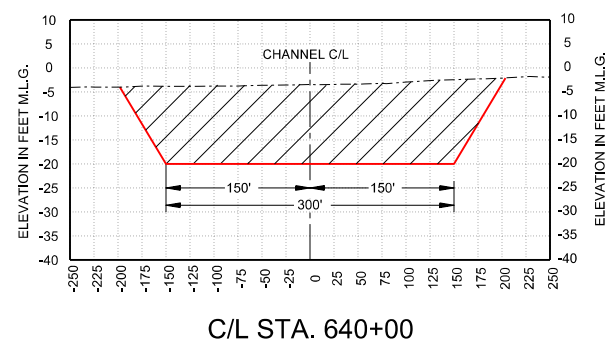
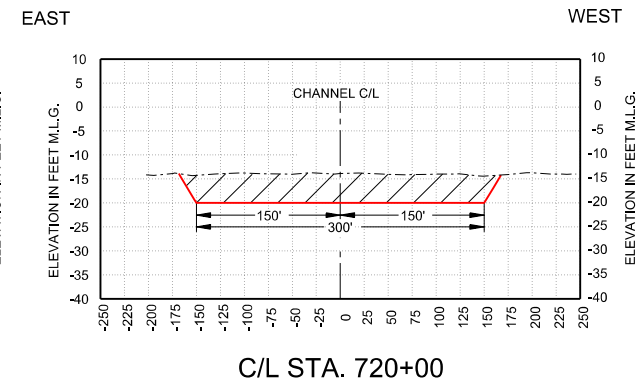
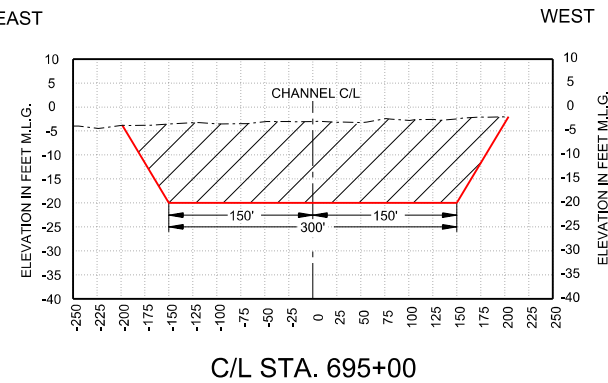
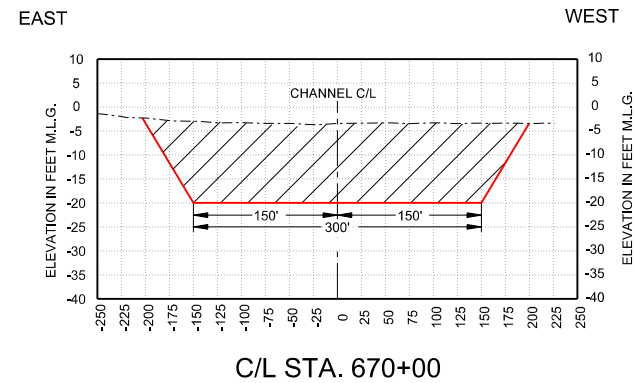
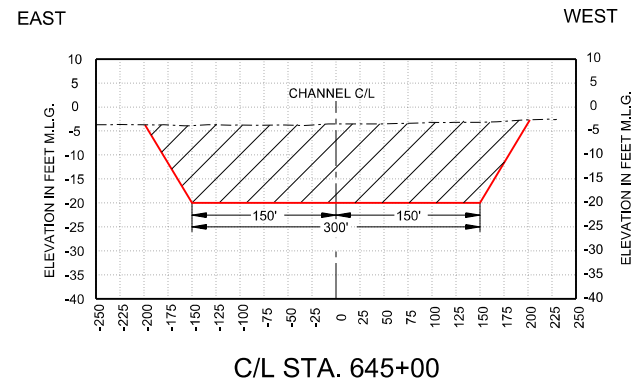
PASSES OF THE MISSISSIPPI RIVER  
SOUTH PASS  
MAINTENANCE DREDGING #20-2

TYPICAL CROSS SECTIONS  
C/L STA. 425+00 TO C/L STA. 520+00

SHEET  
IDENTIFICATION  
**C-14**







NOTES:

1. REQUIRED SIDE SLOPES ARE 1V ON 3H.
2. CROSS SECTIONS SHOWN ARE REPRESENTATIVE OF CONDITIONS THAT EXISTED IN OCTOBER 2019. SURVEYS AND CHANNEL CONDITIONS WILL BE UPDATED PRIOR TO BID OPENING.

[illegible]

|                                                                                |                                                       |                                            |                                                                                                  |
|--------------------------------------------------------------------------------|-------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>NEW ORLEANS DISTRICT<br>NEW ORLEANS, LOUISIANA | DESIGNED BY:<br>SCOTT F. CLARK                        |                                            | DATE:<br>JUNE 2000                                                                               |
|                                                                                | DWN BY:<br>S.A.C.,<br>SUBMITTED BY:<br>JASON A. BINET | CHKD BY:<br>J.A.S.<br>PLOT SCALE:<br>100:1 | SCOLICITATION NO.:<br>W912P6080046<br>CONTRACT NO.:<br>W912P608XXXX<br>FILE NUMBER:<br>H-1648423 |
|                                                                                | SIZE:                                                 | FILE NAME:                                 |                                                                                                  |

PASSES OF THE MISSISSIPPI RIVER  
SOUTH PASS  
MAINTENANCE DREDGING #20-2

TYPICAL CROSS SECTIONS

C/L STA. 625+00 TO C/L STA. 720+00

SHEET  
IDENTIFICATION  
**C-16**

