

IFB NO. W912P826BA009

**US Army Corps
of Engineers®**
New Orleans District

LAKE PONTCHARTRAIN & VICINITY
(LPV),

FORESHORE RISK REDUCTION REPAIRS,

REACH-1, 2, 3, & 4

Jefferson Parish, Louisiana

Construction Solicitation
and Specifications

September 2026



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

SOLICITATION: W912P826BA009

18 September 2026

FOR: Lake Pontchartrain & Vicinity (LPV), Foreshore Risk Reduction Repairs, Reach – 1, 2, 3, & 4, Jefferson Parish, LA

Prospective contractors must register in the System for Award Management (SAM). See RFO Clause 52.204-7 for required information. The website for SAM is <https://www.sam.gov>. As of April 4, 2022, the Federal Government has stopped using the DUNS Number as a unique identifier for entities and switched to a Unique Entity ID generated by SAM.gov. In addition, entities with DUNS Numbers but no SAM.gov registration have been able to get Unique Entity IDs without registering in SAM.gov since October 2021. NOTE: The DUNS Number is no longer used in SAM.gov, eSRS, FSRS, FPDS, CPARS, or FAPIIS.

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. (RFO 52.214-4 APR 1984)

DESCRIPTION AND MAGNITUDE OF WORK: The work consists of the repair of the existing foreshore protection and repair of the existing embankment along the south shoreline of Lake Pontchartrain, within the limits shown on the contract drawings.

CAUTION TO BIDDERS: *In delivery of hand-carried bids, bidders are cautioned to allow sufficient time for delays which may be encountered as a result of frequent trains which are subject to block all access roads to place of bid opening for various lengths of time. 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", DATED 15 MARCH 2024.

ATTENTION: Contractors must complete, and submit with their bid, the provisions located in Section 00 45 00. A bidder may also submit, in lieu of the completed Section 00 45 00, a complete copy of their Online Representations and Certifications from SAM.gov with an expiration date on or after the date of award.

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

ANGELA C. DAY
CONTRACT SPECIALIST

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

E-MAIL: ANGELA.C.DAY@USACE.ARMY.MIL

PHONE: (504) 862-1047

COLLECT CALLS NOT ACCEPTED

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

SOLICITATION, OFFER, AND AWARD <i>(Construction, Alteration, or Repair)</i>		1. SOLICITATION NUMBER W912P826BA009	2. TYPE OF SOLICITATION ☒ SEALED BID (IFB) INVITATION FOR BID ☐ NEGOTIATED (RFP) REQUEST FOR PROPOSAL	3. DATE ISSUED 18 SEP 2026	PAGE OF PAGES 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 24-006	
7. ISSUED BY W07V ENDIST N ORLEANS KO CONTRACTING DIVISION, 7400 LEAKE AVE NEW ORLEANS, LA 70118-3651 UNITED STATES ANGELA DAY, EMAIL: ANGELA.C.DAY@USACE.ARMY.MIL TELEPHONE: (504) 862-1047		CODE W912P8	8. ADDRESS OFFER TO		
9. FOR INFORMATION CALL: 		a. NAME ANGELA DAY		b. TELEPHONE NUMBER <i>(Include area code) (NO COLLECT CALLS)</i> (504) 862-1047	
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 <i>(Title, identifying number, date)</i> PROJECT TITLE: LPV, FORESHORE RISK REDUCTION REPAIRS, REACH -1, 2, 3, & 4 PROJECT LOCATION: LOUISIANA (ED-24-006) THE U.S. ARMY CORPS OF ENGINEERS (USACE) NEW ORLEANS DISTRICT ISSUES THIS INVITATION FOR BID (IFB) FOR THE CONSTRUCTION OF FORESHORE RISK REDUCTION REPAIRS. THE RESULTING CONTRACT SHALL BE FIRM FIXED PRICE (FFP). THIS SOLICITATION IS ISSUED AS UNRESTRICTED. THE NAICS CODE FOR THIS PROCUREMENT IS 237990. THE MAGNITUDE OF CONSTRUCTION IS BETWEEN \$25,000,000 AND \$100,000,000. THE WORK CONSISTS OF CONSTRUCTION ACCESS TO THE WORK SITE, DEMOLITION, CLEARING AND GRUBBING, EXCAVATION AND PLACING EMBANKMENT, PLACING GEOTEXTILE, PLACING STONE, TURF ESTABLISHMENT AND MAINTENANCE. IN ACCORDANCE WITH RFO 22.502-2(d), AN EXCEPTION HAS BEEN GRANTED FOR THE USE OF A PROJECT LABOR AGREEMENT AS REQUIRED UNDER RFO 22.502-1. THEREFORE, A PROJECT LABOR AGREEMENT IS NOT REQUIRED FOR THIS ACQUISITION. BID SUBMISSION CUTOFF SET FOR MONDAY, OCTOBER 19, 2026 AT 10:00 A.M.; BID OPENING SET FOR 11:00 A.M. QUESTION CUTOFF SET FOR FRIDAY, OCTOBER 2, 2026 AT 11:59 P.M. DIAL IN BY PHONE +1 601-262-2433, 453794823# UNITED STATES, VICKSBURG PHONE CONFERENCE ID: 453 794 823#					
11. The contractor shall begin performance within <u>10</u> calendar days and complete it within <u>300</u> calendar days after receiving ☐ award, ☒ notice to proceed. This performance period is ☒ mandatory ☐ negotiable. (See COMMENCEMENT, PROSECUTION, AN).					
12a. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? <i>(If "YES", indicate within how many calendar days after award in Item 12b.)</i> ☒ YES ☐ NO				12b. CALENDAR DAYS 3	
13. ADDITIONAL SOLICITATION REQUIREMENTS: a. Sealed offers in original and _____ copies to perform the work required are due at the place specified in Item 8 by <u>10:00 AM</u> (hour) local time <u>19 OCT 2026</u> (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 <u>60</u> 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	25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO THE UNITED STATES CODE AT ☐ 10 U.S.C. 3204(a) () ☐ 41 U.S.C. 3304(a) ()	
26. ADMINISTERED BY		27. PAYMENT WILL BE MADE BY	

CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE

☐ 28. NEGOTIATED AGREEMENT (Contractor is required to sign this document and return _____ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all work 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.		☐ 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 BY	31c. DATE

PROJECT TABLE OF CONTENTS

Division 00 – PROCUREMENT AND CONTRACTING

	SOLICITATION, OFFER AND AWARD SF-1442
00 10 00	BIDDING SCHEDULE
00 21 00	INSTRUCTIONS TO BIDDERS
00 22 00	SUPPLEMENTARY INSTRUCTIONS
00 45 00	REPRESENTATIONS AND CERTIFICATIONS
00 70 00	CONDITIONS OF THE CONTRACT
00 72 00	GENERAL CONDITIONS
00 73 00	SUPPLEMENTARY CONDITIONS

Division 01 - GENERAL REQUIREMENTS

01 10 00	GENERAL PROVISIONS
01 32 16.16 12	CONSTRUCTION PROGRESS SCHEDULES
01 33 00	SUBMITTAL PROCEDURES
01 35 26	GOVERNMENTAL SAFETY REQUIREMENTS
01 42 00	SOURCES FOR REFERENCE PUBLICATIONS
01 45 00.15 10	RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE
01 45 04.00 10	CONTRACTOR QUALITY CONTROL
01 57 20.01 12	ENVIRONMENTAL PROTECTION – DREDGING
01 57 23.00 12	STORM WATER POLLUTION PREVENTION PLAN
01 57 23.01 12	TRUCK WASH-DOWN RACKS
01 78 02.00 10	CLOSEOUT SUBMITTALS

DIVISION 02 - EXISTING CONDITIONS

02 21 10.00 12	SURVEYS
02 41 00	DEMOLITION

DIVISION 31 – EARTHWORK

31 05 19.04 12	SEPARATOR GEOTEXTILE
31 11 00.00 12	CLEARING AND GRUBBING
31 23 00.00 12	EXCAVATION
31 24 00.00 12	EMBANKMENT

DIVISION 32 – EXTERIOR IMPROVEMENTS

32 92 19.04 12	TURF ESTABLISHMENT AND MAINTENANCE
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DIVISION 35 – WATERWAY AND MARINE CONSTRUCTION

35 20 23.01 12
35 31 19

MARINE ACCESS PLAN
GRADED STONE

SECTION 00 10 00 – BIDDING SCHEDULE

Lake Pontchartrain and Vicinity (LPV),
Foreshore Risk Reduction Repairs,
Reach – 1, 2, 3, & 4,
Jefferson Parish, Louisiana

Item	DESCRIPTION	Estimated Quantity	Unit	Unit Price	Estimated Amount
BASE WORK					
0001	Mobilization and Demobilization	1	JOB		
0002	Truck Wash-Down Racks	1	JOB		
0003	Demolition	1	JOB		
0004	Separator Geotextile	86,500	SY		
0005	Clearing and Grubbing	20	AC		
0006	Embankment- Commercial	20,000	CY		
0007	Embankment-Stockpile	22,000	CY		
0008	Seeding and Mulching	13.5	AC		
0009	Fertilizer				
0009AA	First 4,000 lbs.	4,000	LBS		
0009AB	All over 4,000 lbs.	600	LBS		
0010	Marine Access	1	JOB		
0011	Graded Stone – Dike Cap				
0011AA	First 190,000 Tons	190,000	TON		
0011AB	All over 190,000 Tons	40,000	TON		
0012	Graded Stone – Splash Pad				
0012AA	First 50,000 Tons	50,000	TON		
0012AB	All over 50,000 Tons	8,000	TON		
TOTAL BASE WORK:					\$
OPTION WORK 1 (OW1)					
0013	Separator Geotextile – OW1	25,500	SY		
0014	Clearing and Grubbing – OW1	5	AC		
0015	Embankment – Commercial - OW1	8,000	CY		

0016	Seeding and Mulching – OW1	2.5	AC		
0017	Fertilizer – OW1				
0017AA	First 750 lbs.	750	LBS		
0017AB	All over 750 lbs.	115	LBS		
0018	Marine Access – OW1	1	JOB		
0019	Graded Stone - Dike Cap OW1				
0019AA	First 60,000 Tons	60,000	TON		
0019AB	All over 60,000 Tons	10,000	TON		
0020	Graded Stone - Splash Pad OW1				
0020AA	First 15,000 Tons	15,000	TON		
0020AB	All over 15,000 Tons	2,000	TON		
TOTAL OPTION WORK 1:					\$
OPTION WORK 2 (OW2)					
0020++	Lime Soil Amendment – OW2	15.5	TON		
0021++	Sulfur Soil Amendment – OW2	7.75	TON		
TOTAL OPTION WORK 2:					\$
TOTAL BASE WORK + OW1 + OW2:					\$

++Items not subject to the requirements of Contract provision in Section 00 72 00 GENERAL CONDITIONS entitled VARIATION IN ESTIMATED QUANTITY.

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

Award will be made as a whole to one bidder.

NOTE 1: 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 2: 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 sub line items are materially unbalanced (See [RFO 14.306-3, Rejection of Individual Bids](#)).

NOTE 3: 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. The NTP will be issued immediately after verification of acceptable performance and payment bonds. Within seven (7) days after issuance of the NTP, the Contractor shall initiate a meeting to discuss the submittal process with the Area or Resident Engineer or his authorized representative. Physical work cannot start until the Accident Prevention Plan, 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 4: RAPID VENDOR PAYMENT: Web based instructions for the submission of invoices;

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

NOTE 5: OPTIONAL WORK ITEMS. The Government may require the delivery of the numbered line item(s), identified in the schedule as OPTION WORK Items, in the quantities and prices stated in the schedule. The Contracting Officer may exercise the OPTION WORK items by written notice to the Contractor no later than 210 calendar days after the Notice to Proceed date." Delete the next sentence, "Upon exercising the Option Work, the Contractor shall immediately begin the work and prosecute the work continuously simultaneously with any other base work until the Optional Work is completed. Bidders shall bid on all items including optional items (see EVALUATION OF OPTIONS). Failure to bid on all items will result in a non-responsive bid.

NOTE 6: EVALUATION OF OPTIONS. Except when it is determined in accordance with RFO 17.202(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 this basic requirement. Evaluation of options will not obligate the Government to exercise the option(s). **If an option is to be exercised at the time of contract award RFO 17.208 shall be used in place of RFO 52.217-5.

NOTE 7: TIME ADJUSTMENT IN THE EVENT OF THE EXERCISE OF OPTIONAL WORK. In the event that OPTIONAL WORK items are exercised under the terms of this contract, the time required for completion of the contract will be adjusted in accordance with the following:

OW-1 – 70 calendar days

OW-2 – will run concurrent with basework and OW1.

The above Optional Workdays will be added to the original contract duration of 300 calendar days established for the BASE WORK items as specified in the contract provision found in Section 00 73 00 entitled COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK.

EVALUATION OF SUBLINE ITEMS

Item Nos. 0009, 0011, 0012, 0017, 0019, and 0020 are subdivided into two or more estimated quantities and are to be separately priced. The Government will evaluate each of these items on the basis of total price of its subline items.

(End of Clause)

VARIATIONS IN ESTIMATED QUANTITIES - SUBLINE ITEMS

This variation in estimated quantities clause is applicable only to item Nos. 0009, 0011, 0012, 0017, 0019, and 0020.

- (a) Variation from the estimated quantity in the actual work performed under any second or subsequent subline item or elimination of all work under such a second or subsequent subline item will not be the basis for an adjustment in contract unit price.
- (b) Where the actual quantity of work performed for item Nos. 0009, 0011, 0012, 0017, 0019, and 0020 are less than 85% of the quantity of the first subline item listed under such item, the contractor will be paid at the contract unit price for that subline item for the actual quantity of work performed and, in addition, an equitable adjustment shall be made in accordance with the clause VARIATION IN ESTIMATED QUANTITY.
- (c) If the actual quantity of work performed under item Nos. 0009, 0011, 0012, 0017, 0019, and 0020 exceeds 115% or is less than 85% of the total estimated quantity of the subline item under that item and/or if the quantity of the work performed under the second subline item or any subsequent subline item under item Nos. NONE exceeds 115% or is less than 85% of the estimated quantity of any such subline item, and if such variation causes an increase or a decrease in the time required for performance of this contract the contract completion time will be adjusted in accordance with VARIATION IN ESTIMATED QUANTITY.

(End of Clause)

Bid Bond (See Instructions on Page 3)		Date Bond Executed (Must Not Be Later Than Bid Opening Date)	OMB Control Number: 9000-0001 Expiration Date: 1/31/2027
Principal (Legal Name And Business Address)		Type Of Organization ("X" One) ☐ Individual ☐ Partnership ☐ Joint Venture ☐ Corporation ☐ Other (Specify)	
		State Of Incorporation	
Surety(ies) (Name And Business Address)			

Penal Sum Of Bond					Bid Identification	
Percent Of Bid Price	Amount Not To Exceed				Bid Date	Invitation Number
	Million(s)	Thousand(s)	Hundred(s)	Cents		
					For (Construction, Supplies Or Services)	
					▼	

Obligation:

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

Conditions:

The Principal has submitted the bid identified above.

Therefore:

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

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

Witness:

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

Principal

Signature(s)	1. (Seal)	2. (Seal)	3. (Seal)	Corporate Seal
Name(s) And Title(s) (Typed)	1.	2.	3.	

Individual Surety(ies)

Signature(s)	1. (Seal)	2. (Seal)
Name(s) (Typed)	1.	2.

Corporate Surety(ies)

Surety A	Name And Address		State Of Incorporation	Liability Limit (\$)	Corporate Seal
	Signature(s)	1.	2.		
	Name(s) And Title(s) (Typed)	1.	2.		
Surety B	Name And Address		State Of Incorporation	Liability Limit (\$)	Corporate Seal
	Signature(s)	1.	2.		
	Name(s) And Title(s) (Typed)	1.	2.		
Surety C	Name And Address		State Of Incorporation	Liability Limit (\$)	Corporate Seal
	Signature(s)	1.	2.		
	Name(s) And Title(s) (Typed)	1.	2.		
Surety D	Name And Address		State Of Incorporation	Liability Limit (\$)	Corporate Seal
	Signature(s)	1.	2.		
	Name(s) And Title(s) (Typed)	1.	2.		

Surety E	Name And Address		State Of Incorporation	Liability Limit (\$)	Corporate Seal
	Signature(s)	1.	2.		
	Name(s) And Title(s) (Typed)	1.	2.		
Surety F	Name And Address		State Of Incorporation	Liability Limit (\$)	Corporate Seal
	Signature(s)	1.	2.		
	Name(s) And Title(s) (Typed)	1.	2.		
Surety G	Name And Address		State Of Incorporation	Liability Limit (\$)	Corporate Seal
	Signature(s)	1.	2.		
	Name(s) And 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."

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 9000-0001. 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 (MVCB), 1800 F Street, NW, Washington, DC 20405.

Section 00 21 00 - Instructions**FAR Provisions Incorporated by Reference**

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.204-7	System for Award Management-Registration. (Deviation 2026-O0038)	2026-02		
52.214-3	Amendments to Invitations for Bids. (Deviation 2026-O0038)	2026-02		
52.214-4	False Statements in Bids.	1984-04		
52.214-5	Submission of Bids. (Deviation 2026-O0038)	2026-02		
52.214-6	Explanation to Prospective Bidders.	1984-04		
52.214-7	Late Submissions, Modifications, and Withdrawals of Bids. (Deviation 2026-O0038)	2026-02		
52.214-34	Submission of Offers in the English Language.	1991-04		
52.214-35	Submission of Offers in U.S. Currency.	1991-04		
52.222-5	Construction Wage Rate Requirements-Secondary Site of the Work. (Deviation 2026-O0038)	2026-02		
52.225-10	Notice of Buy American Requirement-Construction	2014-05		

Materials.

52.225-12	Notice of Buy American Requirement-Construction Materials Under Trade Agreements.	2014-05
52.232-38	Submission of Electronic Funds Transfer Information with Offer.	2013-07
52.233-2	Service of Protest. (Deviation 2026-O0038)	2026-02

DFARS Provisions Incorporated by Reference

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
252.204-7019	Notice of NIST SP 800-171 DoD Assessment Requirements.	2023-11		
252.204-7024	Notice on the Use of the Supplier Performance Risk System.	2023-03		
252.215-7013	Supplies and Services Provided by Nontraditional Defense Contractors.	2023-01		

FAR Provisions Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.216-1	Type of Contract. (Deviation	2026-02		

2026-O0038)

Type of Contract (Feb 2026) (Deviation 2026-O0038)

The Government contemplates award of a firm fixed-price contract resulting from this solicitation.

(End of provision)

52.228-1

Bid Guarantee.

1996-09

Bid Guarantee (Sept 1996)

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

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

(1) To unsuccessful bidders as soon as practicable after the opening of bids; and

(2) To the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.

(c) The amount of the bid guarantee shall be twenty (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 clause)

52.252-1

Solicitation Provisions

1998-02

Incorporated by Reference.

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):

<https://www.acquisition.gov/>

(End of provision)

52.252-5	Authorized Deviations in	2020-11
	Provisions.	

Authorized Deviations in Provisions (Nov 2020)

(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 Defense Federal Acquisition Regulation (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)

Instructions to Bidders
QUESTION AND ANSWER VIA PROJNET

**ALL SUBMITTED QUESTIONS FOR THIS PROJECT AND THE ANSWERS PROVIDED
SHALL BE VIEWED IN BIDDER INQUIRY IN PROJNET AT**

(<https://www.projnet.org>)

Technical inquiries and/or questions relating to this solicitation shall be submitted via Bidder Inquiry in ProjNet at (<https://www.projnet.org>). **A question period will be open until October 2, 2026.**

To submit or review inquiry items, prospective vendors will need to use the Bidder Inquiry Key presented below and follow the instructions listed below the key for access. **Emailed inquiries and/or questions will not be accepted.** A prospective vendor who submits a comment /question will receive an acknowledgment of their comment/question via email. Another email to the same address will notify the prospective vendor once the reply is available for viewing.

The Bidder Inquiry Key is: **3TFDH8-9QX8J5**

Specific Instructions for First Time ProjNet Bid Inquiry Access:

1. From the ProjNet home page linked above, click on **Quick Add** on the upper right side of the screen.
2. Identify the Agency. This should be marked as **USACE**.
3. Key. Enter the **Bidder Inquiry Key** listed above.
4. Email. Enter the email address you would like to use for communication.
5. Click Continue. A page will then open saying that a user account was not found and will ask you to create one using the provided form.
6. Enter your First Name, Last Name, Company, City, State, Phone, Email, Secret Question, Secret Answer, and Time Zone. Make sure to remember your Secret Question and Answer as they will be used from this point on to access the ProjNet system.
7. Click Add User. Once this is completed you are now registered within ProjNet and are currently logged into the system.

Specific Instructions for Future ProjNet Bid Inquiry Access:

1. For future access to ProjNet, you will not be provided any type of password. You will utilize your Secret Question and Secret Answer to log in.
2. From the ProjNet home page linked above, click on **Quick Add** on the upper right side of the screen.
3. Identify the Agency. This should be marked as **USACE**.
4. Key. Enter the **Bidder Inquiry Key** listed above.
5. Email. Enter the email address you used to register previously in ProjNet.
6. Click Continue. A page will then open asking you to enter the answer to your Secret Question.
7. Enter your Secret Answer and click Login. Once this is completed you are now logged into the system.

SOLICITATION NUMBER: W912P826BA009

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

Electronic Submission of Bids/Proposals (Email):

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

1. Send an email containing your name, email address and bid/proposal to the following emails associated with the IFB (MUST include all emails):
 - ANGELA.C.DAY@USACE.ARMY.MIL
 - CHRISTOPHER.NUCCIO@USACE.ARMY.MIL
2. ALL BIDS SUBMITTED BY EMAIL MUST CONTAIN THE SOLICITATION NUMBER IN THE SUBJECT LINE.
3. Once the agency receives your bid/proposal at the above email addresses, you will then receive a confirmation email stating your bid/proposal was received. If a bidder does not receive a reply acknowledging receipt electronically from the New Orleans District, it is incumbent upon the bidder to seek confirmation from the issuing Contracting office by phone.

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

- Use .zip files as attachments. Combine multiple files into a .zip file to compress file size prior to adding as an email attachment.
- Send multiple emails. Label each email with same subject line and indicate number of emails. For example: Smith Construction W912P826BAXXX (1 of 2) Smith Construction W912P826BAXXX (2 of 2).

Physical Submission of Bids:

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

Bid Opening:

This bid opening is currently scheduled for 19 October 2026 at 11:00 a.m. The Contracting Officer and Contract Specialist will begin downloading bids at 10:00 a.m. on 19 October 2026, which is the bid submission receipt cutoff time. All bids received after 10:00 a.m. will be considered late.

Audio Teleconference Bid Opening Information:

Instructions as well as any subsequent bid opening information will be provided on SAM.gov prior to the final closing date of this solicitation. Following the conclusion of the bid opening, an abstract of offers for unclassified acquisitions shall be available for public inspection via SAM.gov.

Dial in by phone

+1 601-262-2433, 453794823# United States, Vicksburg

Phone conference ID: 453 794 823#

Section 00 22 00 - Supplementary Instructions

FAR Provisions Incorporated by Reference

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.217-5	Evaluation of Options. (Deviation 2026-O0038)	2026-02		

Section 00 45 00 - Representations and Certifications**FAR Provisions Incorporated by Reference**

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.203-11	Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions.	2024-09		
52.203-18	Prohibition on Contracting with Entities that Require Certain Internal Confidentiality Agreements or Statements-Representation.	2017-01		
52.223-4	Recovered Material Certification.	2008-05		
52.240-90	Security Prohibitions and Exclusions Representations and Certifications. (Deviation 2026-O0038)	2026-02		

DFARS Provisions Incorporated by Reference

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
252.203-7005	Representation Relating to Compensation of Former DoD Officials.	2022-09		
252.204-7008	Compliance with Safeguarding Covered Defense Information Controls.	2016-10		

FAR Provisions Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.203-2	Certificate of Independent Price Determination.	1985-04		

Certificate of Independent Price Determination (Apr 1985)

(a) The offeror certifies that-

(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to-

(i) Those prices;

(ii) The intention to submit an offer; or

(iii) The methods or factors used to calculate the prices offered.

(2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

(b) Each signature on the offer is considered to be a certification by the signatory that the signatory-

(1) Is the person in the offeror's organization responsible for determining the prices being

offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this provision; or

(2)

(i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this provision ____ [insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization];

(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) of this provision have not participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this provision; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this provision.

(c) If the offeror deletes or modifies subparagraph (a)(2) above, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of provision)

52.209-2	Prohibition on Contracting With Inverted Domestic Corporations- Representation. (Deviation 2026- O0038)	2026-02
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Prohibition on Contracting with Inverted Domestic Corporations-Representation (Feb 2026)
(Deviation 2026-O0038)

(a) Definitions. As used in this clause-

Inverted domestic corporation means a foreign incorporated entity that meets the definition of an inverted domestic corporation under 6 U.S.C. 395(b), applied in accordance with the rules and definitions of 6 U.S.C. 395(c).

Subsidiary means an entity in which more than 50 percent of the entity is owned-

(1) Directly by a parent corporation; or

(2) Through another subsidiary of a parent corporation.

(b) Government agencies are not permitted to use appropriated (or otherwise made available) funds for contracts with either an inverted domestic corporation, or a subsidiary of an inverted domestic corporation, unless the exception at 9.108-3(b) applies or the requirement is waived in accordance with the procedures at 9.108-5.

(c) Representation. The Offeror represents that-

(1) It [] is, [] is not an inverted domestic corporation; and

(2) It [] is, [] is not a subsidiary of an inverted domestic corporation.

(End of provision)

52.209-7	Information Regarding Responsibility Matters. (Deviation 2026-O0038)	2026-02
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Information Regarding Responsibility Matters (Feb 2026) (Deviation 2026-O0038)

(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 (FAPIIS) 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 FAPIIS 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. (Deviation 2026-O0038)	2026-02
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Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law (Feb 2026) (Deviation 2026-O0038)

(a) 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)

52.209-13	Violation of Arms Control Treaties or Agreements- Certification. (Deviation 2026- O0038)	2026-02
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Violation of Arms Control Treaties or Agreements-Certification (Feb 2026) (Deviation 2026-O0038)

(a) This provision does not apply to acquisitions at or below the simplified acquisition threshold or to acquisitions of commercial products and commercial services as defined in Federal Acquisition Regulation 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 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 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 such activity might have occurred, 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. 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 22 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 the Government later determines 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)

52.229-11	Tax on Certain Foreign Procurements-Notice and Representation. (Deviation 2026- O0038)	2026-02
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Tax on Certain Foreign Procurements-Notice and Representation (Feb 2026) (Deviation 2026-O0038)

(a) Definitions. As used in this provision-

Foreign person means any person other than a United States person.

Specified Federal procurement payment means any payment made pursuant to a contract with a foreign contracting party that is for goods, manufactured or produced, or services provided in a foreign country that is not a party to an international procurement agreement with the United States. For purposes of the prior sentence, a foreign country does not include an outlying area of the United States.

United States person as defined in 26 U.S.C. 7701(a)(30) means

(1) A citizen or resident of the United States;

(2) A domestic partnership;

(3) A domestic corporation;

(4) Any estate (other than a foreign estate, within the meaning of 26 U.S.C. 701(a)(31)); and

(5) Any trust if-

(i) A court within the United States is able to exercise primary supervision over the administration of the trust; and

(ii) One or more United States persons have the authority to control all substantial decisions of the trust.

(b) Unless exempted, there is a 2 percent tax of the amount of a specified Federal procurement payment on any foreign person receiving such payment. See 26 U.S.C. 5000C and its implementing regulations at 26 CFR 1.5000C-1 through 1.5000C-7.

(c) Exemptions from withholding under this provision are described at 26 CFR 1.5000C-1(d)(5) through (7). The Offeror may claim an exemption from the withholding by using the Department of the Treasury Internal Revenue Service (IRS) Form W-14, Certificate of Foreign Contracting Party Receiving Federal Procurement Payments, available at www.irs.gov/w14. Any exemption claimed and self-certified on the IRS Form W-14 is subject to audit by the IRS. Any disputes regarding the imposition and collection of the 26 U.S.C. 5000C tax are adjudicated by the IRS as the 26 U.S.C. 5000C tax is a tax matter, not a contract issue. The IRS Form W-14 is provided to the acquiring agency rather than to the IRS.

(d) For purposes of withholding under 26 U.S.C. 5000C, the Offeror represents that

(1) It ☐ is ☐ is not a foreign person; and

(2) If the Offeror indicates "is" in paragraph (d)(1) of this provision, then the Offeror represents that-I am claiming on the IRS Form W-14 ☐ a full exemption, or ☐ partial or no exemption [Offeror must select one] from the excise tax.

(e) If the Offeror represents it is a foreign person in paragraph (d)(1) of this provision, then-

(1) The clause at FAR 52.229-12, Tax on Certain Foreign Procurements, will be included in any resulting contract; and

(2) The Offeror shall submit with its offer the IRS Form W-14. If the IRS Form W-14 is not submitted with the offer, exemptions will not be applied to any resulting contract and the Government will withhold a full 2 percent of each payment.

(f) If the Offeror selects "is" in paragraph (d)(1) and "partial or no exemption" in paragraph (d)(2) of this provision, the Offeror will be subject to withholding in accordance with the clause at FAR 52.229-12, Tax on Certain Foreign Procurements, in any resulting contract.

(g) A taxpayer may, for a fee, seek advice from the IRS as to the proper tax treatment of a

transaction. This is called a private letter ruling. Also, the IRS may publish a revenue ruling, which is an official interpretation by the IRS of the Internal Revenue Code, related statutes, tax treaties, and regulations. A revenue ruling is the conclusion of the IRS on how the law is applied to a specific set of facts. For questions relating to the interpretation of the IRS regulations go to <https://www.irs.gov/help/tax-law-questions>.

(End of provision)

DFARS Provisions Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
252.204-7007	Alternate A, Annual Representations and Certifications.	2025-10	Alternate A	2025-10

ALTERNATE A, ANNUAL REPRESENTATIONS AND CERTIFICATIONS (OCT 2025)

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

(b)(1) If the provision at 52.204-7, System for Award Management, is included in this solicitation, paragraph (e) 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 (e) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The Offeror shall indicate which option applies by checking one of the following boxes:

☐ (i) Paragraph (e) applies.

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

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

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

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

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

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

(v) 252.225-7050, Disclosure of Ownership or Control by the Government of a Country that is a State Sponsor of Terrorism. Applies to all solicitations expected to result in contracts of \$200,000 or more.

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

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

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

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

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

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

☐ Use with Alternate I.

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

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

☐ Use with Alternate I.

☐ Use with Alternate II.

☐ Use with Alternate III.

☐ Use with Alternate IV.

☐ Use with Alternate V.

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

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

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

FAR/DFARS Provision #	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)

252.204-7016 Covered Defense 2019-12
Telecommunications Equipment
or Services-Representation.

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

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

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

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

(End of provision)

252.204-7017 Prohibition on the Acquisition of 2021-05
Covered Defense
Telecommunications Equipment

or Services-Representation.

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

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

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

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

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

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

The Offeror represents that it ☐ will ☐ will not provide covered defense telecommunications equipment or services as a part of its offered products or services to DoD in the performance of

any award resulting from this solicitation.

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

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

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

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

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

(End of provision)

Section 00 70 00 - Conditions of the Contract

FAR Clauses Incorporated by Reference

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.219-9	Small Business Subcontracting Plan. (Deviation 2026-O0038) (Alternate I)	2026-02	Alternate I	2026-02
52.222-3	Convict Labor. (Deviation 2026-O0038)	2026-02		
52.222-7	Withholding of Funds. (Deviation 2026-O0038)	2026-02		
52.232-1	Payments.	1984-04		

Section 00 72 00 - General Conditions**FAR Clauses Incorporated by Reference**

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
52.202-1	Definitions.	2020-06		
52.203-3	Gratuities.	1984-04		
52.203-5	Covenant Against Contingent Fees.	2014-05		
52.203-6	Restrictions on Subcontractor Sales to the Government.	2020-06		
52.203-7	Anti-Kickback Procedures.	2020-06		
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity.	2014-05		
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity.	2014-05		
52.203-12	Limitation on Payments to Influence Certain Federal Transactions.	2020-06		
52.203-13	Contractor Code of Business Ethics and Conduct.	2021-11		
52.203-19	Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements.	2017-01		
52.204-10	Reporting Executive Compensation and First-Tier	2026-02		

	Subcontract Awards. (Deviation 2026-O0038)	
52.204-13	System for Award Management-Maintenance. (Deviation 2026-O0038)	2026-02
52.204-19	Incorporation by Reference of Representations and Certifications.	2014-12
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, Proposed for Debarment, or Voluntarily Excluded. (Deviation 2026-O0038)	2026-02
52.209-9	Updates of Publicly Available Information Regarding Responsibility Matters. (Deviation 2026-O0038)	2026-02
52.209-10	Prohibition on Contracting With Inverted Domestic Corporations. (Deviation 2026-O0038)	2026-02
52.210-1	Market Research. (Deviation 2026-O0038)	2026-02
52.214-18	Preparation of Bids-Construction.	1984-04
52.214-19	Contract Award-Sealed Bidding-Construction.	1996-08
52.214-26	Audit and Records-Sealed Bidding. (Deviation 2026-O0038)	2026-02
52.214-27	Price Reduction for Defective	2020-06

Certified Cost or Pricing Data-
Modifications-Sealed Bidding.

52.214-28	Subcontractor Certified Cost or Pricing Data-Modifications-Sealed Bidding. (Deviation 2026-O0038)	2026-02
52.214-29	Order of Precedence-Sealed Bidding.	1986-01
52.219-8	Utilization of Small Business Concerns. (Deviation 2026-O0038)	2026-02
52.219-16	Liquidated Damages-Subcontracting Plan. (Deviation 2026-O0038)	2026-02
52.222-6	Construction Wage Rate Requirements. (Deviation 2026-O0038)	2026-02
52.222-8	Payrolls and Basic Records. (Deviation 2026-O0038)	2026-02
52.222-9	Apprentices and Trainees. (Deviation 2026-O0038)	2026-02
52.222-10	Compliance with Copeland Act Requirements. (Deviation 2026-O0038)	2026-02
52.222-11	Subcontracts (Labor Standards). (Deviation 2026-O0038)	2026-02
52.222-12	Contract Termination-Debarment.	2014-05
52.222-13	Compliance with Construction Wage Rate Requirements and	2014-05

Related Regulations.

52.222-14	Disputes Concerning Labor Standards. (Deviation 2026-O0038)	2026-02
52.222-15	Certification of Eligibility.	2014-05
52.222-30	Construction Wage Rate Requirements-Price Adjustment (None or Separately Specified Method).	2018-08
52.222-35	Equal Opportunity for Veterans. (Deviation 2026-O0038)	2026-02
52.222-36	Equal Opportunity for Workers with Disabilities. (Deviation 2026-O0038)	2026-02
52.222-37	Employment Reports on Veterans. (Deviation 2026-O0038)	2026-02
52.222-40	Notification of Employee Rights Under the National Labor Relations Act. (Deviation 2026-O0038)	2026-02
52.222-50	Combating Trafficking in Persons. (Deviation 2026-O0038)	2026-02
52.222-54	Employment Eligibility Verification. (Deviation 2026-O0038)	2026-02
52.222-55	Minimum Wages for Contractor Workers Under Executive Order 14026. (Deviation 2026-O0038)	2026-02

52.222-62	Paid Sick Leave Under Executive Order 13706. (Deviation 2026-O0038)	2026-02
52.222-90	Addressing DEI Discrimination by Federal Contractors. (Deviation 2026-O0040, Revision 1)	2026-04
52.223-23	Sustainable Products. (Deviation 2026-O0038)	2026-02
52.226-6	Promoting Excess Food Donation to Nonprofit Organizations. (Deviation 2026-O0038)	2026-02
52.226-7	Drug-Free Workplace.	2024-05
52.226-8	Encouraging Contractor Policies to Ban Text Messaging While Driving.	2024-05
52.228-2	Additional Bond Security.	1997-10
52.228-5	Insurance-Work on a Government Installation.	1997-01
52.228-11	Individual Surety-Pledge of Assets.	2021-02
52.228-12	Prospective Subcontractor Requests for Bonds.	2022-12
52.228-14	Irrevocable Letter of Credit.	2014-11
52.228-15	Performance and Payment Bonds-Construction.	2020-06
52.228-17	Individual Surety-Pledge of	2021-02

Assets (Bid Guarantee).

52.229-3	Federal, State, and Local Taxes.	2026-02
52.229-12	Tax on Certain Foreign Procurements. (Deviation 2026-O0038)	2026-02
52.232-8	Discounts for Prompt Payment.	2002-02
52.232-15	Progress Payments Not Included.	1984-04
52.232-17	Interest.	2014-05
52.232-23	Assignment of Claims.	2014-05
52.232-27	Prompt Payment for Construction Contracts.	2017-01
52.232-33	Payment by Electronic Funds Transfer-System for Award Management.	2018-10
52.232-39	Unenforceability of Unauthorized Obligations.	2013-06
52.232-40	Providing Accelerated Payments to Small Business Subcontractors.	2023-03
52.233-3	Protest after Award. (Deviation 2026-O0038)	2026-02
52.233-4	Applicable Law for Breach of Contract Claim. (Deviation 2026-O0038)	2026-02
52.236-2	Differing Site Conditions. (Deviation 2026-O0038)	2026-02

52.236-3	Site Investigation and Conditions Affecting the Work. (Deviation 2026-O0038)	2026-02
52.236-5	Material and Workmanship. (Deviation 2026-O0038)	2026-02
52.236-6	Superintendence by the Contractor. (Deviation 2026-O0038)	2026-02
52.236-7	Permits and Responsibilities. (Deviation 2026-O0038)	2026-02
52.236-8	Other Contracts. (Deviation 2026-O0038)	2026-02
52.236-9	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements. (Deviation 2026-O0038)	2026-02
52.236-10	Operations and Storage Areas. (Deviation 2026-O0038)	2026-02
52.236-11	Use and Possession Prior to Completion. (Deviation 2026-O0038)	2026-02
52.236-12	Cleaning Up. (Deviation 2026-O0038)	2026-02
52.236-13	Accident Prevention. (Deviation 2026-O0038)	2026-02
52.236-15	Schedules for Construction Contracts. (Deviation 2026-O0038)	2026-02
52.236-21	Specifications and Drawings for	2026-02

	Construction. (Deviation 2026-00038)	
52.237-2	Protection of Government Buildings, Equipment, and Vegetation.	1984-04
52.240-91	Security Prohibitions and Exclusions. (Deviation 2026-00038)	2026-02
52.242-5	Payments to Small Business Subcontractors.	2017-01
52.242-13	Bankruptcy.	1995-07
52.242-14	Suspension of Work.	1984-04
52.243-4	Changes. (Deviation 2026-00038)	2026-02
52.244-6	Subcontracts for Commercial Products and Commercial Services. (Deviation 2026-00038)	2026-04
52.245-1	Government Property.	2021-09
52.245-9	Use and Charges.	2012-04
52.246-12	Inspection of Construction.	1996-08
52.246-21	Warranty of Construction.	1994-03
52.249-1	Termination for Convenience of the Government (Fixed-Price) (Short Form).	1984-04
52.249-10	Default (Fixed-Price Construction).	1984-04

DFARS Clauses Incorporated by Reference

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
252.201-7000	Contracting Officer's Representative.	1991-12		
252.203-7000	Requirements Relating to Compensation of Former DoD Officials.	2011-09		
252.203-7001	Prohibition on Persons Convicted of Fraud or Other Defense-Contract-Related Felonies.	2023-01		
252.203-7002	Requirement to Inform Employees of Whistleblower Rights.	2022-12		
252.203-7003	Agency Office of the Inspector General.	2019-08		
252.203-7004	Display of Hotline Posters.	2023-01		
252.204-7003	Control of Government Personnel Work Product.	1992-04		
252.204-7012	Safeguarding Covered Defense Information and Cyber Incident Reporting.	2024-05		
252.204-7015	Notice of Authorized Disclosure of Information for Litigation Support.	2023-01		
252.204-7018	Prohibition on the Acquisition of Covered Defense	2023-01		

Telecommunications Equipment
or Services.

252.204-7020	NIST SP 800-171 DoD Assessment Requirements.	2023-11
252.205-7000	Provision of Information to Cooperative Agreement Holders.	2024-10
252.209-7004	Subcontracting with Firms that are Owned or Controlled by the Government of a Country that is a State Sponsor of Terrorism.	2019-05
252.215-7002	Cost Estimating System Requirements.	2025-01
252.222-7006	Restrictions on the Use of Mandatory Arbitration Agreements.	2023-01
252.223-7006	Prohibition on Storage, Treatment, and Disposal of Toxic or Hazardous Materials.	2014-09
252.223-7008	Prohibition of Hexavalent Chromium.	2023-01
252.225-7002	Qualifying Country Sources as Subcontractors.	2022-03
252.225-7012	Preference for Certain Domestic Commodities.	2022-04
252.225-7048	Export-Controlled Items.	2013-06
252.226-7001	Utilization of Indian Organizations, Indian-Owned	2023-01

Economic Enterprises, and
Native Hawaiian Small Business
Concerns.

252.232-7003	Electronic Submission of Payment Requests and Receiving Reports.	2018-12
252.232-7010	Levies on Contract Payments.	2006-12
252.236-7000	Modification Proposals--Price Breakdown.	1991-12
252.236-7002	Obstruction of Navigable Waterways.	1991-12
252.236-7007	Additive or Deductive Items.	1991-12
252.243-7001	Pricing of Contract Modifications.	1991-12
252.243-7002	Requests for Equitable Adjustment.	2022-12
252.244-7000	Subcontracts for Commercial Products or Commercial Services.	2023-11
252.245-7003	Contractor Property Management System Administration	2025-01
252.245-7005	Management and Reporting of Government Property.	2024-01
252.246-7004	Safety of Facilities, Infrastructure, and Equipment for Military Operations.	2010-10
252.247-7023	Transportation of Supplies by Sea.	2024-10

FAR Clauses Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
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52.211-12	Liquidated Damages-Construction.	2000-09		
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Liquidated Damages-Construction (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 \$4,295.00 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.	1989-03		
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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 any time after Notice to Proceed. 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)

52.219-4	Notice of Price Evaluation Preference for HUBZone Small Business Concerns. (Deviation	2026-02		
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2026-O0038)

Notice of Price Evaluation preference for HUBZone Small Business Concerns (Feb 2026)
(Deviation 2026-O0038)

(a) Evaluation preference.

(1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except-

(i) Offers from HUBZone small business concerns that have not waived the evaluation preference; and

(ii) Otherwise successful offers from small business concerns.

(b) Waiver of evaluation preference. A HUBZone small business concern may choose to waive the evaluation preference. If the concern waives the preference, the factor will be added to its offer for evaluation purposes.

[] Offeror chooses to waive the evaluation preference.

(c) Joint venture. A HUBZone joint venture agrees that, in the performance of the contract, at least 40 percent of the aggregate work performed by the joint venture shall be completed by the HUBZone small business parties to the joint venture. Work performed by the HUBZone small business parties to the joint venture must be more than administrative functions.

(End of provision)

52.219-14	Limitations on Subcontracting. (Deviation 2026-O0038)	2026-02
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Limitations on Subcontracting (Feb 2026) (Deviation 2026-O0038)

(a) This clause does not apply to the unrestricted portion of a partial set-aside.

(b) Definition. Similarly situated entity, as used in this clause, means a first-tier subcontractor, including an independent contractor, that-

(1) Has the same small business program status as that which qualified the prime contractor for the award (e.g., for a small business set-aside contract, any small business concern, without regard to its socioeconomic status); and

(2) Is considered small for the size standard under the North American Industry Classification System (NAICS) code the prime contractor assigned to the subcontract.

(c) Applicability. This clause applies only to-

(1) Contracts that have been set aside for any of the small business concerns identified in 19.000(a)(3);

(2) Part or parts of a multiple-award contract that have been set aside for any of the small business concerns identified in 19.000(a)(3);

(3) Contracts that have been awarded on a sole-source basis in accordance with sections 19.105, 19.106, 19.107, and 19.108;

(4) Orders expected to exceed the simplified acquisition threshold and that are set aside for small business concerns under multiple-award contracts, as described in 8.4 and 16.5;

(5) Orders, regardless of dollar value, that are set aside in accordance with sections 19.105, 19.106, 19.107, and 19.108 under multiple-award contracts, as described in 8.4 and 16.5; and

(6) Contracts using the HUBZone price evaluation preference to award to a HUBZone small business concern unless the concern waived the evaluation preference.

(d) Independent contractors. An independent contractor shall be considered a subcontractor.

(e) By submission of an offer and execution of a contract, the Contractor agrees that in performance of a contract assigned a North American Industry Classification System (NAICS) code for-

(1) Services (except construction), it will not pay more than 50 percent of the amount paid by the Government for contract performance to subcontractors that are not similarly situated

entities. Any work that a similarly situated entity further subcontracts will count towards the prime contractor's 50 percent subcontract amount that cannot be exceeded. When a contract includes both services and supplies, the 50 percent limitation shall apply only to the service portion of the contract;

(2) Supplies (other than procurement from a nonmanufacturer of such supplies), it will not pay more than 50 percent of the amount paid by the Government for contract performance, excluding the cost of materials, to subcontractors that are not similarly situated entities. Any work that a similarly situated entity further subcontracts will count towards the prime contractor's 50 percent subcontract amount that cannot be exceeded. When a contract includes both supplies and services, the 50 percent limitation shall apply only to the supply portion of the contract;

(3) General construction, it will not pay more than 85 percent of the amount paid by the Government for contract performance, excluding the cost of materials, to subcontractors that are not similarly situated entities. Any work that a similarly situated entity further subcontracts will count towards the prime contractor's 85 percent subcontract amount that cannot be exceeded; or

(4) Construction by special trade contractors, it will not pay more than 75 percent of the amount paid by the Government for contract performance, excluding the cost of materials, to subcontractors that are not similarly situated entities. Any work that a similarly situated entity further subcontracts will count towards the prime contractor's 75 percent subcontract amount that cannot be exceeded.

(f) The Contractor shall comply with the limitations on subcontracting as follows:

(1) For contracts, in accordance with paragraphs (c)(1), (2), (3) and (6) of this clause-

[Contracting Officer check as appropriate.]

[] By the end of the base term of the contract and then by the end of each subsequent option period; or

[] By the end of the performance period for each order issued under the contract.

(2) For orders, in accordance with paragraphs (c)(4) and (5) of this clause, by the end of the performance period for the order.

(g) A joint venture agrees that, in the performance of the contract, the applicable percentage specified in paragraph (e) of this clause will be performed by the aggregate of the joint venture participants.

(1) In a joint venture comprised of a small business protégé and its mentor approved by the Small Business Administration, the small business protégé shall perform at least 40 percent of the work performed by the joint venture. Work performed by the small business protégé in the joint venture must be more than administrative functions.

(2) In an 8(a) joint venture, the 8(a) participant(s) shall perform at least 40 percent of the work performed by the joint venture. Work performed by the 8(a) participants in the joint venture must be more than administrative functions.

(End of clause)

52.232-5	Payments under Fixed-Price Construction Contracts.	2014-05
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Payments under Fixed-Price Construction Contracts (May 2014)

(a) Payment of price. The Government shall pay the Contractor the contract price as provided in this contract.

(b) Progress payments. The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer.

(1) The Contractor's request for progress payments shall include the following substantiation:

(i) An itemization of the amounts requested, related to the various elements of work required by the contract covered by the payment requested.

(ii) A listing of the amount included for work performed by each subcontractor under the contract.

(iii) A listing of the total amount of each subcontract under the contract.

(iv) A listing of the amounts previously paid to each such subcontractor under the contract.

(v) Additional supporting data in a form and detail required by the Contracting Officer.

(2) In the preparation of estimates, the Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site also may be taken into consideration if-

(i) Consideration is specifically authorized by this contract; and

(ii) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.

(c) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made: (However, if the Contractor elects to delete paragraph (c)(4) from the certification, the certification is still acceptable.)

I hereby certify, to the best of my knowledge and belief, that-

(1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;

(2) All payments due to subcontractors and suppliers from previous payments received under the contract have been made, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of Chapter 39 of Title 31, United States Code;

(3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract; and

(4) This certification is not to be construed as final acceptance of a subcontractor's performance.

____ (Name)

____ (Title)

____ (Date)

(d) Refund of unearned amounts. If the Contractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this contract (hereinafter referred to as the "unearned amount"), the Contractor shall-

(1) Notify the Contracting Officer of such performance deficiency; and

(2) Be obligated to pay the Government an amount (computed by the Contracting Officer in the manner provided in paragraph (j) of this clause) equal to interest on the unearned amount from the 8th day after the date of receipt of the unearned amount until-

(i) The date the Contractor notifies the Contracting Officer that the performance deficiency has been corrected; or

(ii) The date the Contractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.

(e) Retainage. If the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all the remaining withheld funds. Also, on completion and acceptance of each separate building, public work, or other division of the contract, for which the price is stated separately in the contract, payment shall be made for the completed work without retention of a percentage.

(f) Title, liability, and reservation of rights. All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as-

(1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or

(2) Waiving the right of the Government to require the fulfillment of all of the terms of the

contract.

(g) Reimbursement for bond premiums. In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph (e) of this clause shall not apply to that portion of progress payments attributable to bond premiums.

(h) Final payment. The Government shall pay the amount due the Contractor under this contract after-

(1) Completion and acceptance of all work;

(2) Presentation of a properly executed voucher; and

(3) Presentation of release of all claims against the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned under the Assignment of Claims Act of 1940 (31 U.S.C.3727 and 41 U.S.C. 6305).

(i) Limitation because of undefinitized work. Notwithstanding any provision of this contract, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

(j) Interest computation on unearned amounts. In accordance with 31 U.S.C. 3903(c)(1), the amount payable under paragraph (d)(2) of this clause shall be-

(1) Computed at the rate of average bond equivalent rates of 91-day Treasury bills auctioned at the most recent auction of such bills prior to the date the Contractor receives the unearned amount; and

(2) Deducted from the next available payment to the Contractor.

(End of clause)

52.244-2 Subcontracts. 2020-06

Subcontracts (Jun 2020)

(a) Definitions. As used in this clause-

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

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

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

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

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

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

(2) Is fixed-price and exceeds-

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

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

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

(e)

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

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

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

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

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

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

(vii) A negotiation memorandum reflecting-

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(End of clause)

52.248-3 Value Engineering-Construction. 2025-10

Value Engineering-Construction (Oct 2025)

(a) General. The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP's, in accordance with paragraph (f) of this clause.

(b) Definitions. "Collateral costs," as used in this clause, means agency costs of operation, maintenance, logistic support, or Government-furnished property.

Collateral savings, as used in this clause, means those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

Contractor's development and implementation costs, as used in this clause, means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP.

Government costs, as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.

Instant contract savings, as used in this clause, means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs, including subcontractors' development and implementation costs (see paragraph (h) of this clause).

Value engineering change proposal (VECP) means a proposal that-

- (1) Requires a change to this, the instant contract, to implement; and
- (2) Results in reducing the contract price or estimated cost without impairing essential functions or characteristics; provided, that it does not involve a change-
 - (i) In deliverable end item quantities only; or
 - (ii) To the contract type only.

(c) VECP preparation. As a minimum, the Contractor shall include in each VECP the information described in paragraphs (c)(1) through (7) of this clause. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

- (1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.
- (2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.
- (3) A separate, detailed cost estimate for (i) the affected portions of the existing contract requirement and (ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) of this clause.
- (4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

(5) A prediction of any effects the proposed change would have on collateral costs to the agency.

(6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

(7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) Submission. The Contractor shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.

(e) Government action.

(1) The Contracting Officer will notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer will notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it will not be liable for any delay in acting upon a VECP.

(2) If the VECP is not accepted, the Contracting Officer will notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

(3) Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

(f) Sharing-

(1) Rates. The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by-

(i) 45 percent for fixed-price contracts; or

(ii) 75 percent for cost-reimbursement contracts.

(2) Payment. Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to-

(i) Accept the VECP;

(ii) Reduce the contract price or estimated cost by the amount of instant contract savings; and

(iii) Provide the Contractor's share of savings by adding the amount calculated to the contract price or fee.

(g) Collateral savings. If a VECP is accepted, the Contracting Officer will increase the instant contract amount by 20 percent of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. However, the Contractor's share of collateral savings will not exceed the contract's firm-fixed-price or estimated cost, at the time the VECP is accepted, or \$100,000, whichever is greater. The Contracting Officer is the sole determiner of the amount of collateral savings.

(h) Subcontracts. The Contractor shall include an appropriate value engineering clause in any subcontract of \$90,000 or more and may include one in subcontracts of lesser value. In computing any adjustment in this contract's price under paragraph (f) of this clause, the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this contract, but shall exclude any value engineering incentive payments to a subcontractor. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; provided, that these payments shall not reduce the Government's share of the savings resulting from the VECP.

(i) Data. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

These data, furnished under the Value Engineering-Construction clause of contract ____, shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations.

If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (The terms "unlimited rights" and "limited rights" are defined in part 27 of the Federal Acquisition Regulation.)

(End of clause)

52.252-2	Clauses Incorporated by Reference.	1998-02
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Clauses Incorporated By Reference (Feb 1998)

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):

<https://www.acquisition.gov/>

(End of clause)

52.252-6	Authorized Deviations in Clauses.	2020-11
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Authorized Deviations in Clauses (Nov 2020)

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

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

(End of clause)

DFARS Clauses Incorporated by Full Text

Number	Title	Effective Date	Alternate Deviation	Variation Effective Date
252.211-7003	Item Unique Identification and Valuation.	2023-01		

ITEM UNIQUE IDENTIFICATION AND VALUATION (JAN 2023)

(a) Definitions. As used in this clause-

"Automatic identification device" means a device, such as a reader or interrogator, used to retrieve data encoded on machine-readable media.

"Concatenated unique item identifier" means-

(1) For items that are serialized within the enterprise identifier, the linking together of the unique identifier data elements in order of the issuing agency code, enterprise identifier, and unique serial number within the enterprise identifier; or

(2) For items that are serialized within the original part, lot, or batch number, the linking together of the unique identifier data elements in order of the issuing agency code; enterprise identifier; original part, lot, or batch number; and serial number within the original part, lot, or batch number.

"Data matrix" means a two-dimensional matrix symbology, which is made up of square or, in some cases, round modules arranged within a perimeter finder pattern and uses the Error Checking and Correction 200 (ECC200) specification found within International Standards

Organization (ISO)/International Electrotechnical Commission (IEC) 16022.

"Data qualifier" means a specified character (or string of characters) that immediately precedes a data field that defines the general category or intended use of the data that follows.

"DoD recognized unique identification equivalent" means a unique identification method that is in commercial use and has been recognized by DoD. All DoD recognized unique identification equivalents are listed at <https://www.acq.osd.mil/asda/dpc/ce/ds/unique-id.html>.

"DoD item unique identification" means a system of marking items delivered to DoD with unique item identifiers that have machine-readable data elements to distinguish an item from all other like and unlike items. For items that are serialized within the enterprise identifier, the unique item identifier shall include the data elements of the enterprise identifier and a unique serial number. For items that are serialized within the part, lot, or batch number within the enterprise identifier, the unique item identifier shall include the data elements of the enterprise identifier; the original part, lot, or batch number; and the serial number.

" Enterprise " means the entity (e.g., a manufacturer or vendor) responsible for assigning unique item identifiers to items.

" Enterprise identifier" means a code that is uniquely assigned to an enterprise by an issuing agency.

"Government's unit acquisition cost" means-

(1) For fixed-price type line, subline, or exhibit line items, the unit price identified in the contract at the time of delivery;

(2) For cost-type or undefinitized line, subline, or exhibit line items, the Contractor's estimated fully burdened unit cost to the Government at the time of delivery; and

(3) For items produced under a time-and-materials contract, the Contractor's estimated fully burdened unit cost to the Government at the time of delivery.

"Issuing agency" means an organization responsible for assigning a globally unique identifier to an enterprise, as indicated in the Register of Issuing Agency Codes for ISO/IEC 15459, located at http://www.aimglobal.org/?Reg_Authority15459.

"Issuing agency code" means a code that designates the registration (or controlling) authority

for the enterprise identifier.

"Item" means a single hardware article or a single unit formed by a grouping of subassemblies, components, or constituent parts.

" Lot or batch number" means an identifying number assigned by the enterprise to a designated group of items, usually referred to as either a lot or a batch, all of which were manufactured under identical conditions.

"Machine-readable" means an automatic identification technology media, such as bar codes, contact memory buttons, radio frequency identification, or optical memory cards.

"Original part number" means a combination of numbers or letters assigned by the enterprise at item creation to a class of items with the same form, fit, function, and interface.

"Parent item" means the item assembly, intermediate component, or subassembly that has an embedded item with a unique item identifier or DoD recognized unique identification equivalent.

"Serial number within the enterprise identifier" means a combination of numbers, letters, or symbols assigned by the enterprise to an item that provides for the differentiation of that item from any other like and unlike item and is never used again within the enterprise.

"Serial number within the part, lot, or batch number" means a combination of numbers or letters assigned by the enterprise to an item that provides for the differentiation of that item from any other like item within a part, lot, or batch number assignment.

"Serialization within the enterprise identifier" means each item produced is assigned a serial number that is unique among all the tangible items produced by the enterprise and is never used again. The enterprise is responsible for ensuring unique serialization within the enterprise identifier.

"Serialization within the part, lot, or batch number" means each item of a particular part, lot, or batch number is assigned a unique serial number within that part, lot, or batch number assignment. The enterprise is responsible for ensuring unique serialization within the part, lot, or batch number within the enterprise identifier.

"Type designation" means a combination of letters and numerals assigned by the Government to a major end item, assembly or subassembly, as appropriate, to provide a convenient means of differentiating between items having the same basic name and to indicate modifications and

changes thereto.

"Unique item identifier" means a set of data elements marked on items that is globally unique and unambiguous. The term includes a concatenated unique item identifier or a DoD recognized unique identification equivalent.

"Unique item identifier type" means a designator to indicate which method of uniquely identifying a part has been used. The current list of accepted unique item identifier types is maintained at <https://www.acq.osd.mil/asda/dpc/ce/ds/unique-id.html>.

(b) The Contractor shall deliver all items under a contract line, subline, or exhibit line item.

(c) Unique item identifier.

(1) The Contractor shall provide a unique item identifier for the following:

(i) Delivered items for which the Government's unit acquisition cost is \$5,000 or more, except for the following line items:

Contract Line, Subline, or

Exhibit Line Item Number Item Description

(ii) Items for which the Government's unit acquisition cost is less than \$5,000 that are identified in the Schedule or the following table:

Contract Line, Subline, or

Exhibit Line Item Number Item Description

(If items are identified in the Schedule, insert "See Schedule in this table.")

(iii) Subassemblies, components, and parts embedded within delivered items, items with warranty requirements, DoD serially managed reparable and DoD serially managed nonreparables as specified in Attachment Number _____.

(iv) Any item of special tooling or special test equipment as defined in FAR 2.101 that have been designated for preservation and storage for a Major Defense Acquisition Program as specified in Attachment Number _____.

(v) Any item not included in (i), (ii), (iii), or (iv) for which the contractor creates and marks a unique item identifier for traceability.

(2) The unique item identifier assignment and its component data element combination shall not be duplicated on any other item marked or registered in the DoD Item Unique Identification Registry by the contractor.

(3) The unique item identifier component data elements shall be marked on an item using two dimensional data matrix symbology that complies with ISO/IEC International Standard 16022, Information technology - International symbology specification - Data matrix; ECC200 data matrix specification.

(4) Data syntax and semantics of unique item identifiers. The Contractor shall ensure that-

(i) The data elements (except issuing agency code) of the unique item identifier are encoded within the data matrix symbol that is marked on the item using one of the following three types of data qualifiers, as determined by the Contractor:

(A) Application Identifiers (AIs) (Format Indicator 05 of ISO/IEC International Standard 15434), in accordance with ISO/IEC International Standard 15418, Information Technology - EAN/UCC Application Identifiers and Fact Data Identifiers and Maintenance and ANSI MH 10.8.2 Data Identifier and Application Identifier Standard.

(B) Data Identifiers (DIs) (Format Indicator 06 of ISO/IEC International Standard 15434), in accordance with ISO/IEC International Standard 15418, Information Technology - EAN/UCC Application Identifiers and Fact Data Identifiers and Maintenance and ANSI MH 10.8.2 Data

Identifier and Application Identifier Standard.

(C) Text Element Identifiers (TEIs) (Format Indicator 12 of ISO/IEC International Standard 15434), in accordance with the Air Transport Association Common Support Data Dictionary; and

(ii) The encoded data elements of the unique item identifier conform to the transfer structure, syntax, and coding of messages and data formats specified for Format Indicators 05, 06, and 12 in ISO/IEC International Standard 15434, Information Technology - Transfer Syntax for High Capacity Automatic Data Capture Media.

(5) Unique item identifier.

(i) The Contractor shall-

(A) Determine whether to-

(1) Serialize within the enterprise identifier;

(2) Serialize within the part, lot, or batch number; or

(3) Use a DoD recognized unique identification equivalent (e.g. Vehicle Identification Number); and

(B) Place the data elements of the unique item identifier (enterprise identifier; serial number; DoD recognized unique identification equivalent; and for serialization within the part, lot, or batch number only: original part, lot, or batch number) on items requiring marking by paragraph (c)(1) of this clause, based on the criteria provided in MIL-STD-130, Identification Marking of U. S. Military Property, latest version;

(C) Label shipments, storage containers and packages that contain uniquely identified items in accordance with the requirements of MIL-STD-129, Military Marking for Shipment and Storage, latest version; and

(D) Verify that the marks on items and labels on shipments, storage containers, and packages are machine readable and conform to the applicable standards. The contractor shall use an automatic identification technology device for this verification that has been programmed to the requirements of Appendix A, MIL-STD-130, latest version.

(ii) The issuing agency code-

(A) Shall not be placed on the item; and

(B) Shall be derived from the data qualifier for the enterprise identifier.

(d) For each item that requires item unique identification under paragraph (c)(1)(i), (ii), or (iv) of this clause or when item unique identification is provided under paragraph (c)(1)(v), in addition to the information provided as part of the Material Inspection and Receiving Report specified elsewhere in this contract, the Contractor shall report at the time of delivery, as part of the Material Inspection and Receiving Report, the following information:

(1) Unique item identifier.

(2) Unique item identifier type.

(3) Issuing agency code (if concatenated unique item identifier is used).

(4) Enterprise identifier (if concatenated unique item identifier is used).

(5) Original part number (if there is serialization within the original part number).

(6) Lot or batch number (if there is serialization within the lot or batch number).

(7) Current part number (optional and only if not the same as the original part number).

(8) Current part number effective date (optional and only if current part number is used).

(9) Serial number (if concatenated unique item identifier is used).

(10) Government's unit acquisition cost.

(11) Unit of measure.

(12) Type designation of the item as specified in the contract schedule, if any.

(13) Whether the item is an item of Special Tooling or Special Test Equipment.

(14) Whether the item is covered by a warranty.

(e) For embedded subassemblies, components, and parts that require DoD item unique identification under paragraph (c)(1)(iii) of this clause or when item unique identification is provided under paragraph (c)(1)(v), the Contractor shall report as part of the Material Inspection and Receiving Report specified elsewhere in this contract, the following information:

(1) Unique item identifier of the parent item under paragraph (c)(1) of this clause that contains the embedded subassembly, component, or part.

(2) Unique item identifier of the embedded subassembly, component, or part.

(3) Unique item identifier type.**

(4) Issuing agency code (if concatenated unique item identifier is used).**

(5) Enterprise identifier (if concatenated unique item identifier is used).**

(6) Original part number (if there is serialization within the original part number).**

(7) Lot or batch number (if there is serialization within the lot or batch number).**

(8) Current part number (optional and only if not the same as the original part number).**

(9) Current part number effective date (optional and only if current part number is used).**

(10) Serial number (if concatenated unique item identifier is used).**

(11) Description.

** Once per item.

(f) The Contractor shall submit the information required by paragraphs (d) and (e) of this clause as follows:

(1) End items shall be reported using the receiving report capability in Wide Area WorkFlow (WAWF) in accordance with the clause at 252.232-7003. If WAWF is not required by this contract, and the contractor is not using WAWF, follow the procedures at

<http://dodprocurementtoolbox.com/site/uidregistry/>.

(2) Embedded items shall be reported by one of the following methods-

(i) Use of the embedded items capability in WAWF;

(ii) Direct data submission to the IUID Registry following the procedures and formats at <http://dodprocurementtoolbox.com/site/uidregistry/>; or

(iii) Via WAWF as a deliverable attachment for exhibit line item number (fill in) ____, Unique Item Identifier Report for Embedded Items, Contract Data Requirements List, DD Form 1423.

(g) Subcontracts. If the Contractor acquires by subcontract, any item(s) for which item unique identification is required in accordance with paragraph (c)(1) of this clause, the Contractor shall include this clause, including this paragraph (g), in the applicable subcontract(s), including subcontracts for commercial products or commercial services.

(End of clause)

252.236-7001	Contract Drawings and Specifications.	2000-08
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CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000)

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

(b) The Contractor shall-

(1) Check all drawings furnished immediately upon receipt;

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

(3) Promptly notify the Contracting Officer of any discrepancies;

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

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

(c) In general--

(1) Large-scale drawings shall govern small-scale drawings; and

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

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

(e) The work shall conform to the specifications and the contract drawings identified on the following index of drawings:

Title	File	Drawing No.
<u>Lake Pontchartrain & Vicinity (LPV) Foreshore Rick Reduction Repairs, Reach 1, 2, 3, & 4</u>	—	<u>G-001 through G-009</u> <u>C-101 through C-115</u> <u>C-201</u> <u>C-301 through C-325</u> <u>C-501 through C-504</u>
—		

(End of clause)

252.236-7004 Payment for Mobilization and 1991-12
Demobilization.

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

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

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

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

(i) Actual mobilization costs at completion of mobilization;

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

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

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

(End of clause)

Section Table of Contents

SECTION 00 70 00 – CONDITIONS OF THE CONTRACT

1.	QUANTITY SURVEYS – ALTERNATE I	1
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SECTION 00 70 00 – CONDITIONS OF THE CONTRACT

1. QUANTITY SURVEYS – ALTERNATE I

(a) Quantity surveys will 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.

Section Table of Contents

SECTION 00 72 00 – GENERAL CONDITIONS

1.	PHYSICAL DATA	1
2.	PERFORMANCE OF WORK BY THE CONTRACTOR	2
3.	VARIATION IN ESTIMATED QUANTITY	2
4.	SITE VISIT (CONSTRUCTION)	2
5.	PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS	3
6.	OBSTRUCTION OF NAVIGABLE WATERWAYS	3
7.	LIQUIDATED DAMAGES - CONSTRUCTION	4
8.	CONTRACT DRAWINGS AND SPECIFICATIONS	4
9.	LAYOUT OF WORK	5
10.	PAYMENT FOR MOBILIZATION AND DEMOBILIZATION	5
11.	SCHEDULES FOR CONSTRUCTION CONTRACTS	6

SECTION 00 72 00 – GENERAL CONDITIONS

1. PHYSICAL DATA

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 and borings. Field notes, graphic boring logs, field and laboratory test results, and other data on which this information is based are available at U.S. Army Engineer District, New Orleans, Corps of Engineers, Attn: CEMVN-ED, 7400 Leake Avenue, New Orleans, LA 70118-3651, and access thereto may be had upon request.

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

(c) For construction of the foreshore risk reduction repairs, primary access to the site is available from Lake Pontchartrain at the marine access points shown on the contract drawings. Alternatively, should the contractor choose to haul embankment material via truck, landward access must be restricted to the specific locations shown on the drawings. Reach 1 is barge access only for embankment material. Haul access for Reach 2 will be through Williams Blvd., with Wilson Dr also available as haul access for Reach 2 and 3. Light access only for Reach 3 will be through Waverly Pl. Traffic for Reaches 3 and 4 may exit from Lake Villa Dr. to Avron Blvd.; **however, access through Avron Blvd. is strictly limited to light trucks and empty dump trucks.**

(d) The Contractor is responsible for keeping streets free of mud, tracking, spillage and/or other surface pollution from his equipment and operations. The Contractor shall take whatever means required (i.e., street cleaners, manual labor, water trucks with sprayers) as often as needed to maintain clean streets near the work site. All debris resulting from street cleaning operations shall be hauled off-site and disposed of properly.

(e) 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.

2. PERFORMANCE OF WORK BY THE CONTRACTOR

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 the work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract, if, while performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

3. VARIATION IN ESTIMATED QUANTITY

If the quantity of a unit-priced item in this contract is an estimated quantity and the actual quantity of the unit-priced item varies more than 15 percent above or below the estimated quantity, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 115 percent or below 85 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contractor may request, in writing, an extension of time, to be received by the Contracting Officer within 10 days from the beginning of the delay, or within such further period as may be granted by the Contracting Officer before the date of final settlement of the contract. Upon receipt of a written request for an extension, the Contracting Officer shall ascertain the facts and make an adjustment for extending the completion date as, in the judgement of the Contracting Officer, is justified.

4. SITE VISIT (CONSTRUCTION)

(a) The Section 00 21 00 - INSTRUCTIONS TO BIDDERS, entitled DIFFERING SITE CONDITIONS, and Section 00 72 00 GENERAL CONDITIONS, entitled 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 the Contract Specialist managing this contract:

Name: Toby Upson, P.E.

Address: 7400 Leake Avenue, New Orleans, LA 70118-3651

Telephone: 504-862-2012

(End of Provision)

5. PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS

(a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(b) The Contractor shall protect from damage all existing improvements and utilities (1) at or near the work site, and (2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

6. OBSTRUCTION OF NAVIGABLE WATERWAYS

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.).

7. LIQUIDATED DAMAGES - CONSTRUCTION

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of \$4,295.00 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.

8. CONTRACT DRAWINGS AND SPECIFICATIONS

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

(b) The Contractor shall --

(1) Check all drawings furnished immediately upon receipt;

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

(3) Promptly notify the Contracting Officer 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>
Lake Pontchartrain and Vicinity	H-8-48705	G-001 thru G-010
Foreshore Risk Reduction Repairs		C-101 thru C-116
Reach -1, 2, 3, and 4		C-201
Jefferson Parish, LA		C-301 thru C-325
		C-501 thru C-505
		BB-801

(End of Clause)

NOTE: PLAN DRAWING SIGNATURES: The plan drawings accompanying this solicitation have been submitted and approved by the individuals shown in the title blocks on the plans. The actual signatures of the individuals shown on the plans are on file and are available for inspection at U.S. Army Engineer District, New Orleans, Corps of Engineers, Attn: CEMVN-ED, 7400 Leake Avenue, New Orleans, LA 70118-3651, and access thereto may be had upon request.

9. LAYOUT OF WORK

The Contractor shall lay out its work from Government established base lines and benchmarks 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.

10. PAYMENT FOR MOBILIZATION AND DEMOBILIZATION

(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 paragraph (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)

11. SCHEDULES FOR CONSTRUCTION CONTRACTS

(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 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)

Section Table of Contents

SECTION 00 73 00 – SUPPLEMENTARY CONDITIONS

1.	COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK	1
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SECTION 00 73 00 – CONDITIONS OF THE CONTRACT

1. COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK - CONSTRUCTION

The Contractor shall be required to

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

(b) Prosecute the work diligently, and

(c) Complete the entire BASE work ready for use not later than 300 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.

State: Louisiana

Construction Types: Heavy

Counties: Louisiana Counties of
Jefferson, Orleans, Plaquemines, St
Bernard, St Charles, St James, St John
the Baptist and St Tammany

Includes flood control, water & sewer lines, and water wells. Includes elevated storage tanks in all listed parishes except Plaquemines and St. James. Excludes Industrial Construction, Processing Plants,

Modification Number	Publication Date
1	01/30/2026
2	05/18/2026

CARP0729-001 01/01/2025	Rates	Fringes
MILLWRIGHT.....	\$ 40.34	14.16

CARP1846-006 07/01/2024	Rates	Fringes
CARPENTER (FORMBUILDING/FORMSETTING AND PILEDRIERS).....	\$ 32.59	10.52

ELEC0130-005 12/01/2025	Rates	Fringes
ELECTRICIAN: INCLUDING LOW VOLTAGE WIRING (JEFFERSON, ORLEANS, PLAQUEMINES, ST. BERNARD, ST. CHARLES, ST. JAMES, AND ST. JOHN THE BAPTIST PARISHES).....	\$ 36.00	16.66

ELEC1077-002 05/26/2025	Rates	Fringes
ELECTRICIAN: INCLUDING LOW VOLTAGE WIRING (ST. TAMMANY PARISH).....	\$ 30.35	12.46

ENGI0406-018 07/01/2009	Rates	Fringes
OPERATOR: POWER EQUIPMENT: MECHANIC.....	\$ 23.31	6.70
OPERATOR: POWER EQUIPMENT: BULLDOZER.....	\$ 21.26	6.70

PLAS0567-003 08/01/2022	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER (JEFFERSON, ORLEANS, PLAQUEMINES, ST. BERNARD, ST. CHARLES, ST. JOHN THE BAPTIST, AND ST. TAMMANY PARISHES).....	\$ 30.47	7.97

PLAS0812-003 01/01/2022	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER (ST. JAMES PARISH)...	\$ 31.83	5.90

PLUM0060-002 06/05/2023	Rates	Fringes
PLUMBERS: EXCLUDING PIPE LAYING (JEFFERSON, ORLEANS, PLAQUEMINES, ST. BERNARD, ST. CHARLES, ST. JAMES (SOUTHEASTERN PORTION), ST. JOHN THE BAPTIST,		

AND ST. TAMMANY PARISHES).....\$ 31.70 13.85

PLUM0198-005 12/08/2022

	Rates	Fringes
PLUMBER: EXCLUDING PIPE LAYING (ST. JAMES PARISH (NORTHWESTERN PORTION)).....\$ 32.42		16.50

SULA2004-007 05/13/2004

	Rates	Fringes
TRUCK DRIVERS: PICKUP.....\$ 12.25		0.00
TRUCK DRIVERS: DUMP.....\$ 11.01		0.00
POWER EQUIPMENT OPERATORS: OILER.....\$ 10.03		0.00
POWER EQUIPMENT OPERATORS: FRONT END LOADER.....\$ 13.89		0.00
POWER EQUIPMENT OPERATORS: DRAGLINE.....\$ 16.50		0.00
POWER EQUIPMENT OPERATORS: CRANE.....\$ 16.34		3.30
POWER EQUIPMENT OPERATORS: BACKHOE/EXCAVATOR.....\$ 14.42		0.00
PIPEFITTER (EXCLUDING PIPELAYING).....\$ 17.52		4.51
LABORERS: MASON TENDER.....\$ 7.25		0.00
LABORERS: FLAGGER.....\$ 8.58		0.00
LABORERS: FENCE.....\$ 11.24		0.00
LABORERS: COMMON/LANDSCAPE.....\$ 9.88		0.00
LABORERS: (PIPELAYER).....\$ 9.84		0.00
CARPENTER (ALL OTHER WORK).....\$ 13.75		2.60

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

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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 <https://www.dol.gov/agencies/whd/government-contracts>.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least \$13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at 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) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular

rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ♦SU♦, ♦UAVG♦, ♦SA♦, or ♦SC♦ denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate 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. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ♦SU♦ identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the 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. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

♦SU♦ wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ♦SA♦ identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which

the classifications and rates under the ♦SA♦ identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

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

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

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

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail 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 an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail 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 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.

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END OF GENERAL DECISION

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Section Table of Contents

SECTION 01 10 00 - GENERAL PROVISIONS (30 Mar 2026)

1.	TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER	1
2.	DAMAGE TO WORK	2
3.	SAFETY PROVISIONS	2
4.	INSPECTOR'S FIELD OFFICE	8
5.	PROJECT SIGN	10
6.	RIGHTS-OF-WAY	10
7.	CERTIFICATES OF COMPLIANCE	11
8.	SEAWORTHINESS CERTIFICATION	12
9.	ENVIRONMENTAL LITIGATION	12
10.	UTILITIES AND IMPROVEMENTS	12
11.	PERMISSIBLE HOURS OF WORK	13
12.	EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE	13
13.	STONE SOURCES	14
14.	CLAY SOURCES	15
15.	SIGNAL LIGHTS	16
16.	STATE TAXES	16
17.	FORMAT OF SURVEYS	17
18.	BENCHMARK VERIFICATION SURVEYS	18
19.	REQUIRED INSURANCE SCHEDULE	20
20.	COMMERCIAL WARRANTY	20
21.	ACCESS PLAN	20
22.	EXISTING FACILITIES	22
23.	FIELD VERIFICATION OF UTILITY LOCATIONS	24
24.	SECURITY	24
25.	VIDEO AND PHOTOGRAPHIC DOCUMENTATION	25
26.	COORDINATION WITH LOCAL INTERESTS	26
27.	SECURITY REQUIREMENTS	27
28.	JOINT RISK MANAGEMENT	27
29.	CONTRACTOR PERFORMANCE EVALUATIONS – CONSTRUCTION	28
30.	DAMAGED LEVEE TRAIL ROAD OR ROADWAYS	28
31.	SPECIAL SURVEYING REQUIREMENTS	29

SECTION 01 10 00 - GENERAL PROVISIONS

1. TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER

(a) This provision specifies the procedure for determination of time extensions for unusually severe weather in accordance with the provision in Section 00 72 00 GENERAL CONDITIONS entitled DEFAULT (FIXED PRICE CONSTRUCTION). In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied.

(1) The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.

(2) The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the Contractor.

(b) The following schedule of monthly anticipated adverse weather delays is based upon data collected by the Louisiana Office of State Climatology for temperature, precipitation and wet ground conditions or similar data for the project location and will constitute the base line for monthly weather time evaluations. The Contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities. The adverse weather days apply to rain, fog, high winds, high/low tides, hail, lightning, and high/low temperatures as indicated on the Weather Data Sheet and will be used by the Government to record weather during construction.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY WORK DAYS BASED ON (5) DAY WORK WEEK

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
5	4	5	3	3	3	2	4	2	1	2	6

(c) Upon receipt of the Notice to Proceed (NTP) and continuing throughout the contract, the Contractor shall record on the daily CQC report, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the Contractor's scheduled work day.

(d) The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in

previous month), and shall be calculated chronologically from the first to the last day of each month, and shall be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated in paragraph b, above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather work days, and issue a modification in accordance with the provision in Section 00 72 00 - GENERAL CONDITIONS entitled DEFAULT (FIXED PRICE CONSTRUCTION).

2. DAMAGE TO WORK

The responsibility for damage to any part of the permanent work shall be as set forth in the provision in Section 00 72 00 GENERAL CONDITIONS entitled PERMITS AND RESPONSIBILITIES. 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 provision in Section 00 72 00 GENERAL CONDITIONS entitled CHANGES. 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.

3. SAFETY PROVISIONS

The safety provisions as specified herein refer to the USACE Safety and Occupational Health Requirements EM 385-1-1 dated 15 March 2024. The most current edition can be found at:

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

- (a) Accident Investigation and Reporting. The reporting and associated investigation of accidents and near misses is considered a leading indicator. Utilize ENG Form 3394, U.S. Army Corps of Engineers Mishap Notification and Investigation, to report accidents and near misses. Link to ENG Form 3394:

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

Contractors must investigate, analyze, and report all accidents and near misses occurring incidentally to an operation, project, or facility according to EM 385-1-1, Table 2-1 Accident Reporting Required Timeline.

- (b) Accident Prevention Plan (APP). (See the provision in Section 00 72 00 - GENERAL CONDITIONS entitled ACCIDENT PREVENTION. Within 15 days after receipt of Notice of Award of the contract, and at least 7 days prior to the prework conference, an electronic copy and one hard copy of the Accident Prevention Plan (APP) Worksheet (ENG FORM 6293) shall be submitted to the Contracting Officer for review and acceptance. Link to ENG form 6293 (APP):

https://www.publications.usace.army.mil/Portals/76/Eng_Form_6293_Aug%202024%20-%20FINAL.pdf

The Plan shall be prepared in the following format:

- (1) Activity Hazard Analysis (AHA) Requirements. The contractor shall complete the Activity Hazard Analysis (AHA) Requirements on ENG form 6206 in accordance with EM 385-1-1, Chapter 2-6. Specific AHA requirements are identified in paragraph 6 of each chapter of EM 385-1-1. Link to fillable ENG form 6206 (AHA form):

https://www.publications.usace.army.mil/Portals/76/Eng_Form_6206_2023Aug24.pdf

- (2) The Contractor shall submit ENG Form 6282 (Site Safety and Health Officer Designation Letter). A Designation Letter is required for all levels of onsite SSHOs. The Contractor shall maintain a copy of the accepted form at the site of work. Link to ENG form 6282:

https://www.publications.usace.army.mil/Portals/76/Eng_Form_6282_2023Aug28.pdf?ver=1GgPT1ZS1AFX9P8AKU5oq%3d%3d

- (3) Site Safety and Health Officer (SSHO). The Contractor must employ a minimum of one (1) Level 1 Full-time Site Safety and Health Officer to function as the primary Level 1 SSHO responsible for ensuring all site personnel are implementing Safety and Occupational Health requirements according to the contract, EM 385-1-1, applicable federal, state, and local requirements. A designated Level 1 SSHO must be at the site of work whenever work is performed. The SSHO shall meet the training and experience requirements of EM 385-1-1, Chapter 2-3.b. Level 1 SSHOs are not permitted to supervise non-safety personnel at the site of work.

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

- (5) When marine plant and equipment are in use under a contract, the method of fuel oil transfer shall be included on MVN Form 385-10R (Latest Edition), Fuel Oil Transfer (attached at the end of this section), (Refer to 33 CFR 156).
- (c) Commencement of Work. The Contractor shall not commence physical work at the site until the Contracting Officer, or his/her authorized representative has accepted the Accident Prevention Plan. The Contractor may submit its Accident Prevention Plan only for the first phase of construction provided that it is accompanied by an outline of the remaining phases of construction. All remaining phases shall be submitted and accepted prior to the beginning of work in each phase. Also refer to EM 385-1-1, Chapter 2.
- (d) Hazard Communication (HazCom) Program. The Contractor shall develop, implement, and maintain at the workplace a written, Hazard Communication Program (see EM 385-1-1, Chapter 6-7) 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 ensure accuracy.
- (e) 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.

- (f) Safety Sign. The Contractor shall furnish, erect, and maintain a safety sign at the site where indicated by the Contracting Officer. The sign shall conform to the requirements of this paragraph and the drawing included at the end of this section. The lettering shall be black, the safety circle and cross green, and the background white. When placed on a floating plant, the sign may be half size. The sign shall be erected as soon as practicable, but not later than 15 calendar days after the date established for commencement of work. The data required shall be current. The sign coordinator is Timothy Lacoste@504.862.2663.
- (g) Ground Fault Protection Equipment. Electrical equipment used on this contract shall be equipped with ground fault circuit interrupters in accordance with EM 385-1-1, Chapter 11-8.
- (h) Means of Escape for Personnel Quartered, or Working on Floating Plant. Two means of escape shall be provided for assembly, sleeping, and messing areas on floating plants. For areas involving 10 or more people, both means of egress shall be through standard size doors opening to different exit routes. Where nine or fewer people are involved, one 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 EM 385-1-1, Chapter 19-8.h.
- (i) Emergency Alarms and Signals.
 - (1) Alarms. Emergency alarms shall be installed and maintained on all floating plant requiring a crew where it is possible for either a passenger or crewman to be out of sight or hearing from any other person. The alarm system shall be operated from the primary electrical system with standby batteries on trickle charge that will automatically furnish the required energy during an electrical-system failure. A sufficient number of signaling devices shall be placed on each deck so that the sound can be heard distinctly at any point above the usual background noise. All signaling devices shall be so interconnected that actuation can occur from at least one strategic point on each deck.
 - (2) Signals.
 - (a) Fire Alarm Signals. The general fire alarm signal shall be in accordance with 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 subparagraph (2)(a) above.

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

- (j) Hurricane Plan. A detailed plan for protection and evacuation of personnel and the construction site, in the event of an impending hurricane or storm, is required as an enclosure to the Contractor's Accident Prevention Plan. This plan shall be submitted to the Contracting Officer, or his/her representative, for review and approval prior to the preconstruction conference. Work being performed to satisfy the Hurricane Plan will not be measured for payment. Payment for all work associated with the Hurricane Plan, and providing the equipment required for the duration specified, shall be distributed amongst the existing bid items. The 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 estimated time necessary to secure and evacuate the site including any emergency flood protection.

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

(4) The name of the boat which will be used to move the plant, its type, capacity, speed, and availability.

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

NOTE: Floating plant, boat, or other marine activities must submit an Emergency Plan for Marine Activities which includes a Severe Weather Plan for Marine Activities per EM 385-1-1, Chapters 19-7.a and 19-7.b.

- (k) Hazardous Energy Control Program. The Contractor shall develop, implement, and maintain at the workplace, a written Hazardous Energy Control Program (HECP). Refer to EM 385-1-1, Chapter 12-7.
- (l) Access/Haul Road Plan. A written Access/Haul Road Plan is required when access or haul roads are to be used. Work on the haul road must not commence until USACE supervisor/KO or COR has accepted the plan, refer to EM 385-1-1, Chapter 4-7.b.

- (m) Cranes. The Contractor (including subcontractors) shall have cage boom guards, insulating links, or proximity warning devices on cranes that will be working adjacent to power lines. These devices shall not alter the requirements of any other regulation of this part - even if such device is required by law or other regulation. Insulating links shall be rated for the energized lines they are working near (EM 385-1-1, Chapter 11-8.t.6.d). Calibration records or stamped date of required manufacturer inspection of proximity warning devices shall be kept on the crane. Additionally, prior to any work commencing an Activity Hazard Analysis) identifying and satisfying EM 385-1-1, Chapter 2-6, requirements shall be submitted and accepted by the Contracting Officer.
- (n) Crane/Derrick and Dragline Certification. The Contractor shall submit a copy of the certification and performance test in accordance with EM-385-1-1, Chapter 16-5.
- (o) Emergency Drills. The Contractor shall conduct its drills in accordance with EM 385-1-1, Chapter 19-8.b.
- (p) Equipment Operator Authorization. The Contractor shall submit a list of designated personnel qualified and authorized to operate machinery and mechanized equipment in accordance with EM 385-1-1, Chapter 16-3.
- (q) Dive Plan. The Contractor shall submit a Dive Plan in accordance with EM 385-1-1, Chapter 30-7.
- (r) 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 their 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.
- (s) Overhead Power Lines. In locations where trucks and other equipment will be passing beneath overhead power lines, the Contractor shall install at least 2 signs on either side of the crossings warning drivers of the overhead lines. The signs shall face both directions of travel. The signs shall have arrows

pointing upward and state "Overhead Electric". The Contractor's proposed sign design shall be submitted to the Contracting Officer for approval.

(t) Safety Fence.

The Contractor shall provide, erect, and maintain a temporary safety fence around the limits of work. The temporary safety fence shall be constructed in accordance with sheet C-504. Swing gates shall be at least 12 feet wide by 72 inches high. The swing gate frame shall be fabricated of either 1-3/8-inch O.D. tubular steel, or 1/4-inch angle iron brace with an adjustable brace wire to prevent sagging. Gates shall be fitted with hinges and shall be supported by 1-3/8-inch O.D. tubular steel posts embedded in 3-feet of concrete. The fabric from the gates shall be the same as that for the fence. All gates shall be closed and padlocked at the end of each workday. When necessary, the owner of a facility located within the limits of work will obtain keys from the levee district. The Contractor shall provide and maintain on the fence "NO TRESPASSING" signs every 100 feet facing out from the work. Details of the safety fencing and location shall be submitted with the Contractors APP for approval.

No separate measurement or payment will be made for safety fence. Payment for all work associated with the safety fence shall be distributed amongst the existing bid items.

4. INSPECTOR'S FIELD OFFICE

(a) The Contractor shall furnish, throughout the contract period, for the exclusive use of the Government employees, a temporary waterproof building, or trailer, to be utilized as a field office. It shall be conveniently located at the site of construction and shall be independent of any building, or trailer, used by the Contractor. Toilet facilities and potable water, including bottled water with water cooler, shall be provided within the Inspector's office. It shall be equipped with approved electrical wiring, private telephone service, a telephone answering machine, a fax / copier / printer machine. It shall be equipped with ceiling lamps, double convenience outlets, and the required switches and fuses, to provide 110-volt power for lighting and operating a laptop computer and printer. It shall be equipped with an air conditioning unit to provide cooling in warm or hot weather, and a heater, properly installed and vented in accordance with the National Fire Protection Association Code, for heating in cold weather, as required. The Contractor shall make the necessary arrangements to obtain or to generate the power required to operate the air conditioning unit, lights, and laptop computer and printer, and the power or fuel required for the heater, and shall bear the cost thereof. A drafting table providing a working surface having dimensions of at least 4-feet by 6-feet (which may consist of a piece of plywood, at least 3/4-inch thick, hinged to a wall of the building with hinged legs) shall be installed in the building. The building shall have a built-in locker, extending from the floor to the ceiling, having dimensions of at least 2- feet by 5-feet, with a shelf 12-inch from

the top, and one door equipped with two hinges, a hasp and a padlock. All exterior doors and window frames of the building shall be equipped with iron security guards. The door shall also be equipped with butt hinges and a cylinder lock. Two strong chairs and two desks shall be provided. The building or trailer shall conform to the following minimum requirements:

Ceiling height, not less than	6-feet 9-inches
Floor space, no less than	480 square feet
Windows, not less than	2
Doors, outside	1
Rooms	2
Ceiling lamp receptacles	2
Double convenience outlets	2

Screens over windows; walls and ceilings shall be insulated; and interior walls finished.

(b) The building, or trailer, shall be removed by the Contractor after completion of all work under this contract and before final acceptance thereof. No separate payment will be made for furnishing, maintaining, providing the prescribed utilities, and removing the inspector's field office, but the cost of the same shall be distributed throughout the existing bid items. In the event the Contractor fails to furnish the required facilities, the Government may elect to procure the required facilities and deduct all costs from amounts due or to become due under this contract.

(c) The Contractor shall provide daily janitorial services for this and other buildings at the site throughout the life of the contract. The cost of this service shall be distributed throughout the existing bid items and there shall be no separate payment.

(d) The Contractor shall provide the inspector's field office with a hard line broadband high speed internet service and associated equipment for the exclusive use of the Government. If this service is not practical at the jobsite, the Contractor may instead provide the inspector's field office with a cellular wireless Broadband / WiFi 802.11n capable router that accepts cellular data signals through Express Card / Air Card or USB modems. This service must be capable of providing adequate connection to allow the inspectors to import/export files through RMS. The Contractor must field verify that the service provider chosen has adequate continuous coverage at the construction site. This service shall provide a minimum download speed of 20 Mbps and a minimum upload speed of 5 Mbps. The Contractor shall be responsible for the installation, the maintenance

of, and the monthly service fees necessary to provide continuous high speed internet service for the duration of the contract.

(e) The Government and Contractor's field offices shall be placed within the location and limits of the Government environmentally cleared right of way (ROW) or Limits of Construction (LOC).

5. PROJECT SIGN

Prior to commencement of work, the Contractor shall construct a project sign at the site of the work at a location directed by the Contracting Officer. The sign, which will identify the work with the Corps of Engineers shall be 4 feet by 6 feet in size and shall conform to the requirements of the PROJECT SIGN drawing and installation instructions attached at the end of this section. The lettering for the 2 feet by 4 feet section of the sign with the Corps logo and Army Star shall be white; all other lettering shall be black. Lettering for the project name shall be Helvetica Bold, all other lettering shall be Helvetica Regular. The sign coordinator is Timothy Lacoste @ 504.862.2663. No separate payment will be made for construction and erection of the project sign and all costs in connection therewith will be considered an incidental obligation of the Contractor. Upon completion of the work, the sign shall become the property of the Contractor and shall be removed from the job site.

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

7. CERTIFICATES OF COMPLIANCE

Any certificates required for demonstrating proof of compliance of materials with specification requirements shall be executed in three (3) copies. Each certificate shall be signed by an official authorized to certify on behalf of the manufacturing company and shall contain the name and address of the Contractor, the project name and location, and the quantity and date or dates of shipment or delivery to which the certificates apply. Copies of laboratory test reports submitted with certificates shall contain the name and address of the testing laboratory and the date or dates of the tests to which the report applies. Certification shall not be construed as relieving the Contractor from furnishing satisfactory material, if, after tests are performed on selected samples, the material is found not to meet specified requirements.

8. SEAWORTHINESS CERTIFICATION

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

9. ENVIRONMENTAL LITIGATION

(a) 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.

(b) 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 above, 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 not 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 provision in Section 00 72 00 GENERAL CONDITIONS entitled SUSPENSION OF WORK. The period of such suspension, delay or interruption shall be considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided in that clause, subject to all the provisions thereof.

10. UTILITIES AND IMPROVEMENTS

(a) All known utilities within the limits of the work, such as pipes, communication lines, power lines, etc., that would interfere with construction work will be removed, modified or relocated by local interests or utility companies at no cost to the Contractor unless otherwise noted in the plans and/or specifications. The Contractor, however, shall cooperate with the authorities or company representatives and shall conduct his/her operations in such manner as to result in a minimum of inconveniences to the owners of said utilities. The Contractor shall notify each utility owner by certified mail 45 days, 15 days, and again 72

hours prior to the date utilities must be moved and provide a copy of these notifications to the Contracting Officer.

(b) Any unidentified pipes or structures which may be found within the limits of the work during the course of construction shall not be disturbed nor shall construction or excavation be performed at these locations unless and until approved by the Contracting Officer.

11. PERMISSIBLE HOURS OF WORK

No work shall be done at the jobsite between 7:00 p.m. and 7:00 a.m. Monday through Sunday. Prior to 7:00 a.m. the Contractor shall not start up any equipment nor have any trucks for delivery, service, hauling, etc. arrive at the jobsite. Trucks shall remain on designated truck routes until 7:00 a.m. The Contractor will be allowed to work on Saturdays, Sundays and Holidays. When the Contractor elects to work weekends and holidays, notice shall be given to the Contracting Officer, in writing, 36 hours in advance of commencement of such operations to permit suitable arrangements for inspections to be made. Adequate lighting for thorough inspection of night operations conducted within the permissible hours of work shall be provided by the Contractor at his/her own expense. The Contractor shall at all times comply with Jefferson Parish and City of Kenner Ordinances pertaining to noise.

12. EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE

(a) This clause does not apply to terminations.

(b) Allowable costs for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a Contractor or Subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the Contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the Contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of Engineering Pamphlet (EP) 1110-1-8, "Construction Equipment Ownership and Operating Expense Schedule," Region III. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the Contracting Officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply. EP 1110-1-8 can be found at www.nww.usace.army.mil/missions/cost-engineering/ep1110-1-8/.

(c) rental costs are allowable, subject to the provisions of RFO 31.105(e)(1)(iii) and RFO 31.205-36, Rental Costs. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

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

13. STONE SOURCES

(a) On the basis of information and data available to the Contracting Officer, stone meeting the quality requirements of these specifications has been produced from the listed stone sources attached at the end of this section.

(b) Stone may be furnished from any of the listed STONE SOURCES (attached at the end of this section), or at the option of the Contractor may be furnished from any other source designated by the Contractor and accepted by the Contracting Officer, subject to the conditions hereinafter stated.

(c) The Contractor shall determine that the stone source or combination of sources selected is capable of supplying the quantities and gradation needed and at the rate needed to maintain the scheduled progress of the work.

(d) After the award of the contract, the Contractor shall designate in writing only one source or one combination of sources from which he/she proposes to furnish stone. If the Contractor proposes to furnish stone from a source not listed in STONE SOURCES (attached at the end of this section), he/she may designate only a single additional source for stone. Samples for acceptance testing shall be provided as required by Section 35 31 19. If a source for stone so designated by the Contractor is not accepted for use by the Contracting Officer, the Contractor may not propose other sources but shall furnish the stone from a source listed in STONE SOURCES (attached at the end of this section) at no additional cost to the Government.

(e) The listings of the names of the stone suppliers does not constitute an endorsement of such companies. Acceptance of a source of stone is not to be construed as acceptance of all material from the source. The right is reserved to reject materials from certain localized areas, zones, strata, or channels, when such materials are unsuitable for stone as determined by the Contracting Officer.

Materials produced from a listed or unlisted source shall meet all requirements of Section 35 31 19.

14. CLAY SOURCES

a.

(1) The stockpile location identified on the plans has been studied by the Government for environmental concerns and soil suitability. The designated site may be capable of producing the quality of clay material meeting the requirements set forth in Section 31 24 00.00 12 EMBANKMENT, paragraph entitled MATERIALS, including the salinity requirements set forth in Section 31 23 00.00 12 EXCAVATION, paragraph entitled "Borrow Area Agronomy Report". The contractor must use the stockpile provided before utilizing a commercial pit. The stockpile area is known to primarily consist of fat clays and lean clays. Any areas with excessive sand and organic matter should be removed and placed in a separate pile on site. The contractor may not go below existing grade. The existing adjacent natural ground is an average elevation of 3.5' to 4.0'. After depletion of the stockpile site, the contractor must grade the area (including any piles of wasted material) to provide a level surface.

(2) On the basis of information and data available, the lands containing the clay sources from the sites designated below have been studied by the Government for environmental concerns and soil suitability. The designated sites, below, may be capable of producing the quality of clay material meeting the requirements set forth in Section 31 24 00.00 12 EMBANKMENT, paragraph entitled MATERIALS, including the salinity requirements set forth in Section 31 23 00.00 12 EXCAVATION, paragraph entitled "Borrow Area Agronomy Report", and are subject to the subparagraphs (b) through (e) below. However, some documentation relating to the below sites may need to be updated prior to their use. The Contractor is responsible for submitting a complete Borrow Submittal Package for Corps review and approval with all applicable updated documentation. See Section 31 23 00.00 12 EXCAVATION, paragraph entitled "Borrow Submittal Package Requirements in Detail".

1. Willow Bend (Edgard)
(225) 921-9694
rf@river-parishes.com

Rob Field, Chief Executive Officer

2. Big Shake (SJCM)
(225) 921 9694
rf@river-parishes.com

Rob Field, Chief Executive Officer

b. Clay may be furnished from any of the Government-listed sources in paragraph (a), or, at the option of the Contractor, from a commercial borrow

source, subject to acceptance by the Contracting Officer. **Given that this is a PL 84-99 emergency repair project, any Contractor-furnished borrow source not listed in paragraph (a) must be actively operated as a commercial pit. To ensure timely availability of borrow, the designated pit must currently possess—not merely have applied for—all required Federal, State, and Parish permits to operate as a commercial borrow pit and must meet all requirements outlined in Section 31 23 00.00 12, EXCAVATION, paragraph entitled "Submittal Package Requirements in Detail". The apparent lowest bidder must submit the name of the commercial borrow source they intend to use within 2 business days after the bid opening.**

(c) The Government is not responsible for any agreements or breach of agreement(s) nor the resulting impacts of any breach of agreement(s) between the Contractor and the listed owners and/or agents of the commercial borrow pit and or any other persons.

(d) Contact the Point of Contact for the above sources for information regarding the location of the sites and geotechnical boring logs of the material.

(e) Usage of any of the above listed clay sources shall neither relieve the Contractor from its obligation to furnish satisfactory material to the project nor commit the Government to the acceptance of the character, quantity or availability of material from these sources. Verification of the material should be performed by the Contractor to assure that the material meets the contract specifications for embankment construction material.

15. 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.

16. 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 the 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/her fault or negligence or his/her failure to follow the instructions of the Contracting Officer (CO).

(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.

(e) In addition to the costs allowed by subparagraph b, the Contracting Officer may also allow an increase in contract price for costs or expenses which accrue to the Contractor as a result of any directions or instructions received from the CO.

17. FORMAT OF SURVEYS

a. The Contractor shall submit compliance surveys upon completion of certain construction activities. The survey 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". Links to these documents are shown below:

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

http://www.mvn.usace.army.mil/portals/56/docs/engineering/Geospatial/EM_Format15.pdf

b. Each surveyed point should be listed on a separate line as a comma-delimited list of the following:

(1) Point ID, northing, easting, elevation, code

(2) Surveyed points that are part of a profile shall be grouped under the appropriate #P01 record for that profile.

(3) Surveyed points that are part of a cross-section shall be grouped under the appropriate #X01 record for that cross-section.

(4) All other points shall be grouped under the appropriate #M01 record.

c. Each Project Control Point (PCP) shall be included as #V/#T records with the surveyed elevation #V/T06, and vertical datum and epoch information. Absolute vertical and horizontal accuracies shall be shown in the #H03 and #H17 records. The USACE Survey Drivers shall be used to check for proper formatting.

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

d. A survey report shall be submitted which includes a brief synopsis of the survey methodology (traverse run, level loops, GPS). Copies of all supporting field books shall be signed and sealed by a Licensed Surveyor registered in the state in which the work is being performed. If static GPS is collected, minimally and fully constrained GPS adjustment reports must be submitted as well as any other notes, reports, raw data, and supporting documentation.

e. All surveys shall adhere to the requirements of the "USACE New Orleans District Minimum Survey Standards" and be performed by a licensed surveyor registered in the state in which the work is being performed. The point of contact for survey information is Dwayne Blanchard @ 504.862.1589.

18. BENCHMARK VERIFICATION SURVEYS

a. Project Control Points. For purposes of vertical control, Project Control Points may be referred to as Project Benchmarks. Project Control Points located at the project site may be used as Local Project Control Points and referred to as Site Benchmarks. To ensure local / internal consistency, the Contractor shall verify all Project Benchmarks and Site Benchmarks using differential leveling following Section J of the "USACE New Orleans District Minimum Survey Standards". All benchmarks serve as vertical control for the entire project. The benchmark verification survey shall constrain to the Primary Benchmark as shown on the drawings. The differential levels must be to Second Order Class II closure standards, as defined in Appendix 4 of the Minimum Survey Standards, and as follows: closure error (in feet) must be less than or equal to $0.035 \times \sqrt{\text{distance in miles}}$. Significant closure error (any random error whose magnitude would affect the final elevation of benchmarks when significant digits are considered) shall be distributed through all benchmarks (Project Benchmarks and Site Benchmarks) according to their relative distance along the loop. Verification of

all benchmarks shall be performed within 14 days of receipt of the Notice to Proceed and at least every 6 months using differential leveling.

b. Site Benchmarks. At all established hurricane protection, flood control, shore protection, and navigation projects, three permanent site benchmarks (new or existing) shall be identified/established at the immediate work site (situated as nearly as practicable at the middle and at each end of the project) and referenced to the applicable required epoch of NAVD88. Site Benchmarks are Local Project Control Points provided on the drawings or monuments set by the Contractor according to EM 1110-1-1002, Survey Markers and Monumentation. Site Benchmarks set by the Contractor are limited to types A, B, C, F, or G as described in Chapter 3 of EM 1110-1-1002 and the type and location must be approved in advance by the District Datum Coordinator (DDC). Vertical positioning for all construction activities shall be constrained to a Project or Site Benchmark. To obtain pre-approval for a proposed Site Benchmark, the Contractor shall submit the following to the Contracting Officer's representative (COR): the approximate proposed x, y position; the type of monument; and 5 photos of the proposed location: 1 of the proposed site, and 4 photos taken from the proposed site facing in 4 cardinal directions.

http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_1110-1-1002.pdf

c. Survey Report. The benchmark verification survey data shall be submitted in a Survey Report signed and sealed by a Licensed Surveyor registered in the state in which the work is being performed. The survey report shall be updated and submitted with each benchmark verification survey. The survey report shall include a table of all Project and Site Benchmark measurements and all previous benchmark verification measurements for comparison purposes. The report shall include a graphic that shows the approximate positions of all control points, the route of the differential level loop, and the approximate distances between control points. The report shall include clear, legible field notes that show the daily "Two-Peg Test", all measurements and calculations, and the closure error for each closed loop. Any raw data such as digital level pre or post-processing reports should be included. Each level loop shall be reviewed and initialed in the field book by a person independent of the field crew performing the level loop. Only the field notes for the current benchmark verification survey should be included in each report.

d. Submittals. Survey Reports of the benchmark verifications shall be submitted to the Contracting Officer's Representative (COR) in electronic format via RMS-CM within 7 days of the completion of the benchmark verification. If the file is too large to submit via RMS-CM, contact the COR for alternate methods. The COR shall be notified immediately if any errors or inconsistencies in the benchmark verifications are found. The Survey Report of the first benchmark verification

survey must be received within 14 days of receipt of the Notice to Proceed or as required by the COR.

19. REQUIRED INSURANCE SCHEDULE

The Contractor and subcontractor shall procure and maintain during the entire period of this performance under this contract the following minimum insurance.

(a) Employer's Liability Insurance. The Contractor shall furnish evidence of Employer's Liability Insurance in an amount of not less than \$100,000.

(b) General Liability Insurance. Bodily injury liability insurance in the minimum limits of \$500,000 per occurrence on the comprehensive form of policy.

(c) Automobile Liability Insurance. Minimum limits of \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per accident for property damage. This insurance shall cover the operation of all automobiles used in performance of the contract. All vehicles to be used in the performance of this contract shall be expressly designated in the insurance policy. A copy of the list of such vehicles shall be submitted to the Contracting Officer. In the event that the Contractor acquires a new vehicle for use on this contract after his/her insurance policy has been obtained, he/she shall immediately amend his/her policy to reflect the inclusion of the new vehicle on the policy. In no event shall the Contractor drive a vehicle on the Government installation without first obtaining the required coverage for said vehicle.

20. COMMERCIAL WARRANTY

The Contractor agrees that the standard commercial equipment furnished under this contract shall be covered by the most favorable commercial warranties the manufacturer gives to any customer for such equipment, and that the remedies provided herein are in addition to and do not limit any rights afforded to the Government by any other clause of this contract. Two copies of the warranties shall be furnished by the Contractor to the Contracting Officer.

21. 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. As to the portion of the access route across the bridge at the Duncan Canal Pump Station, shown on Sheet Number RR-101 of right-of-way plans:
 1. Only one vehicle can cross the bridge at any given time, and that vehicle must completely clear the bridge before another vehicle can proceed with crossing the bridge.

2. All vehicles are not to exceed 5 MPH when crossing the bridge.
 3. No heavy trucks will be allowed on the bridge.
 4. Duncan Canal Pump Station will be used only as an **exit route** for empty trucks.
- b. Layout drawings showing the location of all equipment, office structures, toilets, and storage areas for materials.
 - c. Show mobilization and demobilization routing and locations of large equipment, such as draglines, cranes, etc. while on the jobsite.
 - d. 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.
 - e. (Jefferson Parish) As to the portion of the access route across the bridge at the Duncan Canal Pump Station, shown on Sheet Number RR-101 of right-of-way plans: Only one vehicle can cross the bridge at any given time, and that vehicle must completely clear the bridge before another vehicle can proceed with crossing the bridge. All vehicles are not to exceed 5 MPH when crossing the bridge. No heavy trucks will be allowed on the bridge. Duncan Canal Pump Station will be used only as an exit route for empty trucks.
 - f. (Jefferson Parish) As to the portion of the access routes through the Duncan Canal Pump Station and Elmwood Canal Pump Station properties, shown on Sheet Identification Numbers RR-101 and RR-102 of right-of-way plans: At completion of construction of the Project, the Corps or its contractor, as appropriate, shall restore the access routes, based on its use thereof, to the condition existing on said property immediately prior to initiation of the Project, and shall otherwise return said property, with the exception of the improvements to the Project itself, to its original condition free of any waste, spoil, or hazardous material or any other condition inconsistent with its original and continued use.
 - g. (Hwy. 61 Stockpile site and access route) As to the required right of way shown on Sheet Identification Number RR-105 of right-of-way plans:
 - i. At completion of construction of the Project, the Corps or its contractor, as appropriate, shall restore the surface of this property to its condition immediately prior to initiation of work there for the West Shore Lake Pontchartrain ("WSLP") project. This includes but is not limited to causing any remaining borrow material to be removed and the surface of the property to be restored to its grade prior to initiation of work there by the

Corps or its contractor for the WSLP project, including as documented in the WSLP pre-stockpile topographic survey, photography, or video survey. The Corps or its contractor, as appropriate, shall otherwise return said property, with the exception of the improvements to the Project itself, to its original condition prior to initiation of work there for the WSLP project, free of any waste, spoil, or hazardous material or any other condition inconsistent with its original and continued use.

- ii. The Corps or its contractor, as appropriate, shall not stockpile material on the access route and shall not unreasonably delay those with pre-existing access to the road prior to initiation of the WSLP project.
- iii. The Corps or its contractor, as appropriate, shall maintain the drainage under the access route and shall maintain the capacity of the existing swale adjacent to the route.
- iv. The access route is limited to right-in, right-out access on Highway 61. Trucks shall be routed so that they can make right turns into the access route when arriving and right turns out when departing the site.
- v. The Corp or its contractor, as appropriate, shall not modify the access connection to Highway 61 or perform any work within the Louisiana Department of Transportation right of way.
- vi. The Corps or its contractor, as appropriate, shall not modify or perform any work on the access route within 50 feet of any pipeline.
- vii. At no time may USACE and or contractors use the access route for any purpose such that an individual vehicle loading would exceed the following:
 - 24,000 pounds single axle weight
 - 48,000 pounds for each tandem axle group
 - 60,000 pounds for each tridum axle group
 - 54,000 pounds for each trunion axle group (16 wheels)
 - 650 pounds per inch width of tire
 - 180,000 pounds gross vehicle weight, limited to the axle and tire load defined in items i. through vii. above.

22. EXISTING FACILITIES

(a) Protection and Relocation of Existing Structures and Utilities. The Contractor shall assume full responsibility for the protection of all structures and utilities, public or private, including poles, signs, services to building utilities, in the street, gas pipes, water pipes, hydrants, sewers, drains, and electric and telephone cables, whether or not they are shown on the drawings. The Contractor shall carefully support and protect all such structures and utilities from injury of any kind. Any damage resulting from the Contractor's negligence shall be repaired

by him at his expense. (See related General Provision entitled DAMAGED LEVEE TRAIL ROAD OR ROADWAYS below.)

(b) The Contractor shall bear full responsibility for locating all underground structures and utilities (including existing water services, drain lines, and sewers) as indicated on the plan drawings. Services to buildings shall be maintained, and all costs or charges resulting from damage thereto shall be paid by the Contractor.

(c) If, in the opinion of the Contracting Officer, permanent relocation of a utility owned by the Parish is required and is not indicated on the plans, he/she may direct the Contractor in writing, to perform the work. Work so ordered will be paid for by an equitable adjustment under the Section 00 72 00 GENERAL CONDITIONS entitled CHANGES. If relocation of a privately owned utility is required, the Contractor shall notify the utility owner and shall have no claim for delay due to such relocation.

(d) Care and Protection of Property. The Contractor shall be responsible for the preservation of all public and private property and shall use every precaution necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work on the part of the Contractor, such property shall be restored by the Contractor, at his/her expense, to a condition similar or equal to that existing before the damage was done, or he shall make good the damage in another manner acceptable to the Contracting Officer.

(e) Sidewalks and Curbs. All sidewalks which are disturbed by the Contractor's operations shall be restored to their original or better condition by the use of similar or comparable materials. All curbing shall be restored in a condition equal to the original construction and in accordance with the current Federal (American Disability Act - ADA), State and local code requirements.

(f) Other Features. Along the location of this work, all fences, walks, bushes, trees, shrubbery, and other physical features noted on the drawings to remain, shall be protected and restored in a thoroughly workmanlike manner.

(g) Trees. Trees close to the work shall be boxed or otherwise protected against injury. The Contractor shall trim all branches that are liable to damage because of his operations, but in no case shall any tree be cut or removed without prior notification of the Contracting Officer. All injuries to bark, trunk, limbs, and roots of trees shall be repaired.

(h) The protection, removal, and replacement of existing physical features along the line of work shall be a part of the work under the contract, and all costs in connection therewith shall be included in the applicable contract unit and/or job prices for which the work is incidental thereto.

(i) Water for Construction Purposes. In locations where public water supply is available, the Contractor may purchase water for all construction purposes. The express approval of the Water Department of the Parish shall be obtained in writing. Hydrants shall only be operated under the supervision of the Water Department personnel of the Parish.

(j) Maintenance of Flow. The Contractor shall at his own cost, maintain the flow of existing sewers, drains, and water courses, including drain pipes scheduled to be modified, within the project limits during the progress of the work, and shall immediately cart away and remove all offensive matter. Contractor shall allow existing drainage flow directly into the active work area and pump it out past the west end of the project, unless the adjacent project east of this project has already been completed; in this case, Contractor shall be allowed to pump said water eastward. The entire procedure of maintaining existing flow shall be fully discussed with the Contracting Officer's representative well in advance of the interruption of any flow and a plan shall be submitted to the Contracting Officer's Representative for approval. Pavement removal and replacement which, in the opinion of the Contractor, is necessitated by placement of temporary flow control facilities shall be considered as an item for convenience to the Contractor. Such costs for pavement removal and replacement shall, therefore, be borne by the Contractor at his own cost as required for other flow control measures. Pavement removal shall be limited to the least amount possible and the Contractor shall investigate alternative methods for flow control which require the least amount of pavement removal.

23. FIELD VERIFICATION OF UTILITY LOCATIONS

Documentation on the exact locations of various underground utilities is not available except as shown in the reference drawings. In particular, the exact locations of water service and septic system field lines are not precisely known. The Contractor shall verify the locations of underground utilities prior to digging for any purpose.

24. SECURITY

Federal Government agencies, including the US Army Corps of Engineers, may institute restrictive security procedures at their sites when such are deemed necessary. Security levels and associated procedures may change without advance warning. Contractors and Subcontractors shall abide by all security measures in force at any time during the duration of the contract.

a. Personnel Identification

All Contractor and Subcontractor personnel shall have photo identification issued by a State or Federal Government agency on their persons at all times they are on the Government reservation. Identification that does not include a photograph

is not acceptable, nor is identification issued by a company, school, or other agency other than a Federal or State Government agency authorized to issue identification. Personnel may be required to show identification in order to enter the Government reservation or while on the grounds of the reservation, and may be denied access, or may be required to leave the site, if such identification is not valid or not carried.

b. Vehicle Identification

All vehicles used by Contractor or Subcontractor personnel, whether company- or privately-owned, shall have valid license plates, safety inspection stickers, and registration documents from the state(s) in which the vehicles are registered.

c. Vehicle Searches

All vehicles, privately or corporately owned, are subject to search while on the grounds of any Government reservation. Entering the reservation constitutes consent to search. Any contraband found during a search is subject to seizure. The drivers and/or occupants of a vehicle carrying contraband are subject to criminal prosecution, and any vehicle found to contain contraband is subject to impoundment by the appropriate law enforcement agency. Contraband includes but is not limited to, firearms, explosives, and drugs or other controlled substances.

d. Site Access

The main entrance to the lock reservation is controlled by an electronically-operated gate. Contractor and Subcontractor personnel will not be given the entrance code, but instead shall be required to request access each day from the Government personnel operating the gate. During some high levels of security preparedness, Government personnel may deny the Contractor access to the work site. In such a case, the contract duration will be extended one day for each day the Contractor was denied access, but no other compensation or consideration will be made for such delays.

25. VIDEO AND PHOTOGRAPHIC DOCUMENTATION

a. The pre-construction and post-construction conditions of permanent roads, streets, driveways, sidewalks, above-ground utilities, and existing structures shall be verified and documented by the use of Contractor-furnished photographs and videos. The Contractor shall coordinate so that representatives of the Contracting Officer are present during the pre- and post-construction documentation. All video and photographic documentation shall follow:

- (1) Use of uncrewed/unmanned aircraft systems (drones) is prohibited.
- (2) Videos shall be digital format (DVD) with voice over commentary describing all pertinent or unusual conditions.

- (3) Videos shall have a stamped date.
- (4) Photographs shall be 35 mm or digital, color, and 4 inch x 6 inch size minimum, and shall have stamped date.
- (5) The Contractor shall provide two (2) copies of the DVD and two (2) copies of photos with negatives or CDs containing files to the Contracting Officer for the Contract file.
- (6) Electronic photos shall be accompanied by a log describing the content of each photo.
- (7) Two (2) hard copies shall be assembled in a report form with a cover letter attached.
- (8) In the report, a description of each picture identifying and describing the location and indicating the date of the photograph shall be typed beneath each picture.
- (9) On the reverse of each photograph, the Contractor shall affix a self-adhesive label on the reverse of each picture that shall identify the location, describe the photographed object and indicate the date of the photograph and name of the person who documents the information.
- (10) All the information on the label shall be typewritten in black.
- (11) Additionally, the name shall also be signed.

c. Measurement and Payment. No separate measurement or payment will be made for video and photographic documentation. Payment will be included in the contract job price for "Mobilization and Demobilization".

26. COORDINATION WITH LOCAL INTERESTS

The Contractor shall coordinate his/her construction activities, including jobsite access, with the Contracting Officer, East Jefferson Levee District representatives, the U.S. Fish and Wildlife Service, the Corps of Engineers New Orleans District (CEMVN), local parish Government, and other Contractors. A qualified biologist would continue to inspect the construction site for the presence of undocumented nesting colonies during the nesting season (i.e. September 1 through February 15) for wading bird nesting colonies. Also, other Contractors will be in the vicinity, adjacent to this contract executing contract requirements for other construction contracts.

SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY - EAST
Ryan Foster
Engineering Manager
6920 Franklin Ave.
New Orleans, LA 70122
504-286-3100

EAST JEFFERSON LEVEE DISTRICT
1135 Lesan Dr
Kenner, LA 70062
Daniel Abadie

504-469-7522

CEMVN NEST PREVENTION TEAM

Mario Price

U.S. Army Engineer District, New Orleans, Corps of Engineers

7400 Leake Avenue

New Orleans, Louisiana 70118

504.862.2540

27. SECURITY REQUIREMENTS

a. Suspicious Activity Reporting Training (e.g. iWATCH, CorpsWatch, or See Something, Say Something). All contract personnel shall receive initial and annual refresher training from the RA representative on the local suspicious activity reporting program. This locally developed training provides contract personnel with general information on suspicious behavior, and guidance on reporting suspicious activity to the project manager, security representative or law enforcement entity. 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 Contractors shall comply with the requirements set forth in Section 00 72 00 GENERAL PROVISIONS entitled EMPLOYMENT ELIGIBILITY VERIFICATION (FAR 52.222-54) and FAR Subpart 22.18 in using the E-Verify Program at (<https://www.e-verify.gov/>) (website subject to change) to meet the contract employment eligibility requirements. Contractors are encouraged to cooperate with Federal and State agencies responsible for enforcing labor requirements to include eligibility for employment under United States immigration laws in accordance with FAR 22.102-1(i). An initial list of verified/eligible candidates shall be provided to the COR no later than three business days after the initial contract award. When contracts are with individuals, the individuals will be required to complete a Form I-9, Employment Eligibility Verification, and submit it to the Contracting Officer to become part of the official contract file.

28. JOINT RISK MANAGEMENT

On construction contracts with anticipated award of greater than \$4 million, the Government desires to implement a formal risk management process during construction to discuss risk items. This process would involve the development of a Risk Register and regular discussions of risk items along these lines:

(a) Prior to the Preconstruction conference, a Joint Risk Register shall be developed by the Contractor, identifying items such as availability of materials,

quality control of unique systems, critical schedule milestones, and labor challenges that may affect successful contract completion.

(b) Objective type risk items such as weather will not be included in the register.

(c) The Preconstruction Conference will be the initial meeting to discuss the Joint Risk Register. The Joint Risk Register will be updated at regular intervals by the Government and the Contractor.

(d) The Joint Risk Register will be reviewed and discussed at regular progress and schedule meetings.

Participation in the Joint Risk Management process is voluntary and will not change contract requirements.

29. CONTRACTOR PERFORMANCE EVALUATIONS – CONSTRUCTION

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 \$700,000.00, the USACE will evaluate contractor's performance and prepare a performance report using the Contractor Performance Assessment Reporting (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.

30. DAMAGED LEVEE TRAIL ROAD OR ROADWAYS

Any roadways or the existing trail road damaged by the Contractor shall be removed and replaced at his/her expense, as directed by the Contracting Officer. The Contractor shall coordinate the work with the Contracting Officer's representative.

31. SPECIAL SURVEYING REQUIREMENTS

(a) The Contractor shall perform cross section surveys utilizing an independent licensed surveying firm. The surveyor shall be licensed in the State of Louisiana and shall not be an employee of the prime or sub-contractor. All surveys and quantity computations submitted for payment shall be stamped by the independent licensed surveyor.

(b) All survey data shall be recorded in accordance with the paragraph FORMAT OF SURVEYS. The Contractor shall furnish the additional required data described below to the Government as an electronic text file via RMS and by email to mvn-cd-q-testresults@usace.army.mil. If the files are too large for transmission, contact the COR for alternate transmission methods. The information received should be free of errors and in the following format:

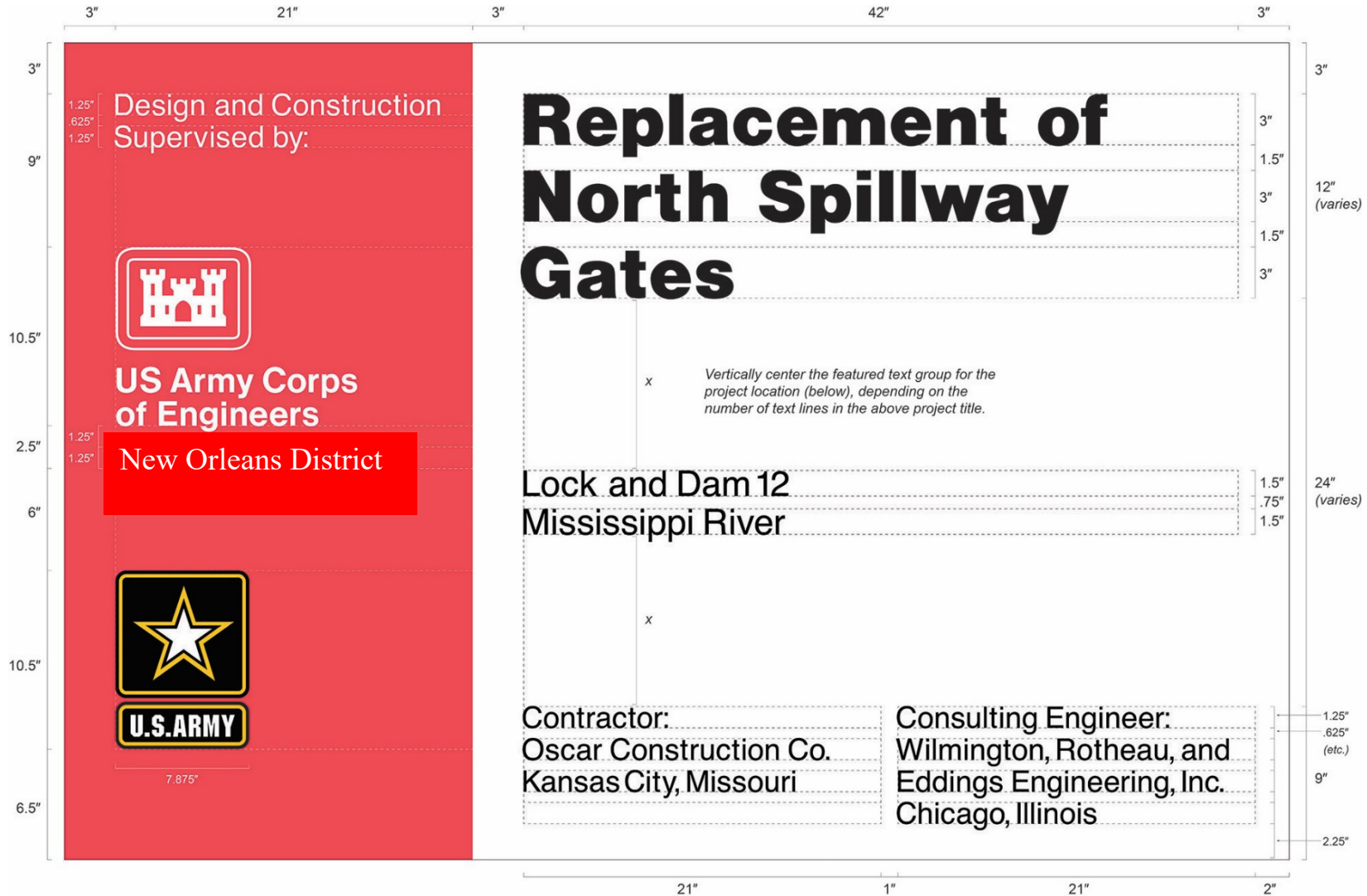
(1) The X-coordinate in feet (Easting)

(2) The Y-coordinate in feet (Northing), and

(3) mandatory 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) as described in the attachments RECORDING SURVEYS FOR CROSS SECTIONS and the SURVEY DATA SAMPLE at the end of this section.

ACCIDENT PREVENTION PLAN
FUEL OIL TRANSFER -- FLOATING PLANT
 U.S. Army Engineer District, New Orleans
 EM 385-1-1, Chapter 19-8.d

1) Contractor		2) Contract Name & Number		3) Date		
4) Officer in Charge of Fuel Transfer		4a) Name of Vessel		4b) Fuel to be Transferred		
5) Name of Vessel		5a) Names of Qualified Tankermen		5b) Type of Certification and expiration date		
6) Name of Vessel	6a) Type of fill nozzle or connection on Vessel	6b) Location of fill pipes openings	6c) Location of vents openings			
7) Type, number, and size of fire fighting equipment to be available during fuel transfer operations.						
8) Sequential steps to be followed when taking on fuel.						
_____ Contractor's Signature _____ Date _____ C.O. or C.O.R. Signature _____ Date						



Below are two samples of the construction project identification sign showing how this panel is adaptable for use to identify either military (top), or civil works projects (bottom). The graphic format for this 4' x 6' sign panel follows the legend guidelines and layout as specified below. The large

4' x 4' section of the panel on the right is to be white with black legend. The 2' x 4' section of the sign on the left with the full Corps signature (reverse version) is to be screen printed Communications Red on the white background.

This sign is to be placed with the Safety Performance Sign shown on the following

page. Mounting and fabrication details are provided on page 16.4.

Special applications or situations not covered in these guidelines should be referred to the District/Division sign coordinator.

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

Legend Group 2: Division or District Name (optional). Placed below 10.5" Reverse Signature (6" Castle).
Color: White
Typeface: 1.25" Helvetica Regular

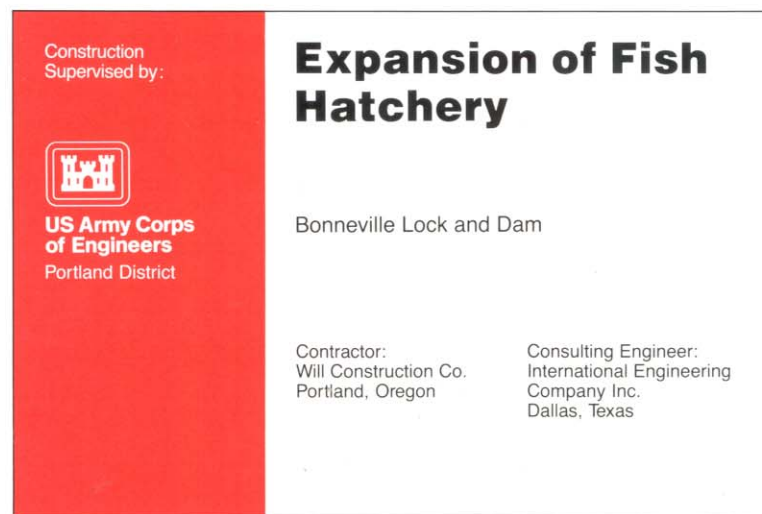
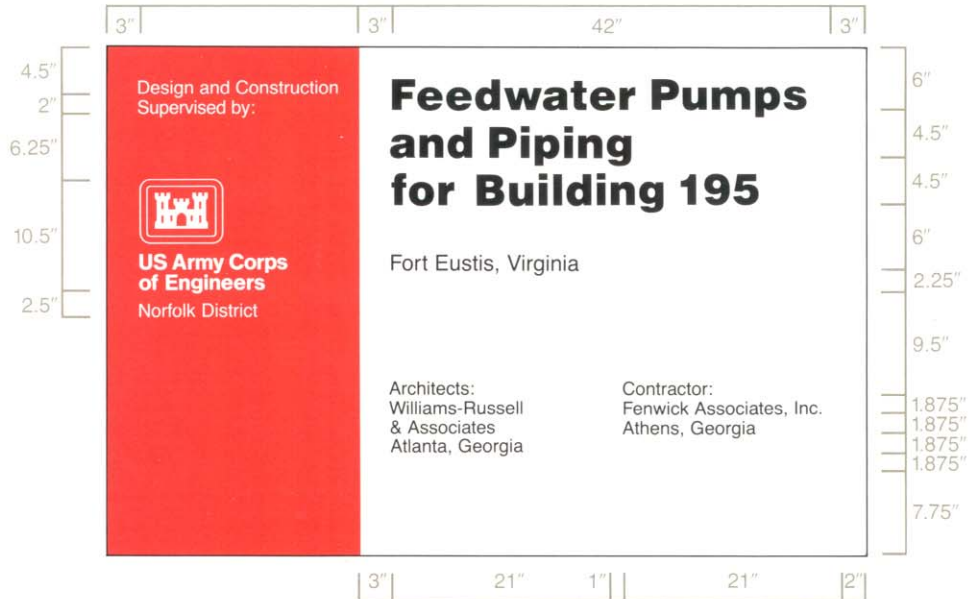
Legend Group 3: One- to three-line project title legend describes the work being done under this contract.
Color: Black
Typeface: 3" Helvetica Bold
Maximum line length: 42"

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

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

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

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



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

Each contractor's safety record is to be posted on Corps managed or supervised construction projects and mounted with the construction project identification sign specified on page 16.2.

The graphic format, color, size and type-faces used on the sign are to be reproduced exactly as specified below. The title

with First Aid logo in the top section of the sign, and the performance record captions are standard for all signs of this type. Legend 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

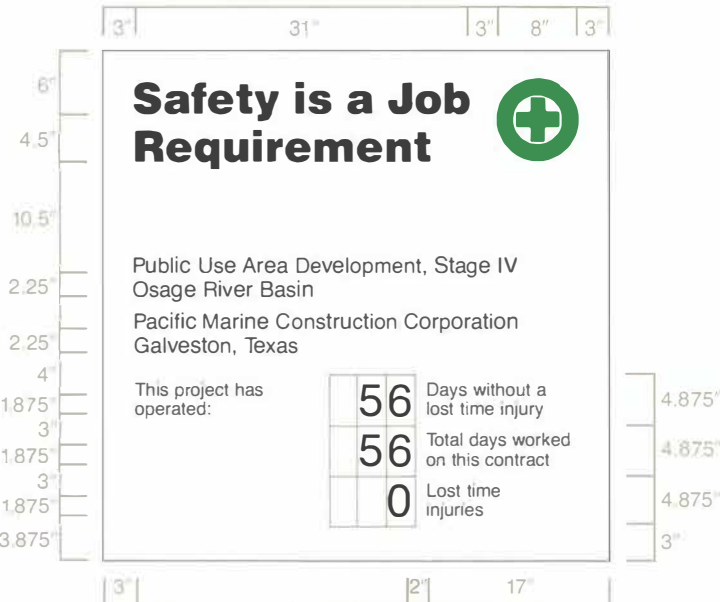
Legend Group 2: One- to two-line project title legend describes the work being done under this contract and name of host project. Color: Black Typeface: 1.5" Helvetica Regular Maximum line length: 42"

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.

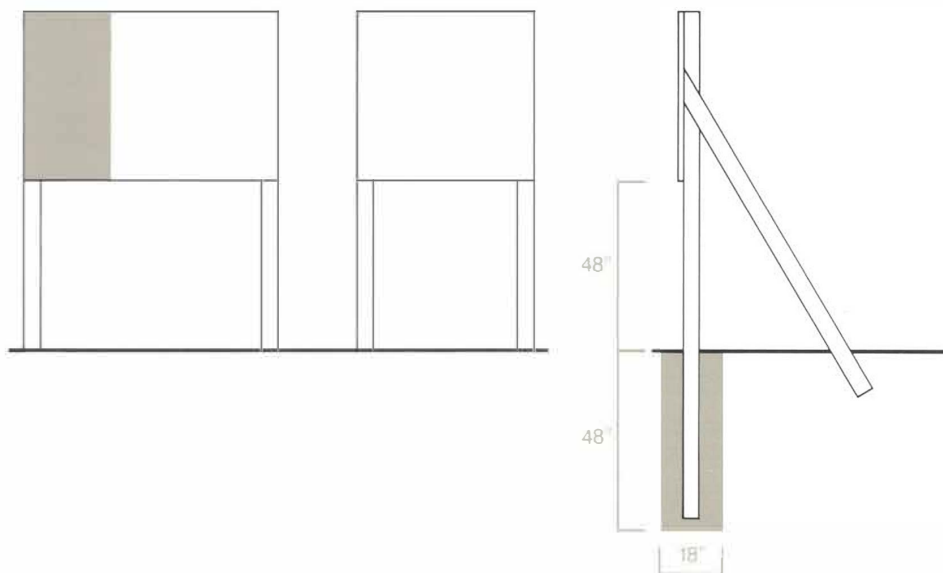
The 2' x 4' Communications Red panel (to match PMS-032) with full Corps signature (reverse version) is to be screen printed on the white background. Identification of the District or Division may be applied under the signature with white cut vinyl letters prepared to Corps standards. Large scale reproduction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

Example

(NOT TO SCALE)

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

CATEGORY I – ACCEPTABLE SOURCES

MVD Master List Stone Sources April 2025

On the basis of information and data available, stone meeting the specified quality requirements has been produced from the sources listed. Acceptance of a source of stone is not to be construed as acceptance of all material from that source. The right is reserved to reject materials from certain localized areas, zones, strata, or channels, when such materials are unsuitable for stone as determined by the Contracting Officer. The Contracting Officer also reserves the right to reject individual units of produced specified materials in stockpiles at the quarry, all transfer points, and at the project construction site when such materials are determined to be unsuitable.

Lat/Long (Tested)	Quarry Location, Address and Telephone Number	Main Office Address and Telephone Number
<u>ALABAMA</u>		
34° 26' 52"N 86° 15' 33"W Updated 2021	Guntersville Quarry - from the intersection of US Hwy 431 and AL Hwy 79, north of Guntersville, AL, travel north 0.7 miles on US HWY 431 to Convict Camp Road. Turn right onto Convict Camp Rd and travel 0.5 miles. Mine scale house will be on the right. TEL:256.582.2130	Madison Materials 692 Convict Camp Rd Guntersville, AL 35976 POC: Joe McConnell TEL: 256.298.3918 joemcconnell@madisonmaterial.com
34° 11' 35"N 86° 29' 21"W Updated 2021	Summit Quarry - from the intersection of US Hwy 278 and US Hwy 231, near Brooksville, AL, travel north 2.8 miles on US Hwy 231N to Blount County Road 25. Turn right onto Blount County Road 25 and travel 1.5 miles to Hinds Road. Turn right onto Hinds Road and Travel 1.8 miles to quarry entrance. Quarry entrance will be on the right. TEL: 205.429.3807	Madison Materials 2335 Hinds Rd. Blountsville, AL 35031 POC: Joe McConnell TEL: 256.298.3918 joemcconnell@madisonmaterial.com

CATEGORY I – ACCEPTABLE SOURCES

Lat/Long (Tested)	Quarry Location, Address and Telephone Number	Main Office Address and Telephone Number
33° 18’ 17”N 86° 59’ 23”W Updated 2021	Flat Top Quarry – from the intersection of interstate I-22W and US Hwy 78, near Graysville, AL, take exit 85 toward Birmingham and travel south 0.53 miles on US Hwy 78. Turn right onto first exit ramp (2nd Ave. NW). Travel 0.4 miles on 2nd Ave NW and merge onto Flat Top Road. Travel north on Flat Top Road 0.85 miles to quarry entrance on left. TEL:256.673.6360	Madison Materials 2335 Hinds Rd. Blountville, AL 35031 POC: Tom Bass TEL: 256.582.2656 tombass@whitaker-contracting.com
34° 33’ 29.89”N 86° 34’ 31.37”W Updated 2019	Lacey Spring Quarry – From Lacey Spring AL, go 1.7 miles north of intersection of US Hwy 231/AL Hwy 53 with AL Hwy 36 and turn right onto the southern end of 149 Parks Chapel Rd and go to quarry entrance on right. Lacey Spring Quarry 149 Parks Chapel Rd. Lacey Spring, AL 35754	Rogers Group Inc. Corporate Headquarters 421 Great Circle Rd. Nashville, TN 37228 615.242.0585 Rogers Group Inc. Administrative Office 520 Three Mile Lane Tuscumbia, AL 35674 256.383.1645 POC: Mr. Michael Wilkes - Quarry Manager
34° 39’ 51.82”N 87° 37’ 31.33”W Updated 2019	Tuscumbia Quarry – from the intersection of US Hwys 72 and 43, in Tuscumbia, take US Hwy72/AL Hwy 20 east approximately 2 miles and then turn south on to Three Mile Road (County Rd 57) and go 2.3 miles to Quarry entrance on left. LEDGES 1,2 AND 3* *Ledge 3 – Randomly oriented fractures are present in the material. Failure can occur along existing fractures under F&T. Tuscumbia Quarry 520 Three Mile Lane Tuscumbia, AL 35674	Roger Group Inc. Corporate Headquarters 421 Great Circle Rd. Nashville, TN 37228 615.242.0585 Roger Group Inc. Administrative Office 520 Three Mile Lane Tuscumbia, AL 35674 256.383.1645 POC: Mr. Michael Wilkes - Quarry Manager

CATEGORY I – ACCEPTABLE SOURCES

Lat/Long (Tested)	Quarry Location, Address and Telephone Number	Main Office Address and Telephone Number
34° 43' 33.46"N 87° 48' 28.66"W 2020 Data update submitted	Pride Quarry located on N side of US Hwy 72, Pride, AL. approx.8.2 miles west of intersection of US-72 and US-43 in Tuscumbia, AL Vulcan Materials, Pride Quarry P.O. 740250 18055 Hwy 72 Tuscumbia, AL 35674 205.310.6853-cell	Vulcan Materials Co. Southern and GLF CST DVSN P.O. Box 385016 Birmingham, AL 35238-5016 Tim Wyatt – Area Manager wyattt@vmcmail.com 205.668.6001-office 205.310.6853-cell
34° 44' 40" N 87° 56' 0"W 2020	Cherokee Quarry- 3 miles east of Cherokee, AL on old Hwy 72. Vulcan Materials Co., Cherokee Quarry P.O. Box 459 Cherokee, AL 35616 POC: Tim Wyatt 205.310.6853 wyattt@vmcmail.com	Vulcan Materials Co. Southern and GLF CST DVSN P.O. Box 385016 Birmingham, AL 35238-5016 POC: Tim Wyatt 205.310.6853 wyattt@vmcmail.com
33° 07.34532', - 86° 46.95146' 2021	Calera Quarry - Calera Alabama Tim Wyatt P.O. Box 996 Calera, AL. 35040 wyattt@vmcmail.com ph#205-310-6853	Vulcan Materials Co. Southern and GLF CST DVSN P.O. Box 385016 Birmingham, AL 35238-5016 POC: Tim Wyatt 205.310.6853 wyattt@vmcmail.com
<u>ARKANSAS</u>		
36° 17' 51.468"N 90° 58' 55.70"W Updated Sep 2023	Pocahontas Quarry - Take Hwy 67 north or south to the Hwy 90/115 junction west. Follow Hwy 90/115 until the two highways split, bear right to stay on Hwy 115. Stay on Hwy 115 approx two miles and turn left on Hwy 251. Proceed .1 miles and turn left onto Johnson Church Rd. The quarry is .5 miles ahead on left. Div. Capital Quarries Co. Inc, 632 Johnson Church Rd Pocahontas AR 72455	Capital Quarries Co. Inc, PO Box 105050 Jefferson City, Mo 65110 Chris W. Pitts Phone (870) 248-1212 Fax (870) 248-0532 Cell (573) 694-0797

CATEGORY I – ACCEPTABLE SOURCES

Lat/Long (Tested)	Quarry Location, Address and Telephone Number	Main Office Address and Telephone Number
34° 40' 38"N 92° 15' 38"W Updated (2020)	Granite Mountain Quarry #1 is located on east side of AR I-530 and just north of Dixon Road, AR Hwy 338 Granite Mountain Quarries P.O. Box 138 Sweet Home, AR 72164 (501) 490-1535	McGeorge Corporation P.O. Box 408 1425 Shamburger Lane Sweet Home, AR 72164 (501) 490-1456
34° 40' 38" N 92° 15' 38"W Updated (2020)	Granite Mountain Quarry #2 is located on west side of AR I-530 and just north of Dixon Road, AR Hwy 338 Granite Mountain Quarries P.O. Box 138 Sweet Home, AR 72164 (501) 490-1535	McGeorge Corporation P.O. Box 408 1425 Shamburger Lane Sweet Home, AR 72164 (501) 490-1456
34° 34' 48"N 92° 27' 59"W Updated (2020)	Granite Mountain Quarry #3 is located 3 miles south of intersection of I-30 and AR Hwy 183 and south of Bryant, AR and 1 mile east on County Rd. #2 Granite Mountain Quarries P.O. Box 886 Bryant, AR 72089	McGeorge Corporation P.O. Box 408 1425 Shamburger Lane Sweet Home, AR 72164 (501) 490-1456
34° 8'46.58"N, 93°15'34.80"W (Sep 2019)	Hollywood Quarry located off Highway 53, 3 miles north of Hollywood, Arkansas, AR in Ouachita Mountain Range.	McGeorge Contracting Co. Inc. P.O Box 408 1425 Shamburger Lane Sweet Home AR 72164 Pine Bluff, Arkansas POC: Anthony Jones anthony.jones@mcgeorgecontracting.com office: 501.490.6079 Cell: 501.353.4515

CATEGORY I – ACCEPTABLE SOURCES

Lat/Long (Tested)	Quarry Location, Address and Telephone Number	Main Office Address and Telephone Number
35.33146;- 93.34504 & 35.32713;- 93.34599 Aug 2022	River Mountain Quarry is operated by Pine Bluff Sand and Gravel Company of Pine Bluff Arkansas. The operation is on the south bank of the Arkansas River at mile 218.5 with a physical address of 3979 River Mountain Road, Delaware, AR 72835. From Delaware, AR turn off AR Hwy 22 and go north on AR Hwy 393 one mile to River Mountain Rd. Proceed West four miles to the quarry entrance road on the right (north). “Berryhill Pit”-35° 32’76.36”North/ Upper East Pit 93° 34’61.23” West “Lower East Pit”- 36° 33’15.17”North/ 93° 34’48.66” West	Pine Bluff Sand and Gravel Attn: Christopher David Abadie chris.abadie@pbsgc.com Delaware, Arkansas
<u>GEORGIA</u>		
<u>ILLINOIS</u>		
37° 28.645’North/ 88° 07.917’ West June 2022	Cave-In-Rock Quarry is located approximately 5 miles east of Cave in Rock, IL. From the flashing light on Illinois Highway 1, from the ferry across the Ohio River, head east past Cave-in-Rock State Park to intersection with next road and turn south toward river. Quarry is on right 0.25 miles from intersection. Genevieve’s Ledge	Lafarge Holcim Attn: Jodie Shepperd 1-jodi.shepperdA@lafargeholcim.com 1-ernest.walder@lafargeholcim.com 830 Three Rivers Quarry Smithland, KY 42081

CATEGORY I – ACCEPTABLE SOURCES

Lat/Long (Tested)	Quarry Location, Address and Telephone Number	Main Office Address and Telephone Number
37° 28' 47.72" N 88° 7' 32.89" W Updated (2021)	Cave-In-Rock Quarry is located approximately 2 miles east of Cave in Rock, IL. To access the quarry, take Illinois Route 1, south into Cave-in-Rock, Illinois. Go east on Golf Course Rd. and continue east on to Mine Haul Rd. for 1 mile. St. Louis Ledges 1, 2, and 3 10 Dravo Drive Cave-in-Rock, Illinois, 62919 (618) 289-3404	Lafarge Holcim One Deerfield Center 13560 Morris Road, Suite 3350 Alpharetta, GA 30004 TEL: 678.867.1309 Jodi Shepperd (270) 969-1656
37° 19' 07.42"N 89° 01' 12.36"W Updated (Sep 2019)	Shawnee Stone, LLC- Cypress Plant From Cairo IL, go to north on I-57 to exit 18, Ullin and take ramp right. At the end of ramp turn right on Co. Rd. 7 (East), Ullin Rd. (Shawnee College Rd.), and proceed 7 mi. to St. Rt. 37. Turn left on St. Rt. 37 (North) and proceed north for 3.2 mi. and the quarry is on the right hand side of the road. Bottom Ledge Ledge 20 Ledge 70 NOTE: The Cypress plant quarry should provide rock from bottom of the Lower Ledge (Mammoth Cave Group. Ste. Genevieve Formation) which should produce riprap and stone protection meeting the required requirements.	Shakespeare Aggregates, Inc. 202 West Main Street Salem, IL 62881 Tel. No. 618.548.1585 www.shakespeare-oil.com
Feb 2023	Fredonia Quarry Fredonia, KY	Lafarge Holcim Attn: Jodie Shepperd 1-jodi.shepperdA@lafargeholcim.com 1-ernest.walder@lafargeholcim.com

CATEGORY I – ACCEPTABLE SOURCES

Lat/Long (Tested)	Quarry Location, Address and Telephone Number	Main Office Address and Telephone Number
<u>KENTUCKY</u>		
37° 11' 30.62"N 88° 13' 32.64"W & 37° 11' 39.58"N 88° 13' 26.63"W Updated June (2021)	Slats Lucas Quarry - is located in Livingston County, KY, From Paducah, KY take US Hwy 60N through Smithland, KY to Salem, KY. Turn South on KY Hwy 723 for 5.4 mi to Pinkneyville, KY and turn left onto Lee Rd Quarry. Bench D, Ledge 10 Bench D, Ledge 7 712 Lee Road Pinkneyville, KY Mr. Daniel Adams Quarry Manager Mr. Colby Croft Assurance Technician (270)988.2647	Warren Paving Co. 562 Elks Lake Road P.O. Box 572 Hattiesburg, MS 39403 Chris Noble 601.544.7811 (228) 697-9005
N 37°11'36" / W 88°15'59" (2005) Updated 2021	Cumberland (Smith) Quarry is located approximately 6 miles south of Salem, KY, at Cumberland River Mile 14.5. From the intersection of US Hwy 60 and KY Hwy 723 in Salem, KY go south approximately 3.5 miles and then turn right onto Maddox Road and go approximately 2.5 miles Actively mining on 4 benches B/C bench N37 1.918', W88 15.910' D bench N37 11.889'm W88 15.827' E bench N37 11.838' W88 15.783' F bench N37 11.688 W88 15.889; Note: 11 Apr 12, Ledge 2 is gone, They are mining on Benches B C, D,E,and F.	Pine Bluff Sand and Gravel P.O. Box 7008 Pine Bluff, AR 71611-7008 (870) 534-7120 (800) 850-2300 POC: Chris Abadie Technical Advisor 318.308.5670=cell 225.922.7864 Email: chris.abadie@pbsgc.com
Nov. 2022	Grand Rivers Quarry Warsaw & Ft. Payne Formations Ledges 2-9 or B-I	Vulcan Materials Company David H. Humphrey C: 270-205-8435 O: 270-362-1214 humphreyd@vmcmail.com

CATEGORY I – ACCEPTABLE SOURCES

Lat/Long (Tested)	Quarry Location, Address and Telephone Number	Main Office Address and Telephone Number
<u>MISSOURI</u>		
37°59'29.10"N 90° 2'39.15"W Added Aug 2023	Tower Rock Stone Company Ledge 3T, 4, and 8	Tower Rock Stone Company 19829 Lower Frenchman Road Ste. Genevieve, Missouri 63670 (651)-659-9001
39° 04' 06.15"N 90° 44' 42.44"W Updated (2020)	Foley Quarry is located approximately 1.4miles north of Foley, Missouri on the west side of Old State route 79 (presently known as Lincoln County Road 925). POC: Jake Fortner 636.266.8714 jfortner@magrudercompanies.com Ledge 1 and Ledge 2	Magruder Limestone Co., Inc 255 Watson Rd. Troy, MO 63379 POC: Harold Bono Harold_bono@magrudercompanies.com
37°30.685' North, 89°30.578' West Approved Feb. 2022	Neely's Landing Quarry is located in Cape Girardeau County, Missouri, eighteen miles north of Cape Girardeau, MO along the Mississippi River. Take Highway 177 north (MO-177 N) for 7.5 miles. Turn right to remain on MO-177 N. Stay straight onto State Highway J for 1.1 miles and continue onto County Road 525 for 1.5 miles. Turn right onto Northeast Quarry Drive. Ledge 10A, 11, and 12	The Southern Stone Company, LLC Jim Provine 207-832-9628 jprovine@aggprollc.com 3861 Ambassador Caffery, Suite 175 Lafayette, LA 70503 Nick Horbenko 618-407-3753 Nick@southernstoneco.com

CATEGORY I – ACCEPTABLE SOURCES

Lat/Long (Tested)	Quarry Location, Address and Telephone Number	Main Office Address and Telephone Number
37° 26' 04.17"N 89° 38' 02.39"W Updated Oct 2022	Fruitland Quarry – Cape Girardeau County, Missouri, On I-55 starting from Cape Girardeau go North to Mile Marker 105. Get off of I-55 at the 105/Furitland exit and trun right on Hwy 61. Go northeast on Hwy 61 towards Fruitland for ¼ mile. The quarry is on the right between Rhodes 101 Convenience Store and Purcell Tire. POC: Kerry Bauman Quarry Manager Tel (cell): 573.880.0885 kerry@baserockminerals.com	Base Rock Minerals (New owner) 5154 US Highway 61 Jackson, MO 63755 POC: Dwayne Holst Aggregates Sales Tel (cell): 573.579.1074 dwayneh@baserockminerals.com
37° 54' 05.76"N 90° 31' 29.38"W Updated Oct 2022	Bonne Terre Quarry – St. Francois Country, MO Starting in Farmington MO at the intersection of Hwy 67 and Hwy 32. Take Hwy 67 north about 8.0 miles to Desloge. Take the Desloge exit onto Bus 67/North Desloge Rd. Go about ¼ mile to first stop light and turn north onto State Drive/Votech Rd. The quarry extrace is on the west side of Votech Rd. just past the cemetery.	Base Rock Minerals (New owner) 6801 Votech Road Bonne Terre, Mo 63628 POC: Dwayne Holst Aggregates Sales Tel (cell): 573.579.1074 dwayneh@baserockminerals.com POC: Kerry Bauman Quarry Manager Tel (cell): 573.880.0885 kerry@baserockminerals.com
37° 15' 57.96"N 89° 33' 24.00"W Updated March 2019	Cape Girardeau Quarry – is located on the Northeast corner of MO-72 and South Sprigg St. East of I-55, exit no. 93. <u>LEDGE 3-4 ONLY</u> Southeast Missouri Stone Co. 3155 Sprigg St. Cape Girardeau, MO 63702 (573) 986-9516	Delta Companies, Inc. - Corporate Office 114 S Silver Springs Rd Cape Girardeau, MO 63701 Phone: 573-334-5261 Fax: 573-986-9511
37.853634o N 89.990964 o W Updated 2025	FISCHER QUARRY AND HAULING 25501 STATE ROUTE Z ST. MARY, MISSOURI Salem Formation - Ledges 21-25	Fischer Quarry & Hauling LLC Koreen Bassham 573-543-5366 PO Box 235 25501 SSR-Z (573) 543-5366

CATEGORY I – ACCEPTABLE SOURCES

Lat/Long (Tested)	Quarry Location, Address and Telephone Number	Main Office Address and Telephone Number
38.333 -90.3778 Added Feb 2023	Simpson Barnhart Quarry 750 Sulphur Springs Road Barnhart, MO	J.C. Webb JCWebb@simpsonmaterials.com 314-565-3420
Added August 2023	Brickeys Quarry <i>Kimmswick, Plattin, and Burlington</i> Bloomsdale, MO	Mike Pingel
Oct 2023 37° 20' 50.13"N 89° 28' 6.35"W	Grays Point Quarry is located approximately 1.7 miles east of Southeast Missouri River Port Authority along the south side of Mississippi River in Scott County, Missouri in SW, NE, SW, Section 23, T.30N, R.14E., Thebes & 7.5-minute Illinois-Missouri Quadrangle with physical address -528 Tower Rock Road Scott City, MO 63780. Kimmswick and Plattin Ledges (Ledges 1- 30)	Gray's Point Stone and Materials, LLC Kyle Carrick Cell: 573-587-8564 Email: kyle.carrick@GraysPointStone.com
<u>OHIO</u>		
<u>HONDURAS, CENTRAL AMERICA</u>		
<u>MEXICO, STATE OF VERACRUZ</u>		
19.524296 N, 96.426432 W Added September 2019	The quarry is located at 19.524296o N, 96.426432 o W, in the State of Veracruz, Mexico approximately 61 kilometers north and west of the Veracruz International Airport.	Wayne LeBaron, Alamo Construction 15088 Rufus White Road, Prairieville, LA 70769 Telephone 225.362.8997 wlebaron83@gmail.com

RECORDING SURVEYS FOR
CROSS SECTIONS

RECORDING SURVEYS FOR CROSS SECTIONS

I. Before taking cross sections:

A. If the contract drawings contain a location with designated X & Y coordinates, then all shots for all surveys for that contract must have coordinates that conform to the designated coordinates.

B. If the contract drawings do not contain a location with designated X & Y coordinates, then only one location within the jobsite will be assumed to have an X & Y coordinates of 10000 & 10000 or of 20000 & 20000.

C. All permanent and temporary benchmarks will be given X & Y coordinates based on the designated location or the one assumed location. A list of benchmarks, elevations & coordinates must be sent to the affected area office within 2 days after having visited the site for the first time.

D. Cross sections should be taken in ascending order of center line stations. A mixture of center line and baseline stations will not be permitted.

II. Starting from a known point:

A. The survey for cross sections must be started from a point where the elevation, X coordinate, and Y coordinate are known. A benchmark where coordinates had been previously assigned is a good location to start from.

III. Input for Regular Land Survey Cross Sections:

A. First Line - The Date:

1. In setting up the instrument so that it can be placed in a location where a maximum number of shots can be obtained, some shots will be taken which are not for cross sections. At any rate, the first line will have a remark which will have the date. The remark will have the letter "D" followed by two numbers for the day of the month, then two numbers for the number of the month, and then two numbers for the last two numbers of the year.

2. Examples:

D010789	(the first day of July of 1989)
D150789	(the 15th day of July of 1989)
D080890	(the 8th day of August of 1990)

B. Second Line - File Name:

The second line will have a remark containing the file name. The file name for the work to be done will be alpha-numeric and will contain the following identifiers:

1. The letter "O", "F", "I" or "P" depending upon whether the survey is for originals, finals, intermediate check sections or profiles.

2. The contract number.

Note that the contract number contains 7 characters but we will use only 6. The fourth character from the right side of the contract number is always a zero and will not be used.

Example:

For contract No. 89-C-0064 use 89C064
For contract No. 89-C-0189 use 89C189
For contract No. 88-C-0104 use 88C104

3. A letter.

a. This letter will be used sequentially beginning with the letter "A". The letter will indicate that there is a time break or a change in type of survey being done from the previous surveys done on the same contract.

b. Example of use of the letter after the contract number.

If on the first day at one particular job some cross sections are taken for originals at one end of the job and then some other cross sections are taken for originals at the other end of the job, then the first set of cross sections will have a letter "A" and the second set will have a letter of "B". If the next day was spent only on getting more regular land survey cross sections for originals, then the letter will be "C". If on the third day more regular originals were taken and some regular finals also were taken, then the letters will be "D" and "E". If land survey cross section extensions (to reg. land survey cross sec.) taken for originals, and regular land survey cross sections taken for originals, and regular land survey cross sections taken for finals were done on the 4th day then the letters will be "F", "G", and "H".

4. A period.

5. The file name extension.

a. The file name extension must consist of 3 letters. The first letter or the first two letters indicate the type of cross section survey taken.

b. There are 14 possible types of surveys as follows:

1. Land survey cross sections taken for originals.

2. Land survey cross section extensions (to reg. land survey cross sec.) taken for originals.

3. Land survey cross section extensions (to soundings) taken for originals.

4. Land survey cross sections taken for finals.

5. Land survey cross section extensions (to reg. land survey cross sec.) taken for finals.

6. Land survey cross section extensions (to soundings) taken for finals.

7. Soundings taken for originals.

8. Soundings extensions (to reg. land survey cross sec.) taken for originals.

9. Soundings extensions (to soundings) taken for originals.

10. Soundings taken for finals.

11. Soundings extensions (to reg. land survey cross sec.) taken for finals.

12. Soundings extensions (to soundings) taken for finals.

13. Intermediate check sections

14. Profiles

c. The last letter of the extension is only a filler and will be the letter "A", except in following cases:

1. If a resubmission is required on any file, the resubmission will have the same letter after the contract no. and the last letter of the extension will be the letter "X". Example: 089C064D.LAA and 089C064D.LAX

2. When the letter after the contract no. is a "Z", the next file must start the alphabet again. When the alphabet is started again, then the last letter of the extension must change. Example: 089C064Z.LAA and 089C064A.LAB.

d. Examples of file name extensions:

<u>Type of Survey Work Done</u>	<u>File Name Extension</u>
Land survey cross sections	LAA
Land survey cross section extensions (to reg. land survey cross sec.)	LLA
Land survey cross section extensions (to soundings)	LSA
Soundings	SAA
Soundings extensions (to reg. land survey cross sec.)	SLA
Soundings extensions (to soundings)	SSA
Profiles	PAA
Land survey cross sections (after 1st alphabet is exhausted)	LAB
Land survey cross sections resubmission	LAX

6. Examples of complete file names:

089C064A.LAA
089C064B.LAA

O89C064C.LAA
O89C064D.LAA
F89C064E.LAA
O89C064F.LAA
O89C064G.LLA
F89C064H.LAA
O89C064B.LAX
O89C064A.LAB
O89C073A.LAA
F89C073B.LLA
F89C073C.SLA
O89C098A.SAA

7. Each file shall contain continuous cross sections. If cross sections are not continuous, a new file will be used for the 2nd continuous set of cross sections.

C. Third Line - Party Chief's Name:

A third line will be identified with the party chief's name.

D. Fourth Line - Extra Job Identification

The fourth line will have a remark that contains additional information necessary for this job. This might be such information as "Levee A-West" which means that survey was for levee A on the West Side. (Since this same contract also might have Levee B or an East Side, then this additional information is necessary).

E. Fifth Line - Identification of known point taking off from:

The fifth line will have a remark identifying the point that will be used to start the survey. The first letter of the remark will be a "T" or a "P" depending on whether the benchmark is a temporary or a permanent benchmark. The second, third and fourth characters will be "BM#". The rest of the remark will be the number of the benchmark. For example: TBM#5, PBM#3

F. Sixth Line - Elevation of known point:

The sixth line will have a remark identifying the elevation of the benchmark used to start the survey. The first character of the remark will be the letter "E" followed by the correct elevation. For Example: E10.463, E17.125.

G. Other shots not for Cross Sections:

In setting up the instrument in a location in which a maximum number of shots can be taken, more than one shot may be taken. The first shot will have the date, and the second shot will have the contract number as explained above. A sixth shot will identify the elevation of the benchmark. Any other shots not necessary for taking cross sections will be identified with the remark "NA".

H. Taking Cross Sections:

1. First Shot:

a. Immediately after taking the first shot in the first cross section, the side from the center line and the station number will be entered in the remark column.

b. There are only two sides from the center line -- land side and flood side. Irrespective of the actual terrain features at the jobsite and for survey purposes, landside and floodside is determined as follows: As the stations increase, landside will be on the left side. As the stations increase, floodside will be on the right side.

c. If in taking a cross section, the rodman with the reflector starts on the land side, then the station number will be preceded with a letter "L". If in taking a cross section, the rodman with the reflector starts on the flood side, then the station number will be preceded with a letter "F".

d. Examples: The 1st shot in a cross section will have a remark such as:

F1+00
L1+00
F301+62
L59+63.73

2. Every cross section taken must have a shot at the center line. This shot will be identified with the remark "CL". The letters "CL" are used at the beginning of a remark to denote the center line of the cross section being taken. The letters CL can also be used in the middle or the end of a remark to denote the center line of a ramp, etc. in the cross section being taken. (In such a case the remark could be "ramp CL" or "road CL" or "pipeline CL", etc.)

3. The last shot for a cross section will have a remark of "ES" for end of station.

4. The last shot for the last continuous cross section taken will have a remark of "EJ" for end of job.

5. Thus, if a group of cross sections are taken continuously, the first shot for the first station will have a remark of "L" or "F" and the station number. The last shot taken will have a remark of "EJ".

6. Cross sections are required at all PC, PI and PT points throughout the job. These cross sections will have a remark after the station number identifying the cross section. For example, the first shot will have a remark such as:

F1+00 PC
L1+00 PT

I. Moving the Instrument:

1. If the instrument is then moved because it is not located where it can take more cross sections, then the shots taken while moving will have a remark of "NA".

2. Upon resuming taking cross sections, the first shot will again have the remark showing either "L" or "F" and the station number.

J. Tying in to an established bench mark:

1. General:

At the end of the day or at the end of the job, the surveyor should tie in to an established bench mark (either temporary or permanent) to prove that the elevations that he had been carrying were correct.

2. Remarks for shots used going to a bench mark:

After the last "EJ" remark for that job or for that day, readings will be taken which are not for cross sections but are for the purpose of moving the reflector or the instrument toward the bench mark. Except for the last two shots, the rest of these shots will have a remark of "NA".

3. Remark for next to the last shot:

The remark for the next to the last shot will identify the bench mark that the instrument man is tying to. The first letter of the remark will be a "T" or a "P" depending upon whether the bench mark is a temporary or a permanent bench mark. The second, third and fourth characters will be "BM#". The rest of the remark will be the number of the bench mark.

4. Example remarks for next to last shots:

TBM#5
PBM#1
TBM#7
PBM#2

5. Remark for the last shot:

The last shot will be taken on the bench mark. It will have a remark that gives the correct elevation of the bench mark. The first character of the remark will be the letter "E" followed by the correct elevation.

6. Example remarks for last shot:

E54.734
E10.345
E37.433

IV. Input for Land Survey Cross Section Extensions:

A. General:

Sometimes regular land survey cross sections are taken and the survey did not extend far enough to the sides. In such cases, a second survey must be done of the ground that was not included originally. The second survey is an extension of the original survey. For the most part, extensions are taken like a regular land survey cross section.

1. First Line - The Date.

This line is explained in paragraph III.A.

2. Second Line - File Name.

This line is explained in paragraph III.B.

3. Third Line - Party Chief's Name.

This line is explained in paragraph III.C.

4. Fourth Line - Extra Job Identification.

This line is explained in paragraph III.D.

5. Fifth Line - Identification of known point taken off from.

This line is explained in paragraph III.E.

6. Sixth Line - Elevation of known point.

This line is explained in paragraph III.F.

7. Seventh Line - Shot at center line and station no.

The first shot is taken at the center line of the cross section to be extended. Either the letter F or L and the station number are entered in the remarks column.

8. Other lines.

Other lines contain the rest of the shots taken at the extended area of the cross section.

V. Sounding Extensions to a regular Land Survey (Minor Hydrographic Soundings, or Lead-Line Soundings).

A. General.

Sometimes regular land survey cross sections and the survey did not extend far enough to the sides. In such cases, a second survey must be done. However, the second survey will consist of lead-line soundings of a small body of water. The second survey is an extension of the original survey.

B. Offset Point.

An offset point must be established at or near the water's edge for every cross section to be extended. The distance from the center line of the cross section to the offset point must be measured and noted so that it can be used later.

C. Taking of the Extension.

Taking of these soundings will be as stipulated below:

1. First Line - The Date.

This line is explained in paragraph III.A.

2. Second Line - File Name.

This line is explained in paragraph III.B.

3. Third Line - Party Chief's Name.

This line is explained in paragraph III.C.

4. Fourth Line - Extra Job Identification.

This line is explained in paragraph III.D.

5. Fifth Line - Gage reading and letters "GA".

The reduced gage reading is inserted in column 2 of line 5. The reading is identified in the remarks column with the remark "GA". The letters "GA" stand for "reduced gage reading". These letters must be at the beginning of the remark. For example, the remark could be "GA" or "GA READ RED". This is the gage reading after it has been reduced. It is the real gage reading in terms of M.S.L. or M.L.G. or whatever is being used in the contract. The reduced gage reading is the amount that must be subtracted from each shot in order to have reduced elevations for every point in the cross section. The gage should be checked for every section extended. If the gage changes, then a similar line should be inserted before the shot that has the station number.

6. Sixth Line - Offset Point Distance and Station No.

The distance from the center line to the offset point is inserted in column 2 of line 6. The station Number is inserted in the remarks column of line 6.

7. Other Lines.

The first column of the other lines contains the distance from the offset point to the point in question. The second column of the other lines contains the elevation of the point in question. The third column of the other lines contains zeros or any number. The computer will not pay attention to the third column.

VI. Soundings (Major Hydrographic Soundings)

A. General.

This type of soundings cannot be taken with a total station and a data collector or with a data collector. This type of soundings are taken with a combination of transponder stations emitting location signals and a fathometer. In recent times, these soundings are taken with a combination of GPS (Global Positioning System) and a type of fathometer. The results are given in X, Y, and Z values.

B. Taking of Soundings.

The soundings are recorded as follows:

1. First Line - The Date.

This line is explained in paragraph III.A.

2. Second Line - File Name.

This line is explained in paragraph III.B.

3. Third Line - Party Chief's Name.

This line is explained in paragraph III.C.

4. Fourth Line - Extra Job Identification.

This line contains any number in the first three columns. The remarks column will contain additional information necessary for this job. For example, it might contain the location of the job and whether it is the 3rd west pass or the second east pass, etc. A remark like "SWP WP-03" might stand for South West Pass, third west pass of the dredge.

5. Fifth Line - Extra Job Identification.

This line contains any number in the first three columns. The remarks column will contain additional information. For example, it might contain the length of the required swing of the dredge.

6. Sixth Line - Extra job identification.

This line contains any number in the first three columns. The remarks column will contain additional information. For example, it might contain the length of the actual swing of the dredge.

7. Seventh Line - Extra job identification.

The line contains any number in the first three columns. The remarks column will contain additional information necessary for this job. For example, it might contain the mid depth of the dredge.

8. Eighth Line - Extra job identification.

This line contains any number in the first three columns. The remarks column will contain additional information necessary for this job. For example, it might contain the unreduced gage reading.

9. Ninth Line - Gage readings and letters "GA".

This line contains any number in the first two columns. The reduced gage reading is inserted in third column and the letters "GA" are inserted in the remarks column. The letters "GA" stand for "reduced gage reading". These letters must be right after the comma. For example, the remark could be "GA", or "GA.REDUCED", or "GA.READ RED". This is the gage reading after it has been reduced. It is the real gage reading in terms of M.S.L. or M.L.G. or whatever is being used in the contract. (The reduced gage reading is the amount which must be subtracted from each shot in order to have reduced elevations for every point in the cross section.)

10. Tenth Line - First shot and station number.

This line contains the first shot for the cross section. Either the letter F or O and the station number are entered in the remarks column.

11. Other Lines - Other lines are like the lines in a regular land survey. The letters "CL" must be entered in the remarks column for the shot in the center line. The end of the section must be remarked with "ES" and the end of the last station taken in that survey must be remarked with "EJ".

VII. Output:

A. Format:

Every line must have at least the X, Y, and Z coordinates of every point. Some lines will be required to have a remark. Thus some lines will have 3 items and some lines will have 4 items.

B. When to send in data:

The survey data should be sent every day that survey work is done. At the end of the day, the party chief is responsible for transmitting the information.

SAMPLE FORMAT FOR DATA COLLECTOR OUTPUT

EXAMPLE OF REGULAR LAND SURVEY CROSS SECTIONS

1000.0000,	1000.0000,	1000.0000,D191295
1000.0000,	1000.0000,	1000.0000,O95C102C.LAA
1000.0000,	1000.0000,	1000.0000,G.LEMOINE
1000.0000,	1000.0000,	1000.0000,LEVEE A-WEST
1000.0000,	1000.0000,	1000.0000,TBM202+04.27
1000.0000,	1000.0000,	1000.0000,E11.33
36358.1855,	25654.9464,	-1.482,L191+85
36378.5365,	25673.0438,	-1.110,
36399.2325,	25690.6271,	0.687,
36418.8397,	25706.3318,	3.032,
36438.3191,	25719.2876,	6.463,RMP CRN
36452.3565,	25730.1831,	8.359,RMP CL
36465.8439,	25741.3032,	9.146,RMP CRN
36474.9891,	25751.1338,	9.422,
36479.0097,	25757.0631,	10.635,
36482.2797,	25760.6425,	11.258,CL
36486.3574,	25764.9339,	11.253,
36502.2576,	25779.7435,	8.663,
36516.2921,	25794.7149,	7.288,
36532.4536,	25809.4293,	5.505,
36545.0617,	25819.8074,	3.810,
36552.7482,	25826.9949,	3.345,ES
36562.3752,	25813.7499,	3.347,F192+00
36545.8606,	25799.6176,	4.955,
36529.2400,	25784.1861,	6.906,
36512.7904,	25769.6663,	8.633,
36500.9466,	25756.9077,	11.512,RMP CRN
36496.1462,	25752.8108,	11.882,
36492.8886,	25749.9533,	11.906,CL
36487.1553,	25744.3274,	11.560,RMP CL
36478.6873,	25733.9126,	10.193,RMP CRN
36466.5709,	25720.0180,	7.233,
36455.0153,	25707.7507,	5.680,
36436.1934,	25687.1011,	2.420,
36419.0729,	25667.1542,	0.335,
36400.8595,	25646.5162,	-1.222,
36384.6750,	25626.8703,	-1.646,ES
36397.1526,	25614.0217,	-1.413,L192+15
36415.8850,	25635.2876,	-0.901,
36433.5016,	25654.1330,	0.539,

36452.6424,	25676.0826,	2.773,
36470.4934,	25696.5641,	6.252,
36487.3775,	25717.6430,	8.029,
36500.0236,	25734.7364,	11.337,
36503.6627,	25739.2314,	11.615,CL
36507.0302,	25743.6353,	11.615,
36513.0782,	25751.6205,	11.254,RMP CRN
36527.8794,	25765.3302,	9.341,RMP CL
36544.5164,	25780.2843,	7.074,RMP CRN
36560.0152,	25793.9867,	4.401,
36570.7228,	25803.7558,	3.388,EJ

EXAMPLE OF LAND EXTENSIONS TO REGULAR LAND SURVEY

COORD 110,	1,0	
5245.19736107,	5000.00000000,	52.17241,D150689
5251.89347869,	5125.90878789,	28.17839,O89C052.LLA
5251.89347869,	5125.90878789,	28.17839,BURNS
5251.89347869,	5125.90878789,	28.17839,JOB INFO
5251.89347869,	5125.90878789,	25.00000,TBM#3
5251.89347869,	5125.90878789,	25.00000,E25.000
5251.02286571,	5143.09378000,	29.13236,F0+00
5251.91238765,	5164.00099910,	28.34230,
5252.93476740,	5190.00994490,	27.17382,
5253.34157670,	5200.00997830,	29.43786,
5254.35878835,	5225.00789990,	29.50780,ES
5145.13289435,	5000.04589390,	52.71820,F1+00
5150.93445890,	4839.38323990,	29.34372,
5153.61078347,	4823.74829083,	27.69857,
5158.84334598,	4793.18189570,	28.54788,
5163.61389998,	4765.31826397,	29.55386,EJ
5225.34578533,	5225.89634990,	52.34589,NA
5323.12903488,	4880.12903478,	32.89001,PBM#1
5476.23893451,	4798.89345788,	27.10893,E27.109

SAMPLE FORMAT FOR DATA COLLECTOR OUTPUT

EXAMPLE OF SOUNDING EXTENSION TO A REGULAR LAND SURVEY
(LEAD-LINE SOUNDINGS) AND EXAMPLE OF SMALL STREAM SOUNDINGS

1000.00000000,	1000.00000000,	1000.00000000,D150793
1000.00000000,	1000.00000000,	1000.00000000,O93C078A.SAA
1000.00000000,	1000.00000000,	1000.00000000,B.LEMOINE
1000.00000000,	1000.00000000,	1000.00000000,EXTENSION
1000.00000000,	7.40000000,	-9999.00000000,GA MLG
0.00010000,	320.00000000,	-9999.00000000,F4+00
20.00000000,	3.80000000,	-9999.00000000,
40.00000000,	6.00000000,	-9999.00000000,
60.00000000,	10.80000000,	-9999.00000000,
80.00000000,	21.80000000,	-9999.00000000,
100.00000000,	24.20000000,	-9999.00000000,
120.00000000,	24.90000000,	-9999.00000000,
140.00000000,	21.30000000,	-9999.00000000,
160.00000000,	17.00000000,	-9999.00000000,
180.00000000,	10.60000000,	-9999.00000000,
200.00000000,	10.90000000,	-9999.00000000,ES
1000.00000000,	6.80000000,	-9999.00000000,GA
0.00010000,	320.00000000,	-9999.00000000,F6+00
40.00000000,	7.00000000,	-9999.00000000,
60.00000000,	10.00000000,	-9999.00000000,
80.00000000,	21.90000000,	-9999.00000000,
100.00000000,	24.50000000,	-9999.00000000,
120.00000000,	24.90000000,	-9999.00000000,
140.00000000,	22.00000000,	-9999.00000000,
160.00000000,	20.00000000,	-9999.00000000,
180.00000000,	19.00000000,	-9999.00000000,
200.00000000,	13.30000000,	-9999.00000000,
220.00000000,	10.60000000,	-9999.00000000,EJ

EXAMPLE OF MAJOR SOUNDINGS

(Major hydrographic survey, such as soundings done at the head of passes of the Mississippi River)

0.00,	0.00,	0.00,D240696
0.00,	0.00,	0.00,O96C0450.SAA
0.00,	0.00,	0.00,G.COWICK
0.00,	0.00,	0.00,SWP WP-03
0.00,	0.00,	250.00,REQ'ED SWING
0.00,	0.00,	250.00,ACTUAL SWING
0.00,	0.00,	-47.00,MD
0.00,	0.00,	3.20,ACTUAL GA READING
0.00,	0.00,	0.00,GA READ REDUCED
2615733.40,	102341.30,	-50.0,L1004.00
2615723.60,	102348.70,	-48.8
2615711.10,	102358.70,	-48.4
2615698.80,	102369.30,	-48.3
2615685.70,	102379.30,	-49.7
2615676.30,	102385.00,	-49.3
2615667.00,	102391.80,	-48.2
2615660.19,	102394.71,	-48.5,CL
2615657.20,	102398.00,	-48.7
2615647.10,	102404.40,	-49.2
2615637.10,	102411.10,	-48.4
2615627.00,	102417.40,	-49.0
2615615.10,	102425.00,	-49.6
2615606.00,	102431.60,	-48.5
2615596.80,	102437.90,	-48.1
2615584.20,	102447.90,	-48.7
2615574.70,	102454.40,	-49.5
2615565.10,	102460.90,	-49.6
2615553.40,	102467.70,	-47.5
2615543.00,	102473.70,	-47.7
2615532.30,	102479.20,	-48.4
2615521.50,	102484.80,	-47.4
2615510.70,	102490.10,	-47.3
2615499.70,	102495.60,	-47.5
2615488.70,	102501.20,	-47.5
2615477.00,	102506.80,	-46.5
2615466.10,	102512.90,	-46.2
2615453.70,	102519.90,	-46.7
2615433.90,	102526.10,	-46.9
2615433.90,	102532.30,	-46.4
2615420.20,	102541.60,	-45.9
2615410.00,	102548.00,	-45.6
2615398.60,	102554.50,	-45.2
2615388.40,	102561.00,	-44.9
2615378.10,	102567.10,	-44.5

2615367.90,	102573.50,	-44.3
2615357.70,	102579.80,	-44.1
2615347.10,	102586.30,	-43.8
2615336.30,	102592.20,	-43.2
2615322.70,	102598.90,	-39.8
2615311.90,	102605.30,	-35.7
2615301.30,	102611.70,	-35.1
2615291.90,	102618.40,	-33.2
2615281.50,	102625.10,	-31.2
2615271.30,	102631.90,	-31.4
2615261.20,	102638.60,	-28.7
2615251.60,	102645.40,	-29.1
2615241.50,	102652.40,	-27.2
2615228.20,	102661.00,	-26.9
2615218.70,	102668.50,	-26.7
2615208.90,	102675.80,	-25.7
2615195.20,	102686.60,	-24.6
2615184.60,	102693.20,	-24.0
2615175.10,	102699.50,	-23.3, EJ

SURVEY DATA SAMPLE

NOTE: LAKEFRONT REACH 3 - 4TH LIFT PHASE-11 JEFFERSON PARISH

LAKE PONTCHARTRAIN LA. AND VICINITY

CROSS SECTIONS C/L STATION 216+00 TO 220+00

1000.000,	1000.000,	100.000,D220413
1000.000,	1000.000,	100.000,O12C054B.LAA
1000.000,	1000.000,	100.000,JOE SMITH
1000.000,	1000.000,	100.000,Reach 3 CROSS SECTIONS
1000.000,	1000.000,	100.000,PBM ALCO 319
1000.000,	1000.000,	100.000,Elev 4.31
559094.930,	3634274.577,	-0.081,F216+00
559087.108,	3634272.199,	0.933,
559077.973,	3634269.296,	1.723,FST
559073.983,	3634267.957,	2.291,
559071.066,	3634267.009,	3.624,Ramp
559061.004,	3634262.356,	3.891,Ramp CL
559059.542,	3634261.605,	4.103,Ramp
559047.821,	3634255.716,	4.951,
559034.823,	3634249.187,	5.064,
559021.870,	3634242.265,	5.743,
559010.277,	3634236.944,	6.443,
559000.544,	3634232.371,	7.402,
558988.133,	3634225.911,	8.354,
558984.002,	3634223.336,	8.621,
558984.601,	3634222.054,	8.643,
558974.531,	3634216.998,	10.253,
558962.167,	3634211.175,	13.695,
558950.181,	3634206.085,	16.789,FSC
558947.742,	3634204.534,	17.015,CL
558945.882,	3634203.631,	16.885,BL
558942.790,	3634202.677,	16.743,LSC
558940.136,	3634201.538,	16.788,
558932.451,	3634197.931,	16.276,
558931.098,	3634197.585,	15.907,
558923.395,	3634192.908,	11.599,
558914.872,	3634188.088,	7.059,EOA
558903.853,	3634184.037,	3.592,
558890.230,	3634177.742,	2.454,
558884.857,	3634176.123,	1.474,
558877.802,	3634173.233,	-0.948,
558868.502,	3634169.267,	-2.070,Ditch CL
558857.658,	3634164.437,	-1.558,
558845.393,	3634159.188,	-1.205,
558836.608,	3634155.744,	-0.095,
558833.653,	3634151.258,	-0.859,
558829.590,	3634149.842,	-1.330,ES
558786.228,	3634239.431,	-1.841,L217+00
558795.462,	3634243.437,	-0.214,
558805.287,	3634247.646,	-0.844,
558819.755,	3634253.905,	-1.253,
558827.430,	3634257.360,	-1.557,Ditch CL
558836.060,	3634261.052,	-0.825,
558844.087,	3634264.993,	1.775,
558857.865,	3634271.976,	2.835,
558866.037,	3634275.846,	3.774,LST
558876.157,	3634281.321,	7.432,
558886.585,	3634286.302,	11.810,
558898.872,	3634292.092,	16.906,
558901.228,	3634293.235,	17.398,LSC

558902.862,	3634294.028,	17.834,BL
558904.700,	3634294.864,	17.880,CL
558910.311,	3634297.237,	17.906,EOA
558912.172,	3634297.960,	17.480,FSC
558920.664,	3634302.758,	13.640,
558931.051,	3634308.249,	10.575,
558938.828,	3634312.111,	9.081,FST
558950.862,	3634318.131,	8.080,
558964.847,	3634325.090,	7.130,
558978.569,	3634331.922,	5.994,
558992.788,	3634339.087,	5.324,
559005.154,	3634345.570,	4.620,
559017.046,	3634351.253,	3.848,
559018.803,	3634352.372,	3.625,EOA
559029.329,	3634357.562,	3.467,EOA
559032.581,	3634359.156,	2.212,
559041.196,	3634363.767,	1.615,
559049.313,	3634367.474,	1.491,
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558881.707,	3634394.374,	14.099,EOA
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558936.191,	3634527.977,	3.948,EOA
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558838.995,	3634591.933,	7.090,
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558812.687,	3634580.697,	8.930,
558808.521,	3634578.868,	9.420,FST
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558786.622,	3634570.065,	14.962,
558778.510,	3634567.155,	17.058,FSC
558776.470,	3634566.258,	17.146,CL
558774.498,	3634565.292,	17.199,BL
558771.339,	3634563.757,	16.985,LSC
558760.204,	3634558.759,	12.582,
558748.715,	3634553.550,	7.901,
558742.184,	3634551.073,	5.460,
558733.642,	3634547.122,	2.997,LST
558720.735,	3634541.090,	1.881,
558708.601,	3634535.530,	1.587,
558702.342,	3634533.186,	1.317,
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Sample
EM Format File

```

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#H02 11/06/06
#H03 3
#H04 NAD83
#H05 07-002
#H06 FT
#H07 1702
#H08 PLAQUEMINES PARISH LA
#H09 CHUSTZ SURVEYING INC.
#H12 1.0
#H13 PLAQUEMINES PARISH
#H14 NEW ORLEANS EAST SE CHALMETTE SW BERTRANDVILLE NE & NW
#H15 W912P8-06-D-0050
#H20 WEST BANK & VICINITY ALGIERS CANAL HURRICANE PROTECTION
#H21 LEVEES HERO TO BELLE CHASSE HWY (EAST SIDE) & BELLE CHASSE
#H22 HWY TO ALGIERS LOCK (WEST SIDE)
;
;
;-----VERTICAL CONTROL INFORMATION-----
;
;
#V01 BEL 1
#V02 -3.42
#V03 2004.65
#V04 NAVD88
#V05 GOOD
#V06 -3.42
#V07 494282.40,3697937.71
#V20 MONUMENT IS A 3/4" IRON ROD SET FLUSH WITH THE GROUND. IT IS
#V21 LOCATED 5.9 FT SE OF A RAILROAD IRON 25 FT NE OF ANOTHER
#V22 RAILROAD IRON AND 116 FT EAST OF A GATE POST AT THE PUMP
#V23 STATION AREA.
#V24 PROJECT BENCHMARK POINTS ARE BEL1 AND V375 SEE
#V25 GPS REPORT FOR DETAILS.
;
;
#V01 770+58.11 (SETTLEMENT PLUG)
#V02 19.21
#V03 2004.65
#V04 NAVD88
#V05 GOOD
#V06 19.21
#V07 516940.13,3711674.20
#V20 MONUMENT IS A SETTLEMENT PLUG IN CONCRETE. IT IS LOCATED 9.4 FT
#V21 EAST NE OF THE EAST EDGE OF THE METAL STEPS 13.55 FT NE OF THE
#V22 EAST CORNER OF THE LOCK WALL AND 17.3 FT NW OF THE NE CORNER
#V23 OF THE LOCK HOUSE.
;
;
;-----TEMPORARY BENCHMARK INFORMATION-----
;
;
#T01 TBM AC-1
#T02 7.96
#T05 GOOD
#T06 7.96
#T10 MONUMENT IS A STANDARD COE BRASS CAP RECESSED 0.5' BELOW GROUND

```

#T11 STAMPED "AC-1 07002C". IT IS LOCATED +/-500 FT. SW OF THE
#T12 CONCRETE BRIDGE OVER THE CANAL AT GENERAL DE GAULLE RD 69.3 FT
#T13 NW OF THE WATERS EDGE OF THE CANAL 17.6 FT NE OF THE SOUTHERN
#T14 GATE POST OF AN ENTRANCE GATE AND 17.8 FT NE OF THE NORTHERN
#T15 MOST GATE POST.

;
;

#T01 TBM AC-2

#T02 8.50

#T05 GOOD

#T06 8.50

#T07 482914.44,3683055.07

#T10 MONUMENT IS A STANDARD COE BRASS CAP ON REBAR STAMPED "AC2

#T11 07002C". IT IS LOCATED 86.4 FT WNW OF THE AIRBASE FENCELINE

#T12 1.6 MILES SW OF THE PUMP STATION AT THE CROSSING AND 0.17

#T13 MILES NE OF THE EDGE OF THE ASPHALT ROAD AT THE AIRBASE BOAT

#T14 RAMP.

;
;

#T01 TBM AC-3

#T02 8.86

#T05 GOOD

#T06 8.86

#T07 482917.55,3683035.15

#T10 MONUMENT IS A STANDARD COE BRASS CAP ON REBAR STAMPED "AC3

#T11 07002C". IT IS LOCATED 334 FT NW OF THE NORTHERNMOST GATE POST

#T12 ON THE ENTRANCE GATE TO THE LEVEE 336 FT NNW OF THE SOUTHERN

#T13 POST 0.2 MILES SE OF A POWER LINE CROSSING AND 1 MILE SE OF

#T14 A CHAIN LINE FENCE GATE CROSSING THE LEVEE.

;
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;
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;

#H02 11/06/06

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;

#H10 070003

#H11 53

;
;
;
;
;

-----FIELD PERSONNEL-----

;
;

#C01 J. GREMILLION

#C02 J. MASSE

#C03 K. MANUEL

#C03 S. HOLMES

;
;

-----EQUIPMENT-----

;
;

#E01 TOTAL STATION

#E02 46587793

#E03 TCR-305

;
;

#E01 LEICA

#E02 235668975

```

#E03 GT-3
;
;-----
;
#H02 11/02/06
;
;
#H10 070003
#H11 19
;
;
;-----GAGE INFORMATION-----
;
;
#G02 GAGE AC-3
#G03 0.50
#G04 12:55
#G07 483479.75,3683384.21
#G10 TEMPORARY STAKE GAGE SET AT AC-3
;
;
;----- CROSS-SECTION -----
;
;
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#X03 10:53
#X04 0.80
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5557,494419.34,3697455.62,8.17,CLL
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5561,494524.13,3697505.97,8.66,CLL

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5565, 494664.84, 3697577.20, 8.93, CLL
5566, 494704.71, 3697597.16, 8.94, CLL
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5570, 494861.50, 3697676.57, 8.56, CLL
5571, 494898.96, 3697696.31, 8.77, CLL
5572, 494921.54, 3697707.77, 6.95, CLL
5573, 494932.32, 3697709.54, 7.94, SHP
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5576, 494957.71, 3697722.81, 6.43, CLL
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5578, 494987.62, 3697740.41, 5.77, CLL
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5580, 495024.72, 3697759.96, 5.43, ESH
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2830, 483133.88, 3683032.85, 2.46, PIR
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2835, 483183.05, 3683219.30, 9.36, FL
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SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 32 01.00 12

PROJECT SCHEDULE

PART 1 GENERAL

- 1.1 MEASUREMENT AND PAYMENT
- 1.2 REFERENCES
- 1.3 SUBMITTALS
- 1.4 PROJECT SCHEDULER QUALIFICATIONS

PART 2 PRODUCTS

- 2.1 SOFTWARE
 - 2.1.1 Government Default Software
 - 2.1.2 Contractor Software
 - 2.1.2.1 Primavera
 - 2.1.2.2 Other Than Primavera

PART 3 EXECUTION

- 3.1 GENERAL REQUIREMENTS
- 3.2 BASIS FOR PAYMENT AND COST LOADING
 - 3.2.1 Activity Cost Loading
 - 3.2.2 Withholdings / Payment Rejection
- 3.3 PROJECT SCHEDULE DETAILED REQUIREMENTS
 - 3.3.1 Level of Detail Required
 - 3.3.2 Activity Durations
 - 3.3.3 Procurement Activities
 - 3.3.4 Mandatory Tasks
 - 3.3.5 Government Activities
 - 3.3.6 Standard Activity Coding Dictionary
 - 3.3.6.1 Workers Per Day (WRKP)
 - 3.3.6.2 Responsible Party Coding (RESP)
 - 3.3.6.3 Area of Work Coding (AREA)
 - 3.3.6.4 Modification Number (MODF)
 - 3.3.6.5 Bid Item Coding (BIDI)
 - 3.3.6.6 Phase of Work Coding (PHAS)
 - 3.3.6.7 Category of Work Coding (CATW)
 - 3.3.6.8 Feature of Work Coding (FOW)
 - 3.3.7 Contract Milestones and Constraints
 - 3.3.7.1 Project Start Date Milestone and Constraint
 - 3.3.7.2 End Project Finish Milestone and Constraint
 - 3.3.7.3 Interim Completion Dates and Constraints
 - 3.3.7.3.1 Start Phase
 - 3.3.7.3.2 End Phase
 - 3.3.8 Calendars
 - 3.3.9 Open Ended Logic
 - 3.3.10 Default Progress Data Disallowed
 - 3.3.11 Out-of-Sequence Progress

- 3.3.12 Added and Deleted Activities
- 3.3.13 Original Durations
- 3.3.14 Leads, Lags, and Start to Finish Relationships
- 3.3.15 Retained Logic
- 3.3.16 Percent Complete
- 3.3.17 Remaining Duration
- 3.3.18 Cost Loading of Closeout Activities
 - 3.3.18.1 As-Built Drawings
 - 3.3.18.2 O & M Manuals
- 3.3.19 Early Completion Schedule and the Right to Finish Early
- 3.4 PROJECT SCHEDULE SUBMISSIONS
 - 3.4.1 Preliminary Project Schedule Submission
 - 3.4.2 Initial Project Schedule Submission
 - 3.4.3 Periodic Schedule Updates
- 3.5 SUBMISSION REQUIREMENTS
 - 3.5.1 Data Submission
 - 3.5.2 Narrative Report
 - 3.5.3 Schedule Reports
 - 3.5.3.1 Activity Report
 - 3.5.3.2 Logic Report
 - 3.5.3.3 Total Float Report
 - 3.5.3.4 Earnings Report by CLIN
 - 3.5.3.5 Schedule Log
 - 3.5.4 Network Diagram
 - 3.5.4.1 Continuous Flow
 - 3.5.4.2 Project Milestone Dates
 - 3.5.4.3 Critical Path
 - 3.5.4.4 Banding
 - 3.5.4.5 Cash Flow / Schedule Variance Control (SVC) Diagram
- 3.6 PERIODIC SCHEDULE UPDATE
 - 3.6.1 Periodic Schedule Update Meetings
 - 3.6.2 Update Submission Following Progress Meeting
- 3.7 WEEKLY PROGRESS MEETINGS
- 3.8 REQUESTS FOR TIME EXTENSIONS
 - 3.8.1 Justification of Delay
 - 3.8.2 Time Impact Analysis (Prospective Analysis)
 - 3.8.3 Forensic Schedule Analysis (Retrospective Analysis)
 - 3.8.4 Fragmentary Network (Fragnet)
 - 3.8.5 Time Extension
 - 3.8.6 Impact to Early Completion Schedule
- 3.9 FAILURE TO ACHIEVE PROGRESS
 - 3.9.1 Artificially Improving Progress
 - 3.9.2 Failure to Perform
 - 3.9.3 Recovery Schedule
- 3.10 OWNERSHIP OF FLOAT
- 3.11 TRANSFER OF SCHEDULE DATA INTO RMS
- 3.12 PRIMAVERA P6 MANDATORY REQUIREMENTS

-- End of Section Table of Contents --

SECTION 01 32 01.00 12

PROJECT SCHEDULE

PART 1 GENERAL

1.1 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for construction progress schedules, and all costs associated therewith shall be included in the applicable contract unit or job prices contained in the Bidding Schedule.

1.2 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.

AACE INTERNATIONAL (AACE)

AACE 29R-03 (2011) Forensic Schedule Analysis

AACE 52R-06 (2006) Time Impact Analysis - As Applied
in Construction

U.S. ARMY CORPS OF ENGINEERS (USACE)

ER 1-1-11 (2017) Administration -- Project Schedules

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Project Scheduler Qualifications; G

Preliminary Project Schedule; G

Initial Project Schedule; G

Periodic Schedule Update; G

1.4 PROJECT SCHEDULER QUALIFICATIONS

Designate an authorized representative to be responsible for the preparation of the schedule and all required updating and production of reports. The authorized representative must have a minimum of 2-years experience scheduling construction projects similar in size and nature to this project with scheduling software that meets the requirements of this specification. Representative must have a comprehensive knowledge of CPM scheduling principles and application.

PART 2 PRODUCTS

2.1 SOFTWARE

The scheduling software utilized to produce and update the schedules required herein must be capable of meeting all requirements of this specification.

2.1.1 Government Default Software

The Government will be using Primavera P6.

2.1.2 Contractor Software

Scheduling software used by the Contractor must be commercially available from the software vendor for purchase with vendor software support agreements available. The software routine used to create the required SDEF file must be created and supported by the software manufacturer.

2.1.2.1 Primavera

The Contractor shall provide the "xer" export file in a version of P6 importable by the Government system.

2.1.2.2 Other Than Primavera

If the Contractor chooses software other than Primavera P6, that is compliant with this specification, provide for the Government's use two licenses, two computers, and training for two Government employees in the use of the software. These computers will be stand-alone and not connected to Government network. Computers and licenses will be returned at project completion.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Prepare for approval a Project Schedule, as specified herein, pursuant to Contract provision in Section 00 72 00 GENERAL CONDITIONS entitled SCHEDULES FOR CONSTRUCTION CONTRACTS. Show in the schedule the proposed sequence to perform the work and dates contemplated for starting and completing all schedule activities. The scheduling of the entire project is required. The scheduling of construction is the responsibility of the Contractor. Contractor management personnel must actively participate in its development. Subcontractors and suppliers working on the project must also contribute in developing and maintaining an accurate Project Schedule. Provide a schedule that is a forward planning as well as a project monitoring tool. Use the Critical Path Method (CPM) of network calculation to generate all Project Schedules. Prepare each Project Schedule using the Precedence Diagram Method (PDM).

3.2 BASIS FOR PAYMENT AND COST LOADING

The schedule is the basis for determining contract earnings during each update period and therefore the amount of each progress payment. The aggregate value of all activities coded to a contract CLIN must equal the value of the CLIN.

3.2.1 Activity Cost Loading

Activity cost loading must be reasonable and without front-end loading. Provide additional documentation to demonstrate reasonableness if requested by the Contracting Officer.

3.2.2 Withholdings / Payment Rejection

Failure to meet the requirements of this specification may result in the disapproval of the preliminary, initial, or periodic schedule updates and subsequent rejection of payment requests until compliance is met. In the event that the Contracting Officer directs schedule revisions and those revisions have not been included in subsequent Project Schedule revisions or updates, the Contracting Officer may withhold 10 percent of pay request amount from each payment period until such revisions to the project schedule have been made.

3.3 PROJECT SCHEDULE DETAILED REQUIREMENTS

3.3.1 Level of Detail Required

Develop the Project Schedule to the appropriate level of detail to address major milestones and to allow for satisfactory project planning and execution. Failure to develop the Project Schedule to an appropriate level of detail will result in its disapproval. The Contracting Officer will consider, but is not limited to, the following characteristics and requirements to determine appropriate level of detail:

3.3.2 Activity Durations

Reasonable activity durations are those that allow the progress of ongoing activities to be accurately determined between update periods. Less than 2 percent of all non-procurement activities may have Original Durations (OD) greater than 20 work days or 30 calendar days.

3.3.3 Procurement Activities

Include activities associated with the critical submittals and their approvals, procurement, fabrication, and delivery of long lead materials, equipment, fabricated assemblies, and supplies. Long lead procurement activities are those with an anticipated procurement sequence of over 90 calendar days.

3.3.4 Mandatory Tasks

Include the following activities/tasks as they are applicable to the project in the initial project schedule and all updates.

- a. Submission, review and acceptance of SD-01 Preconstruction Submittals (individual activity for each).
- b. Submission of mechanical/electrical/information systems layout drawings.
- c. Long procurement activities
- d. Submission and approval of O & M manuals.
- e. Submission and approval of as-built drawings.

- f. Submission and approval of DD1354 data and installed equipment lists.
- g. Submission and approval of testing and air balance (TAB).
- h. Submission of TAB specialist design review report.
- i. Submission and approval of fire protection specialist.
- j. Submission and approval of Building Commissioning Plan, test data, and reports: Develop the schedule logic associated with testing and commissioning of mechanical systems to a level of detail consistent with the contract commissioning requirements. All tasks associated with all building testing and commissioning will be completed prior to submission of building commissioning report and subsequent contract completion.
- k. Air and water balancing.
- l. Building commissioning - Functional Performance Testing.
- m. Controls testing plan submission.
- n. Controls testing.
- o. Performance Verification testing.
- p. Other systems testing, if required.
- q. Contractor's pre-final inspection.
- r. Correction of punch list from Contractor's pre-final inspection.
- s. Government's pre-final inspection.
- t. Correction of punch list from Government's pre-final inspection.
- u. Final inspection.

3.3.5 Government Activities

Show Government and other agency activities that could impact progress. These activities include, but are not limited to: approvals, acceptance, environmental permit approvals by State regulators, inspections, utility tie-in, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements.

3.3.6 Standard Activity Coding Dictionary

Use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11. This exact structure is mandatory. Develop and assign all Activity Codes to activities as detailed herein. A template SDEF compatible schedule backup file is available on the QCS web site: <http://rms.usace.army.mil>.

The SDEF format is as follows:

Field	Activity Code	Length	Description
1	WRKP	3	Workers per day
2	RESP	4	Responsible party
3	AREA	4	Area of work
4	MODF	6	Modification Number
5	BIDI	6	Bid Item (CLIN)
6	PHAS	2	Phase of work
7	CATW	1	Category of work
8	FOW	20	Feature of work*
*Some systems require that FEATURE OF WORK values be placed in several activity code fields. The notation shown is for Primavera P6. Refer to the specific software guidelines with respect to the FEATURE OF WORK field requirements.			

3.3.6.1 Workers Per Day (WRKP)

Assign Workers per Day for all field construction or direct work activities, if directed by the Contracting Officer. Workers per day is based on the average number of workers expected each day to perform a task for the duration of that activity.

3.3.6.2 Responsible Party Coding (RESP)

Assign responsibility code for all activities to the Prime Contractor, Subcontractor(s) or the Government agency responsible for performing the activity.

- a. Activities coded with a Government Responsibility code include, but are not limited to: Government approvals, Government design reviews, environmental permit approvals by State regulators, Government Furnished Property/Equipment (GFP) and Notice to Proceed (NTP) for phasing requirements.
- b. Activities cannot have more than one Responsibility Code. Examples of acceptable activity code values are: DOR (for the designer of record); ELEC (for the electrical subcontractor); MECH (for the mechanical subcontractor); and GOVT (for USACE).

3.3.6.3 Area of Work Coding (AREA)

Assign Work Area code to activities based upon the work area in which the activity occurs. Define work areas based on resource constraints or space constraints that would preclude a resource, such as a particular trade or craft work crew from working in more than one work area at a time due to restraints on resources or space. Examples of Work Area Coding include different areas within a floor of a building, different floors within a building, and different buildings within a complex of buildings. Activities cannot have more than one Work Area Code. Not all activities

are required to be Work Area coded. A lack of Work Area coding indicates the activity is not resource or space constrained.

3.3.6.4 Modification Number (MODF)

Assign a Modification Number Code to any activity or sequence of activities added to the schedule as a result of a Contract Modification, when approved by Contracting Officer. Key all Code values to the Government's modification numbering system. An activity can have only one Modification Number Code.

3.3.6.5 Bid Item Coding (BIDI)

Assign a Bid Item Code to all activities using the Contract Line Item Schedule (CLIN) to which the activity belongs, even when an activity is not cost loaded. An activity can have only one BIDI Code.

3.3.6.6 Phase of Work Coding (PHAS)

Assign Phase of Work Code to all activities. Examples of phase of work are submittal phase, procurement phase, and construction phase. Each activity can have only one Phase of Work code.

- a. Code proposed fast track design and construction phases proposed to allow filtering and organizing the schedule by fast track design and construction packages.
- b. If the contract specifies phasing with separately defined performance periods, identify a Phase Code to allow filtering and organizing the schedule accordingly.

3.3.6.7 Category of Work Coding (CATW)

Assign a Category of Work Code to all activities. Category of Work Codes include, but are not limited to construction submittal, procurement, fabrication, weather sensitive installation, non-weather sensitive installation, start-up, and testing activities. Each activity can have no more than one Category of Work Code.

3.3.6.8 Feature of Work Coding (FOW)

Assign a Feature of Work Code to appropriate activities based on the Definable Feature of Work to which the activity belongs based on the approved QC plan.

Definable Feature of Work is defined in Section 01 45 04.00 10 QUALITY CONTROL. An activity can have only one Feature of Work Code.

3.3.7 Contract Milestones and Constraints

Milestone activities are to be used for significant project events including, but not limited to, project phasing, project start and end activities, or interim completion dates. The use of artificial float constraints such as "zero free float" or "zero total float" are prohibited. Mandatory constraints that ignore or effect network logic are prohibited. No constrained dates are allowed in the schedule other than those specified herein. Submit additional constraints to the Contracting Officer for approval on a case by case basis.

3.3.7.1 Project Start Date Milestone and Constraint

The first activity in the project schedule must be a start milestone titled "NTP Acknowledged," which must have a "Start On" constraint date equal to the date that the NTP is acknowledged.

3.3.7.2 End Project Finish Milestone and Constraint

The last activity in the schedule must be a finish milestone titled "End Project."

Constrain the project schedule to the Contract Completion Date in such a way that if the schedule calculates an early finish, then the float calculation for "End Project" milestone reflects positive float on the longest path. If the project schedule calculates a late finish, then the "End Project" milestone float calculation reflects negative float on the longest path. The Government is under no obligation to accelerate Government activities to support a Contractor's early completion.

3.3.7.3 Interim Completion Dates and Constraints

Constrain contractually specified interim completion dates to show negative float when the calculated late finish date of the last activity in that phase is later than the specified interim completion date.

3.3.7.3.1 Start Phase

Use a start milestone as the first activity for a project phase. Call the start milestone "Start Phase X" where "X" refers to the phase of work.

3.3.7.3.2 End Phase

Use a finish milestone as the last activity for a project phase. Call the finish milestone "End Phase X" where "X" refers to the phase of work.

3.3.8 Calendars

a. Schedule activities on a Calendar to which the activity logically belongs. Develop calendars to accommodate any contract defined work period such as a 7-day calendar for Government Acceptance activities, concrete cure times, etc. Develop the default Calendar to match the physical work plan with non-work periods identified including weekends and holidays. Develop Seasonal Calendar(s) and assign to seasonally affected activities as applicable.

b. If an activity is weather sensitive it should be assigned to a calendar showing non-work days on a monthly basis, with the non-work days selected at random across the weeks of the calendar, using the anticipated adverse weather delay work days provided in the Section 01 10 00 GENERAL PROVISIONS, paragraph TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER. Assign non-work days over a seven-day week as weather records are compiled on seven-day weeks, which may cause some of the weather related non-work days to fall on weekends.

3.3.9 Open Ended Logic

a. Only two open ended activities are allowed: the first activity "NTP Acknowledged" may have no predecessor logic, and the last activity -"End Project" may have no successor logic.

- b. Predecessor open ended logic may be allowed in a time impact analyses upon the Contracting Officer's approval.

3.3.10 Default Progress Data Disallowed

Actual Start and Finish dates must not automatically update with default mechanisms included in the scheduling software. Updating of the percent complete and the remaining duration of any activity must be independent functions. Disable program features that calculate one of these parameters from the other. Activity Actual Start (AS) and Actual Finish (AF) dates assigned during the updating process must match those dates provided in the Contractor Quality Control Reports. Failure to document the AS and AF dates in the Daily Quality Control report will result in disapproval of the Contractor's schedule.

3.3.11 Out-of-Sequence Progress

Activities that have progressed before all preceding logic has been satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case basis subject to approval by the Contracting Officer. Propose logic corrections to eliminate out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule. Address out of sequence progress or logic changes in the Narrative Report and in the periodic schedule update meetings.

3.3.12 Added and Deleted Activities

Do not delete activities from the project schedule or add new activities to the schedule without approval from the Contracting Officer. Activity ID and description changes are considered new activities and cannot be changed without Contracting Officer approval.

3.3.13 Original Durations

Activity Original Durations (OD) must be reasonable to perform the work item. OD changes are prohibited unless justification is provided and approved by the Contracting Officer.

3.3.14 Leads, Lags, and Start to Finish Relationships

Lags must be reasonable as determined by the Government and not used in place of realistic original durations, must not be in place to artificially absorb float, or to replace proper schedule logic.

- a. Leads (negative lags) are prohibited.
- b. Start to Finish (SF) relationships are prohibited.

3.3.15 Retained Logic

Schedule calculations must retain the logic between predecessors and successors ("retained logic" mode) even when the successor activity(s) starts and the predecessor activity(s) has not finished (out-of-sequence progress). Software features that in effect sever the tie between predecessor and successor activities when the successor has started and the predecessor logic is not satisfied ("progress override") are not be allowed.

3.3.16 Percent Complete

Update the percent complete for each activity started, based on the realistic assessment of earned value. Activities which are complete but for remaining minor punch list work and which do not restrain the initiation of successor activities may be declared 100 percent complete to allow for proper schedule management.

3.3.17 Remaining Duration

Update the remaining duration for each activity based on the number of estimated work days it will take to complete the activity. Remaining duration may not mathematically correlate with percentage found under paragraph entitled "Percent Complete".

3.3.18 Cost Loading of Closeout Activities

Cost load the "Correction of punch list from Government pre-final inspection" activity(ies) not less than 1 percent of the present contract value. Activity(ies) may be declared 100 percent complete upon the Government's verification of completion and correction of all punch list work identified during Government pre-final inspection(s).

3.3.18.1 As-Built Drawings

If there is no separate contract line item (CLIN) for as-built drawings, cost load the "Submission and approval of as-built drawings" activity not less than \$35,000 or 1 percent of the present contract value, which ever is greater, up to \$200,000. Activity will be declared 100 percent complete upon the Government's approval.

3.3.18.2 O & M Manuals

Cost load the "Submission and approval of O & M manuals" activity not less than \$20,000. Activity will be declared 100 percent complete upon the Government's approval of all O & M manuals.

3.3.19 Early Completion Schedule and the Right to Finish Early

An Early Completion Schedule is an Initial Project Schedule (IPS) that indicates all scope of the required contract work will be completed before the contractually required completion date.

- a. No IPS indicating an Early Completion will be accepted without being fully resource-loaded (including crew sizes and manhours) and the Government agreeing that the schedule is reasonable and achievable.
- b. The Government is under no obligation to accelerate work items it is responsible for to ensure that the early completion is met nor is it responsible to modify incremental funding (if applicable) for the project to meet the Contractor's accelerated work.

3.4 PROJECT SCHEDULE SUBMISSIONS

Provide the submissions as described below. The data file, reports, and network diagrams required for each submission are contained in paragraph SUBMISSION REQUIREMENTS. If the Contractor fails or refuses to furnish the information and schedule updates as set forth herein, then the Contractor will be deemed not to have provided an estimate upon which a progress

payment can be made. Review comments made by the Government on the schedule(s) do not relieve the Contractor from compliance with requirements of the Contract Documents.

3.4.1 Preliminary Project Schedule Submission

Within 15 calendar days after the NTP is acknowledged submit the Preliminary Project Schedule defining the planned operations detailed for the first 90 calendar days for approval. The approved Preliminary Project Schedule will be used for payment purposes not to exceed 90 calendar days after NTP. Completely cost load the Preliminary Project Schedule to balance the contract award CLINS shown on the Price Schedule. The Preliminary Project Schedule may be summary in nature for the remaining performance period. It must be early start and late finish constrained and logically tied as specified. The Preliminary Project Schedule forms the basis for the Initial Project Schedule specified herein and must include all of the required plan and program preparations, submissions and approvals identified in the contract (for example, Quality Control Plan, Safety Plan, and Environmental Protection Plan) as well as design activities, planned submissions of all early design packages, permitting activities, design review conference activities, and other non-construction activities intended to occur within the first 90 calendar days. Government acceptance of the associated design package(s) and all other specified Program and Plan approvals must occur prior to any planned construction activities. Activity code any activities that are summary in nature after the first 90 calendar days with Bid Item (CLIN) code (BIDI), Responsibility Code (RESP) and Feature of Work code (FOW).

3.4.2 Initial Project Schedule Submission

Submit the Initial Project Schedule for approval within 42 calendar days after Notice to Proceed is issued. The schedule must demonstrate a reasonable and realistic sequence of activities which represent all work through the entire contract performance period. No payment will be made for work items not fully detailed in the Project Schedule.

3.4.3 Periodic Schedule Updates

Update the Project Schedule on a regular basis, monthly at a minimum. Provide a draft Periodic Schedule Update for review at the schedule update meetings as prescribed in the paragraph "Periodic Schedule Update Meetings". These updates will enable the Government to assess Contractor's progress.

- a. Update information including Actual Start Dates (AS), Actual Finish Dates (AF), Remaining Durations (RD), and Percent Complete is subject to the approval of the Government at the meeting.
- b. AS and AF dates must match the date(s) reported on the Contractor's Quality Control Report for an activity start or finish.

3.5 SUBMISSION REQUIREMENTS

Submit the following items for the Preliminary Schedule, Initial Schedule, and every Periodic Schedule Update throughout the life of the project:

3.5.1 Data Submission

Provide the data containing the current project schedule and all previously submitted schedules in the format of the scheduling software (e.g. .xer).

Also include in the data submitted the Narrative Report and all required Schedule Reports. The data reports shall indicate the type of schedule (Preliminary, Initial, Update), full contract number, Data Date and file name. Each schedule must have a unique file name and use project specific settings. The Contractor shall email the files in the format of the scheduling software to the Contracting Officer's representative responsible for the inspection of this contract.

3.5.2 Narrative Report

Provide a Narrative Report with each schedule submission. The Narrative Report is expected to communicate to the Government the thorough analysis of the schedule output and the plans to compensate for any problems, either current or potential, which are revealed through that analysis. Include the following information as minimum in the Narrative Report:

- a. Identify and discuss the work scheduled to start in the next update period.
- b. A description of activities along the two most critical paths where the total float is less than or equal to 20 work days.
- c. A description of current and anticipated problem areas or delaying factors and their impact and an explanation of corrective actions taken or required to be taken.
- d. Identify and explain why activities based on their calculated late dates should have either started or finished during the update period but did not.
- e. Identify and discuss all schedule changes by activity ID and activity name including what specifically was changed and why the change was needed. Include at a minimum new and deleted activities, logic changes, duration changes, calendar changes, lag changes, resource changes, and actual start and finish date changes.
- f. Identify and discuss out-of-sequence work.

3.5.3 Schedule Reports

The format, filtering, organizing and sorting for each schedule report will be as directed by the Contracting Officer. Typically, reports shall contain: Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float, Actual Start Date, Actual Finish Date, and Percent Complete. Provide the reports electronically in .pdf format. One or all of these reports may be requested for each schedule submission. The following lists typical reports that will be requested:

3.5.3.1 Activity Report

List of all activities sorted according to activity number.

3.5.3.2 Logic Report

List of detailed predecessor and successor activities for every activity in ascending order by activity number.

3.5.3.3 Total Float Report

A list of all incomplete activities sorted in ascending order of total float. List activities which have the same amount of total float in ascending order of Early Start Dates. Do not show completed activities on this report.

3.5.3.4 Earnings Report by CLIN

A compilation of the Total Earnings on the project from the NTP to the data date, which reflects the earnings of activities based on the agreements made in the schedule update meeting defined herein. Provided a complete schedule update has been furnished, this report serves as the basis of determining progress payments. Group activities by CLIN number and sort by activity number. Provide a total CLIN percent earned value, CLIN percent complete, and project percent complete. The printed report must contain the following for each activity: the Activity Number, Activity Description, Original Budgeted Amount, Earnings to Date, Earnings this period, Total Quantity, Quantity to Date, and Percent Complete (based on cost).

3.5.3.5 Schedule Log

Provide a Scheduling/Leveling Report generated from the current project schedule being submitted.

3.5.4 Network Diagram

The Network Diagram is required for the Preliminary, Initial and Periodic Updates. Depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished. The Contracting Officer will use, but is not limited to, the following conditions to review compliance with this paragraph:

3.5.4.1 Continuous Flow

Show a continuous flow from left to right with no arrows from right to left. Show the activity number, description, duration, and estimated earned value on the diagram.

3.5.4.2 Project Milestone Dates

Show dates on the diagram for start of project, any contract required interim completion dates, and contract completion dates.

3.5.4.3 Critical Path

Show all activities on the critical path. The critical path is defined as the longest path.

3.5.4.4 Banding

Organize activities using the WBS or as otherwise directed to assist in the understanding of the activity sequence. Typically, this flow will group activities by major elements of work, category of work, work area and/or responsibility.

3.5.4.5 Cash Flow / Schedule Variance Control (SVC) Diagram

With each schedule submission, provide a SVC diagram showing 1) Cash Flow

S-Curves indicating planned project cost based on projected early and late activity finish dates, and 2) Earned Value to-date.

3.6 PERIODIC SCHEDULE UPDATE

3.6.1 Periodic Schedule Update Meetings

Conduct periodic schedule update meetings for the purpose of reviewing the proposed Periodic Schedule Update, Narrative Report, Schedule Reports, and progress payment. Conduct meetings at least monthly within five days of the proposed schedule data date. Provide a computer with the scheduling software loaded and a projector which allows all meeting participants to view the proposed schedule during the meeting. The Contractor's authorized scheduler must organize, group, sort, filter, perform schedule revisions as needed and review functions as requested by the Contractor and/or Government. The meeting is a working interactive exchange which allows the Government and Contractor the opportunity to review the updated schedule on a real time and interactive basis. The meeting will last no longer than 8 hours. Provide a draft of the proposed narrative report and schedule data file to the Government a minimum of two workdays in advance of the meeting. The Contractor's Project Manager and scheduler must attend the meeting with the authorized representative of the Contracting Officer. Superintendents, foremen and major subcontractors must attend the meeting as required to discuss the project schedule and work. Following the periodic schedule update meeting, make corrections to the draft submission. Include only those changes approved by the Government in the submission and invoice for payment.

3.6.2 Update Submission Following Progress Meeting

Submit the complete Periodic Schedule Update of the Project Schedule containing all approved progress, revisions, and adjustments, pursuant to paragraph SUBMISSION REQUIREMENTS not later than 4 work days after the periodic schedule update meeting.

3.7 WEEKLY PROGRESS MEETINGS

Conduct a weekly meeting with the Government (or as otherwise mutually agreed to) between the meetings described in paragraph entitled "Periodic Schedule Update Meetings" for the purpose of jointly reviewing the actual progress of the project as compared to the as planned progress and to review planned activities for the upcoming two weeks. Use the current approved schedule update for the purposes of this meeting and for the production and review of reports. At the weekly progress meeting, address the status of RFIs, RFPs and Submittals.

3.8 REQUESTS FOR TIME EXTENSIONS

Provide a justification of delay to the Contracting Officer in accordance with the contract provisions and clauses for approval within 10 days of a delay occurring. Also prepare a time impact analysis for each Government request for proposal (RFP) to justify time extensions.

3.8.1 Justification of Delay

Provide a description of the event(s) that caused the delay and/or impact to the work. As part of the description, identify all schedule activities impacted. Show that the event that caused the delay/impact was the responsibility of the Government. Provide a time impact analysis that

demonstrates the effects of the delay or impact on the project completion date or interim completion date(s). Evaluate multiple impacts chronologically; each with its own justification of delay. With multiple impacts consider any concurrence of delay. A time extension and the schedule fragnet becomes part of the project schedule and all future schedule updates upon approval by the Contracting Officer.

3.8.2 Time Impact Analysis (Prospective Analysis)

Prepare a time impact analysis for approval by the Contracting Officer based on industry standard AACE 52R-06. Utilize a copy of the last approved schedule prior to the first day of the impact or delay for the time impact analysis. If Contracting Officer determines the time frame between the last approved schedule and the first day of impact is too great, prepare an interim updated schedule to perform the time impact analysis. Unless approved by the Contracting Officer, no other changes may be incorporated into the schedule being used to justify the time impact.

3.8.3 Forensic Schedule Analysis (Retrospective Analysis)

Prepare an analysis for approval by the Contracting Officer based on industry standard AACE 29R-03.

3.8.4 Fragmentary Network (Fragnet)

Prepare a proposed fragnet for time impact analysis consisting of a sequence of new activities that are proposed to be added to the project schedule to demonstrate the influence of the delay or impact to the project's contractual dates. Clearly show how the proposed fragnet is to be tied into the project schedule including all predecessors and successors to the fragnet activities. The proposed fragnet must be approved by the Contracting Officer prior to incorporation into the project schedule.

3.8.5 Time Extension

The Contracting Officer must approve the Justification of Delay including the time impact analysis before a time extension will be granted. No time extension will be granted unless the delay consumes all available Project Float and extends the projected finish date ("End Project" milestone) beyond the Contract Completion Date. The time extension will be in calendar days. Actual delays that are found to be caused by the Contractor's own actions, which result in a calculated schedule delay will not be a cause for an extension to the performance period, completion date, or any interim milestone date.

3.8.6 Impact to Early Completion Schedule

No extended overhead will be paid for delay prior to the original Contract Completion Date for an Early Completion IPS unless the Contractor actually performed work in accordance with that Early Completion Schedule. The Contractor must show that an early completion was achievable had it not been for the impact.

3.9 FAILURE TO ACHIEVE PROGRESS

Should the progress fall behind the approved project schedule for reasons other than those that are excusable within the terms of the contract, the Contracting Officer may require provision of a written recovery plan for approval. The plan must detail how progress will be made-up to include

which activities will be accelerated by adding additional crews, longer work hours, extra work days, etc.

3.9.1 Artificially Improving Progress

Artificially improving progress by means such as, but not limited to, revising the schedule logic, modifying or adding constraints, shortening activity durations, or changing calendars in the project schedule is prohibited. Indicate assumptions made and the basis for any logic, constraint, duration and calendar changes used in the creation of the recovery plan. Any additional resources, manpower, or daily and weekly work hour changes proposed in the recovery plan must be evident at the work site and documented in the daily report along with the Schedule Narrative Report.

3.9.2 Failure to Perform

Failure to perform work and maintain progress in accordance with the supplemental recovery plan may result in an interim and final unsatisfactory performance rating and may result in corrective action directed by the Contracting Officer pursuant to Contract provisions in Section 00 72 00 GENERAL CONDITIONS entitled SCHEDULES FOR CONSTRUCTION CONTRACTS and DEFAULT (FIXED-PRICE CONSTRUCTION), and other contract provisions.

3.9.3 Recovery Schedule

Should the Contracting Officer find it necessary, submit a recovery schedule pursuant to Contract provision in Section 00 72 00 GENERAL CONDITIONS entitled SCHEDULES FOR CONSTRUCTION CONTRACTS.

3.10 OWNERSHIP OF FLOAT

Except for the provision given in the paragraph "Impact To Early Completion Schedule", float available in the schedule, at any time, may not be considered for the exclusive use of either the Government or the Contractor including activity and/or project float. Activity float is the number of work days that an activity can be delayed without causing a delay to the "End Project" finish milestone. Project float (if applicable) is the number of work days between the projected early finish and the contract completion date milestone.

3.11 TRANSFER OF SCHEDULE DATA INTO RMS

Ensure schedule data is uploaded to RMS. This data is additional supporting data in a form and detail required by the Contracting Officer pursuant to Contract provision in Section 00 72 00 GENERAL CONDITIONS entitled PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS. The receipt of a proper payment request pursuant to Contract provision in Section 00 72 00 GENERAL CONDITIONS entitled PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS is contingent upon the Government receiving both acceptable and approval of hard copies and matching electronic versions of the application for progress payment.

3.12 PRIMAVERA P6 MANDATORY REQUIREMENTS

The Contractor shall request a backup file template (.xer) from the Government, if one is available, prior to building the schedule. The following settings are mandatory and required in all schedule submissions

to the Government:

- a. Activity Codes must be Project Level, not Global or EPS level.
- b. Calendars must be Project Level, not Global or Resource level.
- c. Activity Duration Types must be set to "Fixed Duration & Units".
- d. Percent Complete Types must be set to "Physical".
- e. Time Period Admin Preferences must remain the default "8.0 hr/day, 40 hr/week, 172 hr/month, 2000 hr/year". Set Calendar Work Hours/Day to 8.0 Hour days.
- f. Set Schedule Option for defining Critical Activities to "Longest Path".
- g. Set Schedule Option for defining progressed activities to "Retained Logic".
- h. Set up cost loading using a single lump sum labor resource. The Price/Unit must be \$1/hr, Default Units/Time must be "8h/d", and settings "Auto Compute Actual's" and "Calculate costs from units" selected.
- i. Activity ID's must not exceed 10 characters.
- j. Activity Names must have the most defining and detailed description within the first 30 characters.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 GENERAL

- 1.1 MEASUREMENT AND PAYMENT
- 1.2 DEFINITIONS
 - 1.2.1 Submittal Descriptions (SD)
 - 1.2.2 Approving Authority
 - 1.2.3 Work
- 1.3 SUBMITTALS
- 1.4 SUBMITTAL CLASSIFICATION
 - 1.4.1 Government Approved
 - 1.4.2 Information Only
- 1.5 APPROVED SUBMITTALS
- 1.6 DISAPPROVED SUBMITTALS
- 1.7 GENERAL
- 1.8 SUBMITTAL REGISTER
- 1.9 SCHEDULING
- 1.10 TRANSMITTAL FORM (ENG FORM 4025)
- 1.11 SUBMITTAL PROCEDURES
 - 1.11.1 Procedures
 - 1.11.2 Deviations
- 1.12 CONTROL OF SUBMITTALS
- 1.13 GOVERNMENT APPROVED SUBMITTALS
- 1.14 INFORMATION ONLY SUBMITTALS
- 1.15 STAMPS

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

-- End of Section Table of Contents --

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 must 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.

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-03 Product Data

Catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials, systems or equipment for some portion of the work.

Samples of warranty language when the contract requires extended product warranties.

SD-04 Samples

Fabricated or unfabricated physical examples of materials, equipment or workmanship that illustrate functional and aesthetic characteristics of a material or product and establish standards by which the work can be judged.

Color samples from the manufacturer's standard line (or custom color samples if specified) to be used in selecting or approving colors for the project.

Field samples and mock-ups constructed on the project site establish standards by which the ensuring work can be judged. Includes assemblies or portions of assemblies which are to be incorporated into the project and those which will be removed at conclusion of the work.

SD-05 Design Data

Design calculations, mix designs, analyses or other data pertaining to a part of work.

SD-06 Test Reports

Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. (Testing must have been within three years of date of contract award for the project.)

Report which includes findings of a test required to be performed by the Contractor on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports.

Daily logs and checklists.

Final acceptance test and operational test procedure.

SD-07 Certificates

Statements printed on the manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material 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-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 must 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 provision in Section 00 72 00 GENERAL CONDITIONS entitled SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION, 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

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.5 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals must not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory.

Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.6 DISAPPROVED SUBMITTALS

The Contractor must respond to all concerns expressed by the Contracting Officer and promptly make any corrections necessary to address those concerns. The Contractor must 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 provision in Section 00 72 00 GENERAL CONDITIONS entitled CHANGES, must be given promptly to the Contracting Officer.

1.7 GENERAL

The Contractor must submit all items listed on the Submittal Register (ENG Form 4288) or specified in the other sections of these specifications. The Contractor must 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 must be the same as those used in the contract drawings. Each submittal must be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items must be checked and approved by the Contractor's Quality Control (CQC) representative and each item must be stamped, signed, and dated by the CQC representative indicating action taken. Proposed deviations from the contract requirements must be clearly identified. Submittals must 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 must be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work must 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 must 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 must 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 must track all submittals.

1.9 SCHEDULING

Submittals covering component items forming a system or items that are interrelated must be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings must be so scheduled. Adequate time (a minimum of 30 calendar days exclusive of mailing time) must 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 sample transmittal form (ENG Form 4025) attached to this section must be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms are included in the QCS software that the Contractor is required to use for this contract. This form must be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care must be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

1.11 SUBMITTAL PROCEDURES

Submittals must be made as follows:

1.11.1 Procedures

Procedures for submittals will be stipulated by the Contracting Officer at the preconstruction conference.

1.11.2 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 must be checked. The Contractor must 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 must carefully control his/her procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register".

1.13 GOVERNMENT APPROVED SUBMITTALS

All submittals must be received through RMS, including any attachments. Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. The Contractor must provide at least one (1) hard copy to the Government Inspector of all submittals. This copy will be retained by the Contracting Officer. If the Contractor requires the return of any hard copies for their records, these copies must be provided in addition to the one (1) Government copy at the time of submittal.

1.14 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe. The Contractor must also submit electronic copies (e.g., .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 must 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						CONTRACTOR											
LPV Foreshore Risk Reduction Repairs Reach - 1, 2, 3, and 4																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT OR CLASSIFICATION REVIEWER	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 32 01.00 12	SD-01 Preconstruction Submittals														
			Project Scheduler Qualifications	1.4	G												
			Preliminary Project Schedule	3.4.1	G												
			Initial Project Schedule	3.4.2	G												
			Periodic Schedule Update	3.6.2	G												
		01 33 00	SD-01 Preconstruction Submittals														
			Submittal Register	1.7	G												
		01 35 26	SD-01 Preconstruction Submittals														
			Accident Prevention Plan (APP)	1.9	G												
			SD-06 Test Reports														
			Accident Reports	1.13.2	G												
			LHE Inspection Reports	1.13.3													
			Monthly Exposure Reports	1.6	G												
			SD-07 Certificates														
			Activity Hazard Analysis (AHA)	1.10	G												
			Certificate of Compliance	1.13.4													
			Hot Work Permit	1.14													
			License Certificates	1.15													
			Portable Gauge Operations	1.15.1	G												
			Planning Worksheet														
			Radiography Operation Planning	1.15.1	G												
			Work Sheet														
			Standard Lift Plan	1.13.4	G												
		01 45 04.00 10	SD-01 Preconstruction Submittals														
			Contractor Quality Control Plan	3.2	G CD												
		01 55 26.00 12	SD-01 Preconstruction Submittals														

SUBMITTAL REGISTER											CONTRACT NO.						
TITLE AND LOCATION						CONTRACTOR											
LPV Foreshore Risk Reduction Repairs Reach - 1, 2, 3, and 4																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT 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 55 26.00 12	Traffic Control Device Plan	3.2	G CD												
			Truck Haul Route Plan	3.2	G CD												
			Qualifications	3.2	G KO												
		01 57 20.01 12	SD-01 Preconstruction Submittals														
			Environment Pollution Control Plan	1.5.1	G PDSN												
		01 57 23.01 12	SD-01 Preconstruction Submittals														
			Truck Wash-down Rack design	3.1	G EDC												
		01 78 02.00 10	SD-02 Shop Drawings														
			'As-Built' Drawings	1.3.1	G DO												
		02 21 10.00 12	SD-02 Shop Drawings														
			Pre-Construction Stone Dike Cap	3.2	G ED												
			Cross Section Surveys														
			Post-Construction Stone Dike	3.3	G ED												
			Cap Surveys														
			Pre-Construction Wave Berm	3.4	G ED												
			Repair Cross Section Surveys														
			Post-Construction Wave Berm	3.5	G ED												
			Repair Surveys														
			SD-05 Design Data														
			Survey Data	3.1.3	G ED												
		02 41 00	SD-01 Preconstruction Submittals														
			Demolition Plan	1.7	G EDC												
			Notifications	1.5.1	G												
			Existing Conditions	1.6													
			Documentation														

SUBMITTAL REGISTER											CONTRACT NO.						
TITLE AND LOCATION						CONTRACTOR											
LPV Foreshore Risk Reduction Repairs Reach - 1, 2, 3, and 4																	
ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH	GOVT 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)
		31 05 19.04 12	SD-01 Preconstruction Submittals														
			Work Plan	1.5.1													
			SD-04 Samples														
			Geotextile	1.5.1													
			SD-07 Certificates														
			Geotextile	1.5.1	G												
		31 11 00.00 12	SD-01 Preconstruction Submittals														
			Clearing and Grubbing Plan	1.5	G CD												
			Disposal Location	3.5	G CD												
		31 24 00.00 12	SD-01 Preconstruction Submittals														
			Embankment Plan	3.1	G CD												
			Compaction Equipment	1.7.1	G ED												
		32 92 19.04 12	SD-07 Certificates														
			Seed	2.1.2													
			Turf Establishment Plan	1.9	G												
		35 20 23.01 12	SD-01 Preconstruction Submittals														
			Floating Plant Plan	3.2.2	G EDC												
			Marine Access Channel Plan	3.1													
			Stockpile Plan	3.2.7													
			Timber Ramp Plan	3.2.9													
			SD-02 Shop Drawings														
			Surveys/Soundings	3.3	G EDC												
			SD-03 Product Data														
			Turbidity Curtain	1.5.1	G EDC												
			SD-11 Closeout Submittals														
			Report Of Operations	1.6.1	G EDC												

CONTRACT NO.

CONTRACTOR

CONTRACTOR: SCHEDULE DATES	CONTRACTOR ACTION		APPROVING AUTHORITY		
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[illegible]

U.S. Army Corps of Engineers (USACE) TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE For use of this form, see ER 415-1-10; the proponent agency is CECW-CE.					DATE		TRANSMITTAL NO.	
SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS <i>(This section will be initiated by the contractor)</i>								
TO:		FROM:		CONTRACT NO.			CHECK ONE: ☐ THIS IS A NEW TRANSMITTAL ☐ THIS IS A RESUBMITTAL OF TRANSMITTAL _____	
SPECIFICATION SEC. NO. <i>(Cover only one section with each transmittal)</i>			PROJECT TITLE AND LOCATION			THIS TRANSMITTAL IS FOR: <i>(Check one)</i> ☐ FIO ☐ GA ☐ DA ☐ CR ☐ DA/CR ☐ DA/GA		
ITEM NO. (See Note 3) a.	DESCRIPTION OF SUBMITTAL ITEM (Type size, model number/etc.) b.	SUBMITTAL TYPE CODE (See Note 8) c.	NO. OF COPIES d.	CONTRACT DOCUMENT REFERENCE		CONTRACTOR REVIEW CODE g.	VARIATION Enter "Y" if requesting a variation (See Note 6) h.	USACE ACTION CODE (Note 9) i.
				SPEC. PARA. NO. e.	DRAWING SHEET NO. f.			
REMARKS				I certify that the above submitted items had been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as otherwise stated.				
				NAME OF CONTRACTOR			SIGNATURE OF CONTRACTOR	
SECTION II - APPROVAL ACTION								
ENCLOSURES RETURNED <i>(List by item No.)</i>		NAME AND TITLE OF APPROVING AUTHORITY			SIGNATURE OF APPROVING AUTHORITY		DATE	

INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.
2. Each Transmittal shall be numbered consecutively. The Transmittal Number typically includes two parts separated by a dash (-). The first part is the specification section number. The second part is a sequential number for the submittals under that spec section. If the Transmittal is a resubmittal, then add a decimal point to the end of the original Transmittal Number and begin numbering the resubmittal packages sequentially after the decimal.
3. The "Item No." for each entry on this form will be the same "Item No." as indicated on ENG FORM 4288-R.
4. Submittals requiring expeditious handling will be submitted on a separate ENG Form 4025-R.
5. Items transmitted on each transmittal form will be from the same specification section. Do not combine submittal information from different specification sections in a single transmittal.
6. If the data submitted are intentionally in variance with the contract requirements, indicate a variation in column h, and enter a statement in the Remarks block describing the detailed reason for the variation.
7. ENG Form 4025-R is self-transmitting - a letter of transmittal is not required.
8. When submittal items are transmitted, indicate the "Submittal Type" (*SD-01 through SD-11*) in column c of Section I.
Submittal types are the following:

SD-01 - Preconstruction	SD-02 - Shop Drawings	SD-03 - Product Data	SD-04 - Samples	SD-05 - Design Data	SD-06 - Test Reports
SD-07 - Certificates	SD-08 - Manufacturer's Instructions	SD-09 - Manufacturer's Field Reports	SD-10 - O&M Data	SD-11 - Closeout	
9. For each submittal item, the Contractor will assign Submittal Action Codes in column g of Section I. The U.S. Army Corps of Engineers approving authority will assign Submittal Action Codes in column i of Section I. The Submittal Action Codes are:

A -- Approved as submitted.	F -- Receipt acknowledged.
B -- Approved, except as noted on drawings. Resubmission not required.	X -- Receipt acknowledged, does not comply with contract requirements, as noted.
C -- Approved, except as noted on drawings. Refer to attached comments. Resubmission required.	G -- Other action required (<i>Specify</i>)
D -- Will be returned by separate correspondence.	K -- Government concurs with intermediate design. (<i>For D-B contracts</i>)
E -- Disapproved. Refer to attached comments.	R -- Design submittal is acceptable for release for construction. (<i>For D-B contracts</i>)
10. Approval of items does not relieve the contractor from complying with all the requirements of the contract.

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 35 26

GOVERNMENTAL SAFETY REQUIREMENTS

PART 1 GENERAL

- 1.1 MEASUREMENT AND PAYMENT
- 1.2 REFERENCES
- 1.3 DEFINITIONS
 - 1.3.1 Site Safety and Health Officer (SSHO)
 - 1.3.1.1 Level One SSHO
 - 1.3.1.2 Level Two SSHO
 - 1.3.1.3 Level Three SSHO
 - 1.3.1.4 Alternate SSHO
 - 1.3.2 Competent Person (CP)
 - 1.3.3 Qualified Person (QP)
- 1.4 SUBMITTALS
- 1.5 PUBLIC HEALTH EMERGENCIES
- 1.6 MONTHLY EXPOSURE REPORTS
- 1.7 REGULATORY REQUIREMENTS
- 1.8 SITE QUALIFICATIONS, DUTIES, AND MEETINGS
 - 1.8.1 Site Safety and Health Officer (SSHO)
 - 1.8.1.1 Qualifications of SSHO
 - 1.8.1.2 Duties of SSHO
 - 1.8.1.3 Safety Meetings
 - 1.8.2 Roles and Responsibilities of Prime Contractor and SSHO
 - 1.8.3 Contract Site Safety And Health Officer(s) (SSHOs) Minimum Requirements
 - 1.8.4 Competent Person for Confined Space Entry
 - 1.8.5 Preconstruction Conference
- 1.9 ACCIDENT PREVENTION PLAN (APP)
 - 1.9.1 Accident Prevention Plan (APP)
 - 1.9.2 Names and Qualifications
- 1.10 ACTIVITY HAZARD ANALYSIS (AHA)
 - 1.10.1 AHA Management
 - 1.10.2 AHA Signature Log
- 1.11 SITE SAFETY REFERENCE MATERIALS
- 1.12 EMERGENCY MEDICAL TREATMENT
- 1.13 NOTIFICATIONS AND REPORTS
 - 1.13.1 Accident Notification
 - 1.13.2 Accident Reports
 - 1.13.3 LHE Inspection Reports
 - 1.13.4 Certificate of Compliance and Pre-lift Plan/Checklist for LHE and Rigging
- 1.14 HOT WORK PERMIT
 - 1.14.1 Permit and Personnel Requirements
 - 1.14.2 Work Around Flammable Materials
- 1.15 RADIATION SAFETY REQUIREMENTS
 - 1.15.1 Radiography Operation Planning Work Sheet
 - 1.15.2 Site Access and Security

- 1.15.3 Loss or Release and Unplanned Personnel Exposure
- 1.15.4 Site Demarcation and Barricade
- 1.15.5 Security of Material and Equipment
- 1.15.6 Transportation of Material
- 1.15.7 Schedule for Exposure or Unshielding
- 1.15.8 Transmitter Requirements
- 1.16 CONFINED SPACE ENTRY REQUIREMENTS
 - 1.16.1 Rescue Procedures and Coordination with Local Emergency Responders
- 1.17 DIVE SAFETY REQUIREMENTS
- 1.18 SEVERE STORM PLAN

PART 2 PRODUCTS

PART 3 EXECUTION

- 3.1 CONSTRUCTION AND OTHER WORK
 - 3.1.1 Worksite Communication
 - 3.1.2 Hazardous Material Exclusions
 - 3.1.3 Unforeseen Hazardous Material
- 3.2 UTILITY OUTAGE REQUIREMENTS
- 3.3 OUTAGE COORDINATION MEETING
- 3.4 CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT)
 - 3.4.1 Safety Preparatory Inspection Coordination Meeting with the Government or Utility
 - 3.4.2 Lockout/Tagout Isolation
 - 3.4.3 Lockout/Tagout Removal
- 3.5 FALL PROTECTION PROGRAM
 - 3.5.1 Fall Protection Equipment and Systems
 - 3.5.1.1 Additional Personal Fall Protection Measures
 - 3.5.1.2 Personal Fall Protection Equipment
- 3.6 EQUIPMENT
 - 3.6.1 Use of Explosives
- 3.7 ELECTRICAL
 - 3.7.1 Electrical Work
 - 3.7.2 Qualifications
 - 3.7.3 Arc Flash
 - 3.7.4 Grounding
 - 3.7.5 Testing

-- End of Section Table of Contents --

SECTION 01 35 26

GOVERNMENTAL SAFETY REQUIREMENTS

PART 1 GENERAL

1.1 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the safety requirements as specified herein. Payment for work covered under this section shall be distributed throughout the existing bidding schedule items.

1.2 REFERENCES

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

AMERICAN SOCIETY OF SAFETY PROFESSIONALS (ASSP)

ANSI/ASSP A10.34 (2021) Protection of the Public on or
Adjacent to Construction Sites

ANSI/ASSP A10.44 (2020) Control of Energy Sources
(Lockout/Tagout) for Construction and
Demolition Operations

ASTM INTERNATIONAL (ASTM)

ASTM F855 (2020) Standard Specifications for
Temporary Protective Grounds to Be Used on
De-energized Electric Power Lines and
Equipment

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE 1048 (2016) Guide for Protective Grounding of
Power Lines

IEEE C2 (2023) National Electrical Safety Code

INTERNATIONAL SAFETY EQUIPMENT ASSOCIATION (ISEA)

ANSI/ISEA Z89.1 (2014; R 2019) American National Standard
for Industrial Head Protection

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 51B (2024) Standard for Fire Prevention During
Welding, Cutting, and Other Hot Work

NFPA 70 (2023; ERTA 1 2024; TIA 24-1) National
Electrical Code

NFPA 70E (2024) Standard for Electrical Safety in
the Workplace

NFPA 241 (2022) Standard for Safeguarding Construction, Alteration, and Demolition Operations

NFPA 306 (2024) Standard for the Control of Gas Hazards on Vessels

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2024) Safety -- Safety and Occupational Health (SOH) Requirements

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

10 CFR 20 Standards for Protection Against Radiation

29 CFR 1910 Occupational Safety and Health Standards

29 CFR 1915 Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment

29 CFR 1926 Safety and Health Regulations for Construction

49 CFR 173 Shippers - General Requirements for Shipments and Packagings

CPL 2.100 (1995) Application of the Permit-Required Confined Spaces (PRCS) Standards, 29 CFR 1910.146

1.3 DEFINITIONS

The following definitions are for the convenience of the reader. If there is a referenced document in the text of this specification section, that is the document that should define terms for that paragraph. If further clarification is needed, contact the Contracting Officer.

1.3.1 Site Safety and Health Officer (SSHO)

A Contractor Employee that is responsible for overseeing and ensuring implementation of the prime Contractor's Safety and Occupational Health (SOH) program according to the Contract, EM 385-1-1, applicable federal, state, and local requirements.

1.3.1.1 Level One SSHO

A designated employee with full-time SOH responsibility that meets and follows the requirements of EM 385-1-1.

1.3.1.2 Level Two SSHO

A designated employee with Level Two SSHO responsibility that meets and follows the requirements of EM 385-1-1. Level Two SSHOs cannot be assigned to projects that have a residual Risk Assessment Code (RAC) of high or extremely high.

1.3.1.3 Level Three SSHO

A designated Qualified Person or Competent Person with SOH responsibility that meets and follows the requirements of EM 385-1-1. Level 3 SSHOs cannot be assigned to projects that have a residual RAC of high or extremely high.

1.3.1.4 Alternate SSHO

An employee that meets the definition of the contract-required level SSHO, but is not the primary SSHO.

1.3.2 Competent Person (CP)

The CP is a person designated in writing, who, through training, knowledge and experience, is capable of identifying, evaluating, and addressing existing and predictable hazards in the working environment or working conditions that are unsanitary, hazardous, or dangerous to personnel, and who has authorization to take prompt corrective measures to eliminate them.

1.3.3 Qualified Person (QP)

The QP is a person designated in writing, who, by possession of a recognized degree, certificate, or professional standing, or extensive knowledge, training, and experience, has successfully demonstrated their ability to solve or resolve problems related to the subject matter, the work, or the project.

1.4 SUBMITTALS

Government Acceptance or Approval does not remove responsibility from the Contractors for their actions or liability.

Government approval is required for submittals with a "G" classification. Submittals not having a "G" classification are for information only. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Accident Prevention Plan (APP); G

SD-06 Test Reports

Accident Reports; G

LHE Inspection Reports

Monthly Exposure Reports; G

SD-07 Certificates

Activity Hazard Analysis (AHA); G

Certificate of Compliance

Hot Work Permit

License Certificates

Portable Gauge Operations Planning Worksheet; G

Radiography Operation Planning Work Sheet; G

Standard Lift Plan; G

1.5 PUBLIC HEALTH EMERGENCIES

In the event of a declared public health emergency, follow safety precautions as required by the Occupational Safety and Health Administration (OSHA) www.osha.gov, the Centers for Disease Control and Prevention (CDC) www.cdc.gov, and as required by federal, state and local requirements.

1.6 MONTHLY EXPOSURE REPORTS

Provide a Monthly Exposure Report by the fifth of each month. This report is a compilation of employee-hours worked each month for all site workers, both Prime and subcontractor. Failure to submit the report may result in retention of up to 10 percent of the progress payment.

1.7 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this Contract, comply with the most recent edition of USACE EM 385-1-1, and the following federal, state, and local laws, ordinances, criteria, rules and regulations at the date of the Solicitation for this Contract. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements govern.

1.8 SITE QUALIFICATIONS, DUTIES, AND MEETINGS

1.8.1 Site Safety and Health Officer (SSHO)

1.8.1.1 Qualifications of SSHO

All SSHOs will have met the training, experience requirements identified in the EM 385-1-1 and this Contract.

1.8.1.2 Duties of SSHO

All SSHOs will carry out the roles and responsibilities as identified in this Contract and the EM 385-1-1. All SSHOs will be designated on an ENG Form 6282, provided by the Contracting Officer. Superintendent, QC Manager, and SSHO are subject to dismissal if their required duties are not being effectively carried out. If either the Superintendent, QC Manager, or SSHO are dismissed, project work will be stopped and will not be allowed to resume until a suitable replacement is approved and the above duties are again being effectively carried out.

1.8.1.3 Safety Meetings

Conduct safety meetings to review past activities, plan for new or changed operations, review pertinent aspects of appropriate AHA (by trade), establish safe working procedures for anticipated hazards, and provide pertinent Safety and Occupational Health (SOH) training and motivation.

Conduct meetings at least once a month for all supervisors at the project location. The SSHO, supervisors, or foremen must conduct meetings at least once a week for the trade workers. Document meeting minutes to include the date, persons in attendance, subjects discussed, and names of individual(s) who conducted the meeting. Maintain documentation on-site and furnish copies to the Contracting Officer on request. Notify the Contracting Officer of all scheduled meetings 7 calendar days in advance.

1.8.2 Roles and Responsibilities of Prime Contractor and SSHO

The Prime Contractor and SSHO must ensure that the requirements of all applicable OSHA and EM 385-1-1 are met for the project. The Prime Contractor must ensure an SSHO or an equally qualified Alternate SSHO(s) is at the worksite at all times to implement and administer the Contractor's safety program and Government accepted Accident Prevention Plan. If the required SSHO has to temporarily (that is, up to 24 hours / 1 day) leave the site of work due to unforeseen or emergency situations, a Level One, Two, or Three SSHO may be used in the interim and must be on the site of work at all times when work is being performed.

If the SSHO must be off-site for a period longer than 24 hours / 1 day, a qualified alternate that meets the contract requirements must be onsite.

a. Prime contractor must ensure all SSHOs will:

- (1) Are designated on an ENG Form 6282.
- (2) Meet minimum training and experience requirements identified in EM 385-1-1.
- (3) Execute roles and responsibilities identified in EM 385-1-1.

1.8.3 Contract Site Safety And Health Officer(s) (SSHOs) Minimum Requirements

Provide a minimum of one Level One SSHO that meets the requirements of EM 385-1-1 for this project.

1.8.4 Competent Person for Confined Space Entry

Provide a CP for Confined Space Entry who meets the requirements of EM 385-1-1 and herein. The CP for Confined Space Entry must supervise the entry into each confined space in accordance with EM 385-1-1.

Since this work may involves operations that handle combustible or hazardous materials, this person must have the ability to understand and follow through on the air sampling, Personal Protective Equipment (PPE), and instructions of a Marine Chemist, Coast Guard authorized persons, or Certified Industrial Hygienist. Confined space and enclosed space work must comply with NFPA 306, 29 CFR 1915, "Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment," or as applicable in 29 CFR 1910 for general industry, 29 CFR 1926 for construction.

1.8.5 Preconstruction Conference

- a. Contractor representatives who have a responsibility or significant role in accident prevention on the project must attend the preconstruction conference. This includes the project superintendent, Site Safety and Occupational Health Officer, quality control manager, or any other assigned safety and health professionals who participated

in the development of the APP (including the Activity Hazard Analyses (AHAs) and special plans, program and procedures associated with it).

- b. Discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated AHAs that will be developed and implemented during the performance of the Contract. This list of proposed AHAs will be reviewed and an agreement will be reached between the Contractor and the Contracting Officer as to which phases will require an analysis. In addition, establish a schedule for the preparation, submittal, and Government review of AHAs to preclude project delays. The creation of the APP and Schedule will be created after being given Notice to Proceed.
- c. Deficiencies in the submitted APP, identified during the Contracting Officer's review, must be corrected, and the APP re-submitted for review prior to the start of construction. Work is not permitted to begin until an APP is established that is acceptable to the Contracting Officer.

1.9 ACCIDENT PREVENTION PLAN (APP)

1.9.1 Accident Prevention Plan (APP)

Submit the Accident Prevention Plan (APP) for review and acceptance by the Government within 15 calendar days after given Notice of Award of this contract. A competent person must prepare the written site-specific APP. Prepare the APP in accordance with the format and requirements of EM 385-1-1, ENG Form 6293, and herein. The APP must be job-specific and address any unusual or unique aspects of the project or activity for which it is written. The APP must interface with the Contractor's overall safety and occupational health program referenced in the APP in the applicable APP element, and made site-specific. Describe the methods to evaluate past safety performance of potential subcontractors in the selection process. Also, describe innovative methods used to ensure and monitor safe work practices of subcontractors. The Government considers the Prime Contractor to be the "controlling employer" for all worksite safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the Contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The APP must be signed in accordance with the APP and ENG Form 6293 Accident Prevention Plan Worksheet. The SSHO must provide and maintain the APP and a log of signatures by each subcontractor foreman, attesting that they have read and understand the APP, and make the APP and log available on-site to the Contracting Officer. If English is not the foreman's primary language, the Prime Contractor must provide an interpreter.

Submit the APP to the Contracting Officer at least 7 calendar days prior to the date of the preconstruction conference for acceptance. Work cannot proceed without an accepted APP. Once reviewed and accepted by the Contracting Officer, the APP and attachments will be enforced as part of the Contract. Disregarding the provisions of this Contract or the accepted APP is cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified. Continuously review and amend the APP, as necessary, throughout the life of the Contract. Changes to the accepted APP must be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSHO and Quality Control

Manager. Incorporate unusual or high-hazard activities not identified in the original APP as they are discovered. Should any severe hazard exposure (i.e., imminent danger) become evident, stop work in the area, secure the area, and develop a plan to remove the exposure and control the hazard. Notify the Contracting Officer within 24 hours of discovery. Eliminate and remove the hazard. In the interim, take all necessary action to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public (as defined by ANSI/ASSP A10.34), and the environment.

1.9.2 Names and Qualifications

Provide plans in accordance with the requirements outlined in EM 385-1-1, including the following:

- a. Names and qualifications (resumes including education, training, experience and certifications) of site safety and health personnel designated to perform work on this project to include the designated Site Safety and Health Officer and other competent and qualified personnel to be used. Specify the duties of each position.
- b. As a minimum, designate and submit qualifications of Competent Persons (CP) for each of the following major areas: excavation; scaffolding; fall protection; hazardous energy; confined space; health hazard recognition, evaluation and control of chemical, physical and biological agents; and personal protective equipment and clothing to include selection, use and maintenance. Designate and submit qualifications for additional CPs as applicable to the work performed under this Contract.

1.10 ACTIVITY HAZARD ANALYSIS (AHA)

Before beginning each activity, task or Definable Feature of Work (DFOW) involving a type of work presenting hazards not experienced in previous project operations, or where a new work crew or subcontractor is to perform the work, the Contractor(s) performing that work activity must prepare an AHA. AHAs must be developed by the Prime Contractor, subcontractor, or supplier performing the work, and provided for Prime Contractor review and approval before submitting to the Contracting Officer. AHAs must be signed by the SSHO, Superintendent, QC Manager and the subcontractor Foreman performing the work. Format the AHA in accordance with EM 385-1-1 or as directed by the Contracting Officer. Submit the AHA for review at least 15 working days prior to the start of each activity task, or DFOW. The Government reserves the right to require the Contractor to revise and resubmit the AHA if it fails to effectively identify the work sequences, specific anticipated hazards, site conditions, equipment, materials, personnel and the control measures to be implemented.

AHAs must identify competent persons required for phases involving high risk activities, including confined entry, crane and rigging, excavations, trenching, electrical work, fall protection, and scaffolding.

1.10.1 AHA Management

Review the AHA list periodically (at least monthly) at the Contractor supervisory safety meeting, and update as necessary when procedures, scheduling, or hazards change. Use the AHA during daily inspections by the SSHO to ensure the implementation and effectiveness of the required safety and health controls for that work activity.

1.10.2 AHA Signature Log

Each employee performing work as part of an activity, task or DFOV must review the AHA for that work and sign a signature log specifically maintained for that AHA prior to starting work on that activity. The SSHO must maintain a signature log on site for every AHA. Provide employees whose primary language is other than English, with an interpreter to ensure a clear understanding of the AHA and its contents.

1.11 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in paragraph REFERENCES. Maintain applicable equipment manufacturer's manuals.

1.12 EMERGENCY MEDICAL TREATMENT

Contractors must arrange for their own emergency medical treatment in accordance with EM 385-1-1. The Government has no responsibility to provide emergency medical treatment.

1.13 NOTIFICATIONS AND REPORTS

1.13.1 Accident Notification

Notify the Contracting Officer in accordance with the EM 385-1-1 Accident Reporting Timeline.

Table Accident Reporting Required Timeline		
Accident Type	Notify KO or COR	Complete Final Accident Report on ENG 3394 and provide to KO or COR
Fatality, in-patient hospitalization, amputation, eye loss, or property damage over \$600,000.	Immediately, no later than (NLT) 8 Hours	Within 7 Days
All other accidents and near misses	Immediately, no later than (NLT) 24 Hours	Within 7 Days

Within notification include Contractor name; Contract title; type of Contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (for example, type of construction equipment used and PPE used). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted. Assist and cooperate fully with the Government's investigation(s) of any accident or near miss.

1.13.2 Accident Reports

- a. Conduct an accident investigation for recordable injuries and illnesses, property damage, and near misses as defined in EM 385-1-1, to establish the root cause(s) of the accident. All accidents are reportable, regardless of whether or not it is recordable. Complete the applicable USACE Accident Report, ENG Form 3394, and provide the report to the Contracting Officer within 7 calendar days of the accident. The Contracting Officer will provide copies of any required or special forms. All accidents are reportable, regardless of whether or not it is recordable.
- b. Near Misses: For Army projects, report all "Near Misses" to the Contracting Officer using local accident reporting procedures, within 24 hours. The Contracting Officer will provide the Contractor the required forms. Near miss reports are considered positive and proactive Contractor safety management actions.

1.13.3 LHE Inspection Reports

Submit LHE inspection reports required in accordance with EM 385-1-1 and as specified herein with Daily Reports of Inspections.

1.13.4 Certificate of Compliance and Pre-lift Plan/Checklist for LHE and Rigging

Provide a Certificate of Compliance for LHE entering an activity under this Contract and in accordance with EM 385-1-1. Post certifications on the crane.

Develop a Standard Lift Plan (SLP) in accordance with EM 385-1-1 and using Standard Pre-Lift Crane Plan/Checklist for each lift planned. Submit SLP to the Contracting Officer for approval within 15 calendar days in advance of planned lift.

1.14 HOT WORK PERMIT

1.14.1 Permit and Personnel Requirements

Submit and obtain a written permit prior to performing "Hot Work" (i.e., welding or cutting) or operating other flame-producing/spark producing devices. Contractors are required to meet all criteria before a permit is issued. Provide at least two 20 pound 4A:20 BC rated extinguishers for normal "Hot Work". The extinguishers must be current inspection tagged, and contain an approved safety pin and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" done at this activity. The Fire Watch must be trained in accordance with NFPA 51B and remain on-site for a minimum of 1 hour after completion of the task or as specified on the hot work permit.

When starting work at the job site, require personnel to familiarize themselves with the location of the nearest fire extinguisher and place in memory the emergency phone number. Report any fire, no matter how small, to the responsible Fire Division immediately.

1.14.2 Work Around Flammable Materials

Obtain permit approval from a NFPA Certified Marine Chemist, or Certified Industrial Hygienist for "Hot Work" within or around flammable materials

(such as fuel systems or welding/cutting on fuel pipes) or confined spaces (such as sewer wet wells, manholes, or vaults) that have the potential for flammable or explosive atmospheres.

Whenever these materials, except beryllium and chromium (VI), are encountered in indoor operations, local mechanical exhaust ventilation systems that are sufficient to reduce and maintain personal exposures to within acceptable limits must be used and maintained in accordance with manufacturer's instruction and supplemented by exceptions noted in EM 385-1-1.

1.15 RADIATION SAFETY REQUIREMENTS

Submit License Certificates, employee training records, and Leak Test Reports for radiation materials and equipment to the Contracting Officer and Radiation Safety Office (RSO) for all specialized and licensed material and equipment proposed for use on the construction project (excludes portable machine sources of ionizing radiation including moisture density and X-Ray Fluorescence (XRF)). Maintain on-site records whenever licensed radiological materials or ionizing equipment are on Government property.

Protect workers from radiation exposure in accordance with 10 CFR 20, ensuring any personnel exposures are maintained As Low As Reasonably Achievable.

1.15.1 Radiography Operation Planning Work Sheet

Submit a Gamma and X-Ray Radiography Operation Planning Work Sheet to Contracting Officer 14 days prior to commencement of operations involving radioactive materials or radiation generating devices. For portable machine sources of ionizing radiation, including moisture density and XRF, use and submit the Portable Gauge Operations Planning Worksheet instead. The Contracting Officer will review the submitted worksheet and provide questions and comments.

Contractors must use primary dosimeters process by a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory.

1.15.2 Site Access and Security

Coordinate site access and security requirements with the Contracting Officer for all radiological materials and equipment containing ionizing radiation that are proposed for use on a government facility. For gamma radiography materials and equipment, a Government escort is required for any travels on the Installation. The Government authorized representative will meet the Contractor at a designated location outside the Installation, ensure safety of the materials being transported, and will escort the Contractor for gamma sources onto the Installation, to the job site, and off the Installation. For portable machine sources of ionizing radiation, including moisture density and XRF, the Government authorized representative will meet the Contractor at the job site.

Provide a copy of all calibration records, and utilization records for radiological operations performed on the site.

1.15.3 Loss or Release and Unplanned Personnel Exposure

Loss or release of radioactive materials, and unplanned personnel exposures must be reported immediately to the Contracting Officer, RSO, and Base

Security Department Emergency Number.

1.15.4 Site Demarcation and Barricade

Properly demark and barricade an area surrounding radiological operations to preclude personnel entrance, in accordance with EM 385-1-1, Nuclear Regulatory Commission, and Applicable State regulations and license requirements, and in accordance with requirements established in the accepted Radiography Operation Planning Work Sheet.

Do not close or obstruct streets, walks, and other facilities occupied and used by the Government without written permission from the Contracting Officer.

1.15.5 Security of Material and Equipment

Properly secure the radiological material and ionizing radiation equipment at all times, including keeping the devices in a properly marked and locked container, and secondarily locking the container to a secure point in the Contractor's vehicle or other approved storage location during transportation and while not in use. While in use, maintain a continuous visual observation on the radiological material and ionizing radiation equipment. In instances where radiography is scheduled near or adjacent to buildings or areas having limited access or one-way doors, make no assumptions as to building occupancy. Where necessary, the Contracting Officer will direct the Contractor to conduct an actual building entry, search, and alert. Where removal of personnel from such a building cannot be accomplished and it is otherwise safe to proceed with the radiography, position a fully instructed employee inside the building or area to prevent exiting while external radiographic operations are in process.

1.15.6 Transportation of Material

Comply with 49 CFR 173 for Transportation of Regulated Amounts of Radioactive Material. Notify Local Fire authorities and the site Radiation Safety Officer (RSO) of any Radioactive Material use.

1.15.7 Schedule for Exposure or Unshielding

Actual exposure of the radiographic film or unshielding the source must not be initiated until after 5 p.m. on weekdays.

1.15.8 Transmitter Requirements

Adhere to the base policy concerning the use of transmitters, such as radios and cell phones. Obey Emissions control (EMCON) restrictions.

1.16 CONFINED SPACE ENTRY REQUIREMENTS

Confined space entry must comply with EM 385-1-1, 29 CFR 1926, 29 CFR 1910, and Directive CPL 2.100. Any potential for a hazard in the confined space requires a permit system to be used.

1.16.1 Rescue Procedures and Coordination with Local Emergency Responders

Develop and implement an on-site rescue and recovery plan and procedures. The rescue plan must not rely on local emergency responders for rescue from a confined space.

1.17 DIVE SAFETY REQUIREMENTS

When any diving is to be performed, develop a Dive Operations Plan, AHA, emergency management plan, and personnel list that includes qualifications, for each separate diving operation. Submit these documents to the District Dive Coordinator (DDC) via the Contracting Officer, for review and approval at least 15 working days prior to commencement of diving operations. These documents must be at the diving location at all times. Provide each of these documents as a part of the project file.

1.18 SEVERE STORM PLAN

In the event of a severe storm warning, the Contractor must comply with the applicable Storm Plan and:

- a. Secure outside equipment and materials and place materials that could be damaged in protected areas.
- b. Check surrounding area, including roof, for loose material, equipment, debris, and other objects that could be blown away or against existing facilities.
- c. Ensure that temporary erosion controls are adequate.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 CONSTRUCTION AND OTHER WORK

Comply with EM 385-1-1, NFPA 70, NFPA 70E, NFPA 241, the APP, the AHA, Federal and State OSHA regulations, and other related submittals and activity fire and safety regulations. The most stringent standard prevails.

PPE is governed in all areas by the nature of the work the employee is performing. Use personal hearing protection at all times in designated noise hazardous areas or when performing noise hazardous tasks. Safety glasses must be worn or carried/available on each person. Mandatory PPE includes:

- a. Head Protection that meets ANSI/ISEA Z89.1
- b. Long Pants
- c. Appropriate Safety Footwear
- d. Appropriate Class Reflective Vests

3.1.1 Worksite Communication

Employees working alone in a remote location or away from other workers must be provided an effective means of emergency communications (i.e., cellular phone, two-way radios, land-line telephones or other acceptable means). The selected communication must be readily available (easily within the immediate reach) of the employee and must be tested prior to the start of work to verify that it effectively operates in the area/environment. Develop an employee check-in/check-out communication

procedure to ensure employee safety.

3.1.2 Hazardous Material Exclusions

Notwithstanding any other hazardous material used in this Contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation (with the exception of radioactive material and devices used in accordance with EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment with radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocyanates, lead-based paint, and hexavalent chromium, are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials. Low mercury lamps used within fluorescent lighting fixtures are allowed as an exception without further Contracting Officer approval. Notify the Radiation Safety Officer (RSO) prior to excepted items of radioactive material and devices being brought on base.

3.1.3 Unforeseen Hazardous Material

Contract documents identify materials such as PCB, lead paint, and friable and non-friable asbestos and other OSHA regulated chemicals (i.e., 29 CFR Part 1910.1000). If material(s) that may be hazardous to human health upon disturbance are encountered during demolition, repair, renovation, or construction operations. Stop that portion of work and notify the Contracting Officer immediately. Within 14 calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification.

3.2 UTILITY OUTAGE REQUIREMENTS

Apply for utility outages at least 7 days in advance. At a minimum, the written request must include the location of the outage, utilities being affected, duration of outage, any necessary sketches, and a description of the means to fulfill energy isolation requirements in accordance with EM 385-1-1. In accordance with EM 385-1-1, where outages involve Government or Utility personnel, coordinate with the Government on all activities involving the control of hazardous energy.

These activities include, but are not limited to, a review of Hazardous Energy Control Program (HECP) and HEC procedures, as well as applicable Activity Hazard Analyses (AHAs). In accordance with EM 385-1-1 and NFPA 70E, work on energized electrical circuits must not be performed without prior Government authorization. Government permission is considered through the permit process and submission of a detailed AHA. Energized work permits are considered only when de-energizing introduces additional or increased hazard or when de-energizing is infeasible.

3.3 OUTAGE COORDINATION MEETING

After the utility outage request is approved and prior to beginning work on the utility system requiring shut-down, conduct a pre-outage coordination meeting in accordance with EM 385-1-1. This meeting must include the Prime Contractor, the Prime and subcontractors performing the work, the Contracting Officer, the Installation representative and Public Utilities representative. All parties must fully coordinate HEC activities with one another. During the coordination meeting, all parties must discuss and

coordinate on the scope of work, HEC procedures (specifically, the lock-out/tag-out procedures for worker and utility protection), the AHA, assurance of trade personnel qualifications, identification of competent persons, and compliance with HEC training in accordance with EM 385-1-1. Clarify when personal protective equipment is required during switching operations, inspection, and verification.

3.4 CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT)

Provide and operate a Hazardous Energy Control Program (HECP) in accordance with EM 385-1-1, 29 CFR 1910, 29 CFR 1915, ANSI/ASSP A10.44, NFPA 70E.

3.4.1 Safety Preparatory Inspection Coordination Meeting with the Government or Utility

For electrical distribution equipment that is to be operated by Government or Utility personnel, the Prime Contractor and the subcontractor performing the work must attend the safety preparatory inspection coordination meeting, which will also be attended by the Contracting Officer's Representative, and required by EM 385-1-1. The meeting will occur immediately preceding the start of work and following the completion of the outage coordination meeting. Both the safety preparatory inspection coordination meeting and the outage coordination meeting must occur prior to conducting the outage and commencing with lockout/tagout procedures.

3.4.2 Lockout/Tagout Isolation

Where the Government or Utility performs equipment isolation and lockout/tagout, the Contractor must place their own locks and tags on each energy-isolating device and proceed in accordance with the HECP. Before any work begins, both the Contractor and the Government or Utility must perform energy isolation verification testing while wearing required PPE detailed in the Contractor's AHA and required by EM 385-1-1. Install personal protective grounds, with tags, to eliminate the potential for induced voltage in accordance with EM 385-1-1.

3.4.3 Lockout/Tagout Removal

Upon completion of work, conduct lockout/tagout removal procedure in accordance with the HECP. In accordance with EM 385-1-1, each lock and tag must be removed from each energy isolating device by the authorized individual or systems operator who applied the device. Provide formal notification to the Government (by completing the Government form if provided by Contracting Officer's Representative), confirming that steps of de-energization and lockout/tagout removal procedure have been conducted and certified through inspection and verification. Government or Utility locks and tags used to support the Contractor's work will not be removed until the authorized Government employee receives the formal notification.

3.5 FALL PROTECTION PROGRAM

Establish a fall protection program, for the protection of all employees exposed to fall hazards. Within the program include company policy, identify roles and responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection, storage, care and maintenance of fall protection equipment and rescue and evacuation procedures in accordance with EM 385-1-1.

3.5.1 Fall Protection Equipment and Systems

Enforce use of personal fall protection equipment and systems designated (to include fall arrest, restraint, and positioning) for each specific work activity in the Site Specific Fall Protection and Prevention Plan and AHA at all times when an employee is exposed to a fall hazard. Protect employees from fall hazards as specified in EM 385-1-1.

Provide personal fall protection equipment, systems, subsystems, and components that comply with EM 385-1-1 and 29 CFR 1926.

3.5.1.1 Additional Personal Fall Protection Measures

In addition to the required fall protection systems, other protective measures such as safety skiffs, personal floatation devices, and life rings, are required when working above or next to water in accordance with EM 385-1-1. Personal fall protection systems and equipment are required when working from an articulating or extendible boom, swing stages, or suspended platform. In addition, personal fall protection systems are required when operating other equipment such as scissor lifts. The need for tying-off in such equipment is to prevent ejection of the employee from the equipment during raising, lowering, travel, or while performing work.

3.5.1.2 Personal Fall Protection Equipment

Only a full-body harness with a shock-absorbing lanyard or self-retracting lanyard is an acceptable personal fall arrest body support device. The use of body belts is not acceptable. Harnesses must have a fall arrest attachment affixed to the body support (usually a Dorsal D-ring) and specifically designated for attachment to the rest of the system. Snap hooks and carabineers must be self-closing and self-locking, capable of being opened only by at least two consecutive deliberate actions and have a minimum gate strength of 3,600 lbs in all directions. Use webbing, straps, and ropes made of synthetic fiber. The maximum free fall distance when using fall arrest equipment must not exceed 6 feet, unless the proper energy absorbing lanyard is used. Always take into consideration the total fall distance and any swinging of the worker (pendulum-like motion), that can occur during a fall, when attaching a person to a fall arrest system. Equip all full body harnesses with Suspension Trauma Preventers such as stirrups, relief steps, or similar in order to provide short-term relief from the effects of orthostatic intolerance in accordance with EM 385-1-1.

3.6 EQUIPMENT

3.6.1 Use of Explosives

Explosives must not be used or brought to the project site without prior written approval from the Contracting Officer. Such approval does not relieve the Contractor of responsibility for injury to persons or for damage to property due to blasting operations.

Storage of explosives, when permitted on Government property, must be only where directed and in approved storage facilities. These facilities must be kept locked at all times except for inspection, delivery, and withdrawal of explosives.

3.7 ELECTRICAL

Perform electrical work in accordance with EM 385-1-1.

3.7.1 Electrical Work

As described in EM 385-1-1, electrical work is to be conducted in a de-energized state unless there is no alternative method for accomplishing the work. In those cases obtain an energized work permit from the Contracting Officer. The energized work permit application must be accompanied by the AHA and a summary of why the equipment/circuit needs to be worked energized. Underground electrical spaces must be certified safe for entry before entering to conduct work. Cables that will be cut must be positively identified and de-energized prior to performing each cut. Attach temporary grounds in accordance with ASTM F855 and IEEE 1048. Perform all high voltage cable cutting remotely using hydraulic cutting tool. When racking in or live switching of circuit breakers, no additional person other than the switch operator is allowed in the space during the actual operation. Plan so that work near energized parts is minimized to the fullest extent possible. Use of electrical outages clear of any energized electrical sources is the preferred method.

When working in energized substations, only qualified electrical workers are permitted to enter. When work requires work near energized circuits as defined by NFPA 70, high voltage personnel must use personal protective equipment that includes, as a minimum, electrical hard hat, safety footwear, insulating gloves and electrical arc flash protection for personnel as required by NFPA 70E. Insulating blankets, hearing protection, and switching suits may also be required, depending on the specific job and as delineated in the Contractor's AHA. Ensure that each employee is familiar with and complies with these procedures and 29 CFR 1910.

3.7.2 Qualifications

Electrical work must be performed by QP with verifiable credentials who are familiar with applicable code requirements. Verifiable credentials consist of State, National and Local Certifications or Licenses that a Master or Journeyman Electrician may hold, depending on work being performed, and must be identified in the appropriate AHA. Journeyman/Apprentice ratio must be in accordance with State, Local requirements applicable to where work is being performed.

3.7.3 Arc Flash

Conduct a hazard analysis/arc flash hazard analysis whenever work on or near energized parts greater than 50 volts is necessary, in accordance with NFPA 70E.

All personnel entering the identified arc flash protection boundary must be QPs and properly trained in NFPA 70E requirements and procedures. Unless permitted by NFPA 70E, no Unqualified Person is permitted to approach nearer than the Limited Approach Boundary of energized conductors and circuit parts. Training must be administered by an electrically qualified source and documented.

3.7.4 Grounding

Ground electrical circuits, equipment and enclosures in accordance with NFPA 70 and IEEE C2 to provide a permanent, continuous and effective path to ground unless otherwise noted by EM 385-1-1.

3.7.5 Testing

Temporary electrical distribution systems and devices must be inspected, tested and found acceptable for Ground-Fault Circuit Interrupter (GFCI) protection, polarity, ground continuity, and ground resistance before initial use, before use after modification and at least monthly. Monthly inspections and tests must be maintained for each temporary electrical distribution system, and signed by the electrical CP or QP.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 42 00

SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL

1.1 REFERENCES

1.2 ORDERING INFORMATION

-- End of Section Table of Contents --

SECTION 01 42 00

SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL

1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the standards producing organization, (e.g. ASTM B 564 Nickel Alloy Forgings). However, when the standards producing organization has not assigned a number to a document, an identifying number has been assigned for reference purposes.

1.2 ORDERING INFORMATION

The addresses of the standards publishing organizations whose documents are referenced in other sections of these specifications are listed below, and if the source of the publications is different from the address of the sponsoring organization, that information is also provided. Documents listed in the specifications with numbers which were not assigned by the standards producing organization should be ordered from the source by title rather than by number.

AACE INTERNATIONAL (AACE)
1265 Suncrest Towne Centre Drive
Morgantown, WV 26505-1876 USA
Ph: 304-296-8444
Fax: 304-291-5728
Internet: <https://web.aacei.org/>

ASTM INTERNATIONAL (ASTM)
100 Barr Harbor Drive, P.O. Box C700
West Conshohocken, PA 19428-2959
Ph: 610-832-9500
Fax: 610-832-9555
E-mail: service@astm.org
Internet: <http://www.astm.org>

INTERNATIONAL SAFETY EQUIPMENT ASSOCIATION (ISEA)
1901 North Moore Street
Arlington, VA 22209-1762
Ph: 703-525-1695
Fax: 703-528-2148
E-mail: isea@safetyequipment.org
Internet: <http://www.safetyequipment.org/>

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)
445 Hoes Lane
Piscataway, NJ 08855-1331
Ph: 732-981-0060
Fax: 732-981-1712
E-mail: customer-services@ieee.org

Internet: <http://www.ieee.org>

LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES (2016 Edition), LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT (LADOTD)

P.O. Box 94245

Baton Rouge, LA 70804-9245

Ph: 225-379-1200

Fax: 225-379-1851

Internet:

[http://wwwsp.dotd.la.gov/Inside LaDOTD/Divisions/Engineering/Standard Specifications](http://wwwsp.dotd.la.gov/Inside%20LaDOTD/Divisions/Engineering/Standard%20Specifications)

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)

P.O. Box 4301

Baton Rouge, LA 70821-4301

Ph: 225-219-3953

Fax: 225-219-3971

Internet:

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

1 Batterymarch Park

Quincy, MA 02169-7471

Ph: 617-770-3000

Fax: 617-770-0700

E-mail: webmaster@nfpa.org

Internet: <http://www.nfpa.org>

U.S. ARMY CORPS OF ENGINEERS (USACE)

Order CRD-C DOCUMENTS from:

U.S. Army Engineer Research & Development Center

ATTN: Materials Testing Center

Building 6000

3909 Halls Ferry Road

Vicksburg, MS 39180-6199

Ph: 601-634-2496

Fax: 601-634-3242

E-mail: mtc-info@erdc.usace.army.mil

Internet: <https://mtc.erdc.dren.mil/>

Order Other Documents from:

USACE Publications Depot

Attn: CEHEC-IM-PD

2803 52nd Avenue

Hyattsville, MD 20781-1102

Ph: 301-394-0081

Fax: 301-394-0084

E-mail: mtc-info@erdc@usace.army.mil

Internet: <https://www.publications.usace.army.mil/>

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

Ariel Rios Building

1200 Pennsylvania Avenue, N.W.

Washington, DC 20460

Ph: 202-272-0167

Internet: <http://www.epa.gov>

--- Some EPA documents are available only from:

National Technical Information Service (NTIS)

5285 Port Royal Road

Springfield, VA 22161

LPV Risk Reduction Repairs Reach - 1, 2, 3 and 4
ED 24-006

Ph: 703-605-6585
Fax: 703-605-6900
E-mail: info@ntis.gov
Internet: <http://www.ntis.gov>

U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)
Office of Highway Safety (HHS-31)
400 Seventh Street, SW
Washington, DC 20590-0001
Ph: 202-366-0411
Fax: 202-366-2249
Internet: <http://www.fhwa.dot.gov>
Order from:

Superintendent of Documents
U. S. Government Printing Office (GPO)
732 North Capitol Street, NW
Washington, DC 20401
Ph: 202-512-1800
Fax: 202-512-2104
E-mail: contactcenter@gpo.gov
Internet: <http://www.gpoaccess.gov>

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)
8601 Adelphi Road
College Park, MD 20740-6001
Ph: 866-272-6272
Fax: 301-837-0483
Internet: <http://www.archives.gov>

Order documents from:
Superintendent of Documents
U.S. Government Printing Office (GPO)
732 North Capitol Street, NW
Washington, DC 20401
Ph: 202-512-1800
Fax: 202-512-2104
E-mail: contactcenter@gpo.gov
Internet: <http://www.gpoaccess.gov>

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 45 00.15 10

RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE (RMS CM)

PART 1 GENERAL

- 1.1 MEASUREMENT AND PAYMENT
- 1.2 REFERENCES
- 1.3 CONTRACT ADMINISTRATION
 - 1.3.1 Correspondence and Electronic Communications
 - 1.3.2 Other Factors
- 1.4 RMS SOFTWARE
- 1.5 CONTRACT DATABASE - GOVERNMENT
- 1.6 CONTRACT DATABASE - CONTRACTOR
 - 1.6.1 Administration
 - 1.6.1.1 Contractor Information
 - 1.6.1.2 Subcontractor Information
 - 1.6.1.3 Correspondence
 - 1.6.1.4 Equipment
 - 1.6.1.5 Reports
 - 1.6.1.6 Request For Information (RFI)
 - 1.6.2 Finances
 - 1.6.2.1 Pay Activity Data
 - 1.6.2.2 Payment Requests
 - 1.6.3 Quality Control (QC)
 - 1.6.3.1 Quality Control (QC) Reports
 - 1.6.3.2 Deficiency Tracking
 - 1.6.3.3 Three-Phase Control Meetings
 - 1.6.3.4 Labor and Equipment Hours
 - 1.6.3.5 Accident/Safety Reporting
 - 1.6.3.6 Definable Features of Work
 - 1.6.3.7 Activity Hazard Analysis
 - 1.6.4 Submittal Management
 - 1.6.5 Schedule
 - 1.6.6 Closeout
- 1.7 IMPLEMENTATION
- 1.8 NOTIFICATION OF NONCOMPLIANCE

PART 2 PRODUCTS

PART 3 EXECUTION

-- End of Section Table of Contents --

SECTION 01 45 00.15 10

RESIDENT MANAGEMENT SYSTEM CONTRACTOR MODE (RMS CM)

PART 1 GENERAL

1.1 MEASUREMENT AND PAYMENT

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

1.2 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2024) Safety -- Safety and Occupational Health (SOH) Requirements
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RMS CM Guide	(2025) Resident Management System (RMS) User Manual For Contractors
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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), RMS CM Guide. 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

The Contractor must be prepared to transition from the Resident Management System (RMS) to the new Construction Management Platform (CMP) at any time during the period of performance of this contract, once the USACE enterprise implements this change. The Contractor's obligation to transition from RMS to the CMP system is a requirement of this contract. Therefore, additional time or cost increase to complete this transition will not be considered. In the event of the transition, RMS project information will be migrated to CMP by the government and available in the CMP system. After the transition, the Contractor must utilize the CMP

system to perform all contract administration functions previously required in RMS, including all areas listed above. After the transition, "RMS" and "CMP" will be synonymous for all "Resident Management System" and "RMS" references in this contract's specification. To facilitate the transition from RMS to CMP, online training for the CMP system will be made available to the Contractor with enough time to train staff, prior to the transition occurring.

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 documents such as correspondence, including pay requests and payrolls, may be required in paper format with original signatures. Paper documents will govern in the event of discrepancy with the electronic version. Contracting Officer will determine which documents require submission of paper copies.

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 provisions in Section 00 72 00 GENERAL CONDITIONS SCHEDULES FOR CONSTRUCTION CONTRACTS; PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS; PAYMENTS UNDER FIXED-PRICED CONSTRUCTION CONTRACTS; Section 01 32 01.00 10 PROJECT SCHEDULE; Section 01 33 00 SUBMITTAL PROCEDURES; Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS; and Section 01 45 04.00 10 QUALITY CONTROL.

1.4 RMS SOFTWARE

RMS is a web based application. Download, install and be able to utilize the latest version of RMS within 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 (<https://rms.usace.army.mil>). 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 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.

1.6 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:

1.6.1 Administration

1.6.1.1 Contractor Information

Enter all current Contractor administrative data and information into RMS within 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.

1.6.1.2 Subcontractor Information

Enter all missing subcontractor administrative data and information into RMS CM within seven calendar days of receiving access to the Contract in RMS or within seven 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.

1.6.1.3 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".

1.6.1.4 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 in accordance with Section 01 45 04.00 10 QUALITY CONTROL.

1.6.1.5 Reports

Track the status of the project using the reports available in RMS. The value of these reports reflects the quality of the data input. These reports include but are not limited to the Progress Payment Request worksheet, Quality Control (QC) comments, Deficiency Tracking Log, Submittal Register Status, and Three-Phase Control worksheets in accordance with Sections 01 32 01.00 10 PROJECT SCHEDULE, 01 33 00 SUBMITTAL PROCEDURES, and 01 45 04.00 10 QUALITY CONTROL.

1.6.1.6 Request For Information (RFI)

Create and track all Requests For Information (RFI) in the RMS Administration Module for Government review and response. Provide status at weekly progress meeting in accordance with Section 01 32 01.00 10 PROJECT SCHEDULE.

1.6.2 Finances

1.6.2.1 Pay Activity Data

Develop and enter a list of pay activities in conjunction with the project schedule in accordance with Section 01 32 01.00 10 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.

1.6.2.2 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.

1.6.3 Quality Control (QC)

Enter and track implementation of the 3-phase QC Control System, QC testing, transferred and installed property and warranties in RMS. Link each deficiency and QC test to a pay activity. Prepare daily reports, identify and track deficiencies, document progress of work, and support other Contractor QC requirements in RMS. Maintain all data on a daily basis. Ensure that RMS reflects all quality control methods, tests and actions contained within the Contractor Quality Control (CQC) Plan and Government review comments. Provide within seven calendar days of Government acceptance of the CQC Plan.

1.6.3.1 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.

1.6.3.2 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.

1.6.3.3 Three-Phase Control Meetings

Maintain scheduled and actual dates and times of preparatory and initial control meetings in RMS, and upload meeting minutes of the meetings. Worksheets for the three-phase control meetings are generated within RMS.

1.6.3.4 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.

1.6.3.5 Accident/Safety Reporting

Both the Contractor and the Government enter safety related comments in RMS

as a deficiency. The Contractor must 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, Section 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS and as required by any other applicable Federal, State or local agencies.

1.6.3.6 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.

1.6.3.7 Activity Hazard Analysis

Import activity hazard analysis electronic document files into the RMS QC Module utilizing the document package manager. Prepare activity hazard analysis in accordance with Section 01 35 26 GOVERNMENT SAFETY REQUIREMENTS.

1.6.4 Submittal Management

Enter all current submittal register data and information into RMS within seven calendar days of receiving access to the Contract in RMS. Contractor is responsible for entering Activity Numbers for each submittal item corresponding to their Schedule. The Contractor will import the information shown in the submittal register following the specification Section 01 33 00 SUBMITTAL PROCEDURES unless otherwise directed by the Contracting Officer. 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.

Contractor may request submittals to be added to RMS throughout the lifecycle of the project. Approval/disapproval of Contractor requests is at the discretion of the Contracting Officer. Submittals entry into RMS must be updated daily or as practical for performance of the Contract, as approved by the Contracting Officer.

1.6.5 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, based on the requirements in Section 01 32 01.00 10 PROJECT SCHEDULE.

1.6.6 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.

1.7 IMPLEMENTATION

Use of RMS as described in the preceding paragraphs is mandatory. Ensure that sufficient resources are available to maintain contract data within

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ED 24-006

the RMS system. RMS is an integral part of the Contractor's required management of quality control.

1.8 NOTIFICATION OF NONCOMPLIANCE

Take corrective action within seven 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 --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 45 04.00 10

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

- 1.1 MEASUREMENT AND PAYMENT
- 1.2 SUBMITTALS
- 1.3 ELECTRONIC TEST REPORT DATA

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

- 3.1 GENERAL REQUIREMENTS
- 3.2 CONTRACTOR QUALITY CONTROL (CQC) PLAN
 - 3.2.1 Content of the CQC Plan
 - 3.2.2 Acceptance of Plan
 - 3.2.3 Notification of Changes
- 3.3 COORDINATION MEETING
- 3.4 QUALITY CONTROL ORGANIZATION
 - 3.4.1 Personnel Requirements
 - 3.4.2 CQC System Manager
 - 3.4.3 CQC Personnel
 - 3.4.4 Additional Requirement
 - 3.4.5 Organizational Changes
- 3.5 SUBMITTALS AND DELIVERABLES
- 3.6 CONTROL
 - 3.6.1 Preparatory Phase
 - 3.6.2 Initial Phase
 - 3.6.3 Follow-up Phase
 - 3.6.4 Additional Preparatory and Initial Phases
- 3.7 TESTS
 - 3.7.1 Testing Procedure
 - 3.7.2 Testing Laboratories
 - 3.7.2.1 Capability Check
 - 3.7.2.2 Capability Recheck
 - 3.7.3 Onsite Laboratory
 - 3.7.4 Furnishing or Transportation of Samples for Testing
- 3.8 COMPLETION INSPECTION
 - 3.8.1 Punch-Out Inspection
 - 3.8.2 Pre-Final Inspection
 - 3.8.3 Final Acceptance Inspection
- 3.9 DOCUMENTATION
- 3.10 SAMPLE FORMS
- 3.11 NOTIFICATION OF NONCOMPLIANCE

-- End of Section Table of Contents --

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 Contractor Quality Control program, and all costs associated therewith must be included in the applicable contract unit or job prices contained in the Bidding Schedule.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following must be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Contractor Quality Control Plan; G, CD

1.3 ELECTRONIC TEST REPORT DATA

As part of the Contractor's Quality Control Program, the selected QC laboratory must provide electronic transmission of the test report data in the prescribed formats with the original hard copy test report data to the Government. The New Orleans District Construction Control Manual (NODCC Manual) specifies the minimum number of tests to be performed, and includes forms which must be used to report the number of tests to be performed, and includes forms which must be used to report the test data. A copy of the NODCC Manual is attached at the end of this section. The technical specification sections may include testing and/or frequency requirements other than those listed in the NODCC manual. Test results must be emailed to mvn-cd-q-testresults@usace.army.mil and to the Government Project Engineer. In addition, all test results must be uploaded to the Resident Management System Contractor Mode (RMS CM).

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and must establish and maintain an effective quality control system in compliance with the Contract provision in Section 00 72 00 GENERAL CONDITIONS entitled INSPECTION OF CONSTRUCTION. The quality control system must consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system must cover all construction operations, both onsite and offsite, and must 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 must be the highest level manager responsible for the overall construction activities at the site, including quality and production. The site project superintendent must maintain a physical presence at the site at all times, except as otherwise acceptable to the Contracting Officer, and must be responsible for all construction and construction related activities at the site.

3.2 CONTRACTOR QUALITY CONTROL (CQC) PLAN

The Contractor must furnish for review by the Government, not later than 15 days after receipt of notice of award, the Contractor Quality Control Plan proposed to implement the requirements of the Contract provision in Section 00 72 00 GENERAL CONDITIONS entitled INSPECTION OF CONSTRUCTION . The plan must 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 must 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 must implement the three phase control system for all aspects of the work specified. The staff must include a CQC System Manager who must 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 must issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters must 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 must 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 must 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 must 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 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 the 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 must 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 must meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. The CQC Plan must 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 must 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 must be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes must 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 must 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 must 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 must be subject to acceptance by the Contracting Officer. The Contractor must 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 must be promptly furnished to the CQC organization by the Contractor. The CQC organization must 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 must identify as CQC System Manager an individual within the onsite work organization who must be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager must be a construction person with a minimum of 3 years (full time) experience in related equivalent work. This CQC System Manager must be on the site at all times during construction and must be employed by the prime Contractor. The CQC System Manager may not have any other duties than quality control, and that when the alternate is activated, he must also have no other duties other than quality control.

3.4.3 CQC Personnel

In addition to CQC personnel specified elsewhere in the contract, the Contractor must provide as part of the CQC organization specialized personnel to assist the CQC System Manager for the following areas: civil, materials technician, and 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 area provided that they are qualified to perform QC activities in each designated field of expertise and if the workload allows.

Experience Matrix

Area	Qualifications
a. Civil	Graduate Civil Engineer or Construction Manager with 2 years experience in the type of work being performed

Experience Matrix

Area	Qualifications
	on this project or technician with 5 yrs related experience
b. Submittals	Submittal Clerk with 1 yr experience
c. Concrete, Pavements and Soils	Materials Technician with 2 yrs experience for the appropriate area

3.4.4 Additional Requirement

In addition to the above experience and education requirements the CQC System Manager, and the alternate, must have completed the course entitled "Construction Quality Management for Contractors" within the past 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 must maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor must 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, must be made as specified in Section 01 33 00 SUBMITTAL PROCEDURES. The CQC organization must 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 phases of control must be conducted by the CQC System Manager for each definable feature of the construction work as follows:

3.6.1 Preparatory Phase

This phase must 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 must 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 must be notified at least 48 hours in advance of beginning the preparatory control phase. The Contractor must submit a written agenda of the topics to be discussed at the preparatory meeting on the day prior to the meeting date. This phase must 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 must be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report. The Contractor must instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.6.2 Initial Phase

This phase must be accomplished at the beginning of a definable feature of work. The following must 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 must be notified at least 24 hours in advance of

beginning the initial phase. Separate minutes of this phase must be prepared by the CQC System Manager and attached to the daily CQC report. Exact location of initial phase must 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 must 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 must be made a matter of record in the CQC documentation. Final follow-up checks must 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 must not build upon nor conceal non-conforming work.

3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases must 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 TESTS

3.7.1 Testing Procedure

The Contractor must perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. The Contractor must notify the Contracting Officer's Representative (COR) at least 24 hours prior to all quality control testing in order to coordinate simultaneous quality assurance tests if the COR elects to do so. Upon request, the Contractor must furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and/or acceptance tests when specified. The Contractor must procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. Depending upon the workload by the Government inspecting agency, acceptance or rejection of the Contractor proposed testing laboratory is usually done approximately 60 to 120 days after notification is received from the Contractor. The certification will be valid for two years. The Contractor must perform the following activities and record and provide the following data:

- a. Verify that testing procedures comply with contract requirements.
- b. Verify that facilities and testing equipment are available and comply with testing standards.
- c. Check test instrument calibration data against certified standards.
- d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have

been prepared.

- e. Results of all tests taken, both passing and failing tests, must be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test must be given. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility must be provided directly to the Contracting Officer. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.
- f. Field soil sampling and testing locations must be recorded using GPS coordinates accurate to the meter range.
- g. An informational electronic copy (PDF file of actual test result) of all material tests performed (regardless of whether performed by an offsite test facility or an on-site test facility) must be electronically transmitted to mvn-cd-q-testresults@usace.army.mil and to the Government project engineer. In addition, all test results must be uploaded to RMS within 24 hours of test report completion. An electronic data entry form (Excel based) will be provided by the Government to enter electronic data, in a format prescribed by the Government. This data file must contain the results of the required material tests. The required template for data transmission is covered in the attached Construction Control Manual_Appendices A-C at the end of this section.

3.7.2 Testing Laboratories

3.7.2.1 Capability Check

All laboratory facilities, personnel, and equipment used to test soil, concrete, and asphalt must be part of a validated laboratory that has been inspected or audited by the USACE Materials Testing Center, Vicksburg, MS.

3.7.2.2 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge of \$5000.00 to reimburse the Government for each succeeding recheck of the laboratory or the checking of a subsequently selected laboratory. Such costs will be deducted from the contract amount due the Contractor.

3.7.3 Onsite Laboratory

The Government reserves the right to utilize the Contractor's control testing laboratory and equipment to make assurance tests, and to check the Contractor's testing procedures, techniques, and test results at no additional cost to the Government.

3.7.4 Furnishing or Transportation of Samples for Testing

Costs incidental to the transportation of samples or materials must be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Government must be delivered to the Corps of Engineers Division Laboratory, f.o.b., at the following address:

U.S. Army Engineer Research and Development Center (ERDC)
Waterways Experiment Station
Geotechnical and Structures Laboratory
3909 Halls Ferry Road
Vicksburg, Mississippi 39180-6199

3.8 COMPLETION INSPECTION

3.8.1 Punch-Out Inspection

Near the end of the work, or any increment of the work established by a time stated in the Contract provision in Section 00 73 00 SUPPLEMENTARY CONDITIONS entitled COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK or stated elsewhere in the specifications, the CQC Manager must conduct an inspection of the work. A punch list of items which do not conform to the approved drawings and specifications must be prepared and included in the CQC documentation, as required by paragraph DOCUMENTATION. The list of deficiencies must include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff must make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor must notify the Government that the facility is ready for the Government Pre-Final inspection.

3.8.2 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 must 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 must be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph must 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.

3.8.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative must 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 must be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and must 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 provision in Section 00 72 00 GENERAL CONDITIONS entitled INSPECTION OF CONSTRUCTION.

3.9 DOCUMENTATION

The Contractor must maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records must include the work of subcontractors and suppliers and must 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 must 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 must indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records must cover both conforming and deficient features and must include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form must 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 report must be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days must be accounted for throughout the life of the contract. The first report following a day of no work must be for that day only. Reports must be signed and dated by the CQC System Manager. The report from the CQC System Manager must include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

3.10 SAMPLE FORMS

Sample forms for guidance in preparing the CQC Plan are enclosed at the end of this section.

3.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor must take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, must 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 must be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

-- End of Section --



**US Army Corps
of Engineers ®**
New Orleans District

Construction Control Manual

**Sampling & Testing Construction Materials
Reporting Test Results**

**CEMVN CD 415-Q-11
14 March 2016**



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

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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

Table of Contents

Chapter 1 Introduction	1
1. General:.....	1
2. Definitions:	1
3. Responsibility, Compilation, and Submittal of Test Results:	1
Chapter 2 Soils.....	4
1. Scope:.....	4
2. Samples:.....	4
3. Testing Personnel:.....	4
4. Typical Test Requirements:	5
5. Sampling and Testing of Compacted Fill:	6
6. Sampling and Testing of Un-Compacted Berm Material:	7
7. Compilation of Test Data for Submittal:	7
8. Soil Electronic Conductivity (EC) and Total Soluble Salt Analysis:	9
9. Field and Laboratory Determination of Non-Soil Volume for Levee Fill:.....	10
10. Additional Testing:.....	14
Chapter 3 Concrete	15
1. Scope:.....	15
2. Samples:	15
3. Testing Personnel:.....	15
4. Typical Test Requirements:	16
5. Compilation of Test Data for Submittal:	17
Chapter 4 Welding Inspection	20
1. Scope:.....	20
2. Definitions:	20
3. Testing Personnel:.....	20
4. Visual Inspection Requirements:	21
5. Nondestructive Testing Requirements:.....	21
6. Acceptance Criteria:.....	21
7. Frequency of Testing:	21
8. Compilation of Test Data for Submittal:	22

Appendix A – Test Form Management	23
1. Report Numbering:	23
2. Naming the Test Form Files:	23
3. Submitting Test Forms:.....	24
4. How to Access USACE QACC SharePoint Site	25
5. Uploading test forms.....	25
6. Revisions and Special Naming Considerations:	25
Appendix B - Material Testing Laboratory Requirements	26
1. Purpose:.....	26
2. Applicability:	26
3. References:.....	26
4. Responsibilities:.....	26
5. Procedures:.....	26
6. Records:	27
Appendix C - Filling Out Test Form Templates.....	28
1. Test Form Templates:	28
2. MVNQ Terms Document:	28

Chapter 1 Introduction

1. General:

This manual describes the means and methods for the Contractor Quality Control and Government Quality Assurance testing of construction materials incorporated into the New Orleans District (CEMVN) projects. Information is given on sampling, the test required, testing frequency, reporting requirements, and database maintenance. This manual only describes a minimum testing program on a limited number of common construction materials and the specifications may require additional tests that demonstrate compliance with the contract documents. If there is a conflict between this manual and the technical specification sections, the most stringent requirements shall govern. The most recent version of this manual at the time of contract solicitation will supplement the construction material control requirements for a specific contract unless noted otherwise.

The Contractor shall only use those laboratories, including his own that have been validated by an inspection or audit performed by the USACE Materials Testing Center, Vicksburg, MS.

2. Definitions:

- a. Quality Management System. Quality management is defined as all control, inspection, and other assurance activities instituted to achieve the product quality established by the contract plans and specifications.
- b. Contractor Quality Control. Contractor Quality Control (QC) is that part of the system by which the Contractor regulates, tests and inspects their own, suppliers, and sub-Contractors procedures, equipment, materials, and personnel so that the completed product will comply with the requirements of the project's contract documents.
- c. Government Quality Assurance. Government Quality Assurance (QA) is that part of the system by which the Government verifies or assures that the Contractor's Quality Control system is performing properly and the completed product conforms to the contract documents. The number of QC test observed by QA personnel should be generally related to the consistency in QC and QA test results.

3. Responsibility, Compilation, and Submittal of Test Results:

- a. The Contractor is responsible for complying with the contract documents in the performance of all required tests and the preparation, submittal, and maintenance of those test reports outlined in this manual and the contract specifications. The test results from QC and QA testing shall be compiled separately as outlined in this manual.
- b. The Contractors' QC Laboratory shall appoint a Registered Professional Civil Engineer to certify QC inspections and test results prior to the start of work. The certification shall state that the tests and observations were performed by or under the direct supervision of the Registered Professional Civil Engineer and that the results are representative of the

materials and conditions being certified by the tests. The certification shall be submitted within two weeks after final inspections and testing is complete. The certification shall be submitted to USACE for the referenced project in accordance with the New Orleans Construction Control Manual, Appendix A. Failure to submit certifications as stated may result in nonpayment for related work performed and disapproval of the QC test facility for this contract.

- c. Acceptance of the Contractors' QC plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes to the QC Plan and operations including removal of personnel and QC Laboratory, as necessary, to obtain the quality specified.
- d. All test results will be entered into the CEMVN Quality Assurance Control Center (QACC) construction material testing database as described in Appendix A by the QC laboratory performing the testing. Test results will be entered into the testing database within 48 hours from sampling. Payment for any material placed, as well as for any subsequent construction, will not be made until test results are entered into the database and analyzed by Quality Assurance personnel. The Contractor shall maintain a hard copy of the materials testing log, test reports and control charts at the Contractor's field office. These records will be available at all times for review by Government personnel. The original test report will be distributed to the Administrative Contracting Officer (ACO) within 48 of completion of the test. This original test report (supporting documentation) submission is in addition to any required electronic submission.
- e. Any tests not conforming to the contract documents will be immediately reported to the Administrative Contracting Officer along with the recommended corrective action to bring the work into complete compliance with the specifications. The Administrative Contracting Officer may designate additional re-sampling or retesting to verify the work represented by the failing test. This testing is at the Contractor's expense.
- f. Reference to standard test methods and testing procedures for sampling and testing of common construction materials are given in each chapter of this manual. Additional testing may also be required in the contract documents.
- g. Laboratory Facilities. For work that involves aggregates, concrete, masonry, rock or soil the QC Laboratory shall, at its own expense, obtain and maintain validation as an approved testing laboratory by the Materials Testing Center (MTC) of the Engineering Research and Development Center (ERDC). This shall be done in accordance with ER 1110-1- 8100 and ER 1110-1-261. Appendix B further describes this requirement. Refer to Chapter 4 for welding laboratories.

For work that involves vibration, steel, steel reinforcing bars, coatings inspections and other specialized construction material testing and inspection the QC Laboratory shall maintain personnel, procedures and equipment that meet applicable industry standards.

- h. Field sampling and testing locations shall be recorded using Latitude/Longitude coordinates reported in decimal degree format to the millionth decimal and be surveyed using techniques to achieve ± 10 feet accuracy.

Report Form input example: 29.934003, -90.133745

Chapter 2 Soils

1. Scope:

This chapter specifies methods and procedures for the Contractor Quality Control (QC) and Government Quality Assurance (QA) testing of materials used, but not limited to, compacted levee embankments, compacted berms, un-compacted berms, ramps, and structural backfill. The Government will also perform checks, and assurance testing of control testing required by the Contractor.

2. Samples:

Samples shall be collected and secured in accordance applicable ASTM testing procedures.

3. Testing Personnel:

The individuals who inspect, monitor, sample and test Embankment construction as required in this specification shall meet the following minimum criteria of certification and/or documented experience. Work experience shall be related to the field for which the inspector is being qualified and may be obtained by working either for an inspection/testing agency or engineering firm as a technician, inspector or engineer.

- Current NICET Level II certification in Geotechnical Engineering technology/construction, or
- Current ICC Soils Special Inspector with one year related experience, or
- Geologist-in-Training with one year related experience, or
- Engineer Intern with one year related experience, or
- Registered Geologist, or
- Registered Professional Engineer.

The Contractors' QC laboratory shall submit certification and/or documentation to provide evidence of qualification. The appointed Registered Professional Civil Engineer, identified in Chapter 1, Section 3.b to certify inspections and test results, remains responsible for compliance of all inspection and testing activities.

All Laboratory facilities, personnel and equipment used to test soils as required in this specification shall be part of a Laboratory that has been validated by the USACE Materials Testing Center, Vicksburg, MS.

4. Typical Test Requirements:

Testing and reporting shall be performed in accordance with the latest American Society of Testing and Materials (ASTM) Standard, as indicated in Table 2-1.

Table 2-1
ASTM References

Gradation	
ASTM C 117	Materials Finer than No. 200 Sieve in Mineral Aggregates by Washing
ASTM C 136	Sieve Analysis of Fine and Course Aggregates
ASTM D 1140	Amount of Material in Soils Finer than No. 200 (75- μ m) Sieve
ASTM D 6913	Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis
Moisture Content	
ASTM D 2216	Laboratory Determination of Water, (Moisture) Content of Soil and Rock by Mass (Method B)
ASTM D 4643	Determination of Water (Moisture) Content of Soil by Microwave Method
Moisture/Density Relationship	
ASTM D 698	Laboratory Compaction Characteristics of Soil Using Standard Efforts (12,400ft lbs/ft ³ (6000KN))
ASTM D 1557	Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft ³ (2,700 kN-m/m ³))
Field Density	
ASTM D 1556	Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D 6938	In-Place Density and Water Content of Soil and Soil-Aggregate Nuclear Methods (Shallow Depth)
Materials Classification	
ASTM D 2487	Classification of Soils for Engineering Purposes
ASTM D 4318	Liquid Limit (One-Point Method B), Plastic Limit, and Plasticity Index of Soils
Organic Content	
ASTM D 2974	Moisture, Ash, and Organic Matter of Peat and Other Organic Soils (Method C)
Unconfined Compressive Strength	
ASTM D 1633	Compressive Strength of Molded Soil-Cement Cylinders
ASTM D 2166	Unconfined Compressive Strength of Cohesive Soil

5. Sampling and Testing of Compacted Fill:

This sampling and testing shall be in accordance with the standard procedures referred to in this manual. The minimum number of QC tests to be performed shall be as indicated in Table 2-2.

The Government will also perform checks, and assurance testing of the other control testing required by the Contractor.

Table 2-2
Type of Tests and Frequency of Testing
Compacted Embankments and Berms, Ramps, and Structural Backfill Material

Property	Form	Minimum Frequency	Standard
Nuclear Field Density	MVNQS11	One test per 1,500 cubic yards of compacted fill placed per lift, but not less than one density test per 500 linear feet per lift. A lift placed on any one side of an existing embankment will be considered as a separate lift. At least one test shall be performed in any shift that compacted fill is placed.	ASTM D 1556 or ASTM D 6938
Nuclear Field Density Relative Density	MVNQS12	Used to record test results from testing uncohesive material. One density test per lift per 150 linear feet of the base course. Isolated repairs (less than 150 linear feet) must have at least one density test per isolated area per lift.	ASTM D 6938
Sand Cone Field Density	MVNQS03	One test to be obtained for every ten (10) Nuclear Field Density locations to verify Nuclear Field Density.	ASTM D 1556
Compaction Control Curve	MVNQS02	Control Compaction Curves shall be established in accordance with ASTM D 698 - Laboratory Compaction Characteristics of Soil Using Standard Effort. A Compaction Control Curve will be required for each type of material from each source or a minimum of one Compaction Control Curve every 25,000 cubic yards of compacted fill placement. Where construction operations result in the blending of material, two representative Compaction Control Curves will be required for each resulting blend of material. The samples collected for the resultant blended material shall be collected from separate locations. If the borrow or source of fill material changes, new Compaction Control Curves shall be performed. Material test samples for Compaction Control Curve shall be prepared by air-dry, rewet, and cured.	ASTM D 698
One-Point Proctor Verification	MVNQS02	One test to be obtained for every five (5) field density locations.	ASTM D 698 (modified)
Moisture Content	MVNQS11	One test at each field density test location.	ASTM D 2216 or ASTM D 4643
Organic Content	MVNQS07	One test at each field density test location.	ASTM D 2974 (Method C)
Materials Classification	MVNQS06	One test obtained for each Control Compaction Curve and one test for each field density test. Determine Atterberg Limits (LL One-Point Method B), minus #200 and Sand Content.	ASTM D 2487 ASTM D 1140 ASTM D 4318
Unconfined Compressive (UC) Strength	MVNQS05	For Deep Soil Mixing (DSM) QC operations a minimum of three percent of the DSM columns per site will be drilled and three UC strength samples collected and tested at each test column.	ASTM D 2166 ASTM D 1633

6. Sampling and Testing of Un-Compacted Berm Material:

This sampling and testing shall be in accordance with the standard procedures referred to in this manual. The minimum number of QC tests to be performed shall be as indicated in Table 2-3. The Government will also perform check and assurance testing of the other control testing required by the Contractor.

Table 2-3
Type of Tests and Frequency of Testing
Un-Compacted Berm Material

Property	Form	Frequency	Standard
Organic Content	MVNQS07	One test at materials classification test location.	ASTM D 2974 (Method C)
Materials Classification	MVNQS06	One test per 3,000 cubic yards of un-compacted fill placed, but not less than one test per 1,000 linear feet of un-compacted fill placed. At least one test shall be performed in any shift that un-compacted fill is placed. Determine Atterberg Limits (LL One-Point Method B), minus #200 and Sand Content.	ASTM D 2487 ASTM D 1140 ASTM D 4318

7. Compilation of Test Data for Submittal:

The results of the test and inspections shall be recorded in the MVN database as directed in Appendix. Samples of the reporting forms and instruction for each form are provided on the MVN SharePoint site; **Test Form Examples** and are described as follows. The latest forms should be referenced on the MVN SharePoint site and described in Appendices. All data is to be submitted electronically **within 24 hours of completion of the tests by the laboratory performing the testing.**

- a. **MVNQS01** Sieve Analysis – ASTM C 117, ASTM C 136 and ASTM D 1140. This form is to be used in reporting the material finer than No 200 sieve and a sieve analysis of coarse grain material.
- b. **MVNQS02 (Compaction Control Curve)** ASTM D 698. This form is to be used in reporting the determination of the optimum moisture content and the maximum dry density. The moisture-density curve shall be plotted based on a minimum of five compaction test specimens. A one-point Proctor test – ASTM D 698 (modified, Figure 2-2) shall be obtained for every five (5) field density test locations, and reported with same. The soil One-Point proctor result obtained from the in-place density test location will serve as the basis for determining the applicable compaction control curve.

- c. **MVNQS03** (Field Density Sand Cone Method) ASTM D 1556. This form is to be used in reporting the determination of the degree of compaction and moisture content. Contract specifications shall govern the required compaction effort.
- d. **MVNQS05** (Unconfined Compressive Strength) ASTM D 2166. This form is to be used to report the compressive strength of an intact, remolded or reconstituted cohesive soil, using a strain-controlled application of the axial load. Contract specifications shall govern the acceptable strength requirements.
- e. **MVNQS06** (Unified Soil Classification System) ASTM D 2487. This form is to be used to report the determination of the liquid limit (One-point Method B), plastic limit, plasticity index, % sand content and % fines. MVNQS01 Sieve Analysis – ASTM C 117 and ASTM C 136 is to be used to report the results of gradation tests of the material if a granular material is specified. The final soil classification in accordance with ASTM D 2487 shall be stated on the same forms. Contract specifications shall govern the acceptable Atterberg limits, gradation limits, and material classification. If the Nuclear Method (ASTM D 6938) is used for field density determinations, the soil sample utilized for material classification shall come from within a radius of 12 inches of the center of the in-place density test site. The soil classification obtained from in-place density test location will serve as a basis for determining the applicable compaction control curves.
- f. **MVNQS07** (Moisture, Ash, and Organic Content Determination) ASTM D 2974 (Method C). This form is to be used in reporting the determination of the organic content of the material. Determination of organic content shall be performed in accordance with ASTM D 2974; Method C. Contract specifications shall govern the acceptable limits of organic content.
- g. **MVNQS09** (Moisture Content Determination) ASTM D 2216, ASTM D 4643 and ASTM D 6938. This form is to be used in reporting the determination of the moisture content of the in-place material when ASTM D 2216, ASTM D 4643 or ASTM D 6938 is the test method utilized. This form is not to be used when performing Field Density Test Nuclear Method with Moisture Content Determination. Contract specifications shall govern the acceptable limits of moisture content.
- h. **MVNQS11** (Field Density Test Nuclear Method). This form is to be used in reporting the determination of the degree of compaction and moisture content by oven, microwave or nuclear gauge. Contract specifications shall govern the required compaction effort and moisture range. If the nuclear method is selected for field density testing, the Sand-Cone Method shall be used to confirm the accuracy of the Nuclear Method. This shall be accomplished by performing an initial comparison test of the two methods when a nuclear gage is brought on-site for the first time. If the Nuclear Method wet density is within 3 percent of the Sand Cone Method, no correction of the Nuclear Method wet density will be required and the testing may continue with the Nuclear Method. The Nuclear Method wet density shall be verified throughout the project at a rate of one Sand-Cone test for every ten nuclear tests per nuclear gage thereafter. If the variance at any time between the Nuclear Method and the Sand Cone Method exceeds 3 percent, testing

with the Nuclear Method shall stop until the Contractor provides a Root Cause Analysis and five consecutive comparison tests are performed as evidence that Corrective Actions will provide results within 3 percent. For comparison purposes, the nuclear and sand-cone wet densities should represent the same layer thickness within the testing area selected. When a nuclear density result is in doubt, the sand-cone density test shall be used for acceptance.

- i. **MVNQS12** (Field Density (Relative Density) Nuclear Method). This form is to be used in reporting the determination of the Relative degree of compaction as determined based on relationship of the Minimum Dry density and Maximum Dry density. Contract specifications shall govern the required Relative Density.

8. Soil Electronic Conductivity (EC) and Total Soluble Salt Analysis:

The following test method shall be used for determining the Total Soluble Salt (Total Salinity) of Embankment soils. This method shall be followed when testing embankment soil salinity levels. Sampling of materials shall be performed by a USACE Validated Laboratory.

- A. Sampling; Sampling shall consist of one 12,500 gram composite sample per 1,000 linear feet per lift. A Composite soil sample is defined as 5 separate representative 2,500 gram samples taken randomly at relatively evenly spaced intervals within the 1,000 linear foot. A lift on any one side of the levee will be considered one lift. The locations of the samples shall be as directed by the Contracting Officer. When a composite soil sample is collected, it should be handled in accordance with ASTM D 4220, Group B Standard Practices for Preserving and Transporting Soil Samples.

As directed by the Contracting Officer, when samples are to be split for replicate testing, the entire composite sample shall be processed over a No. 4 (4.75 mm) sieve by the contractors QC laboratory. The material passing the No. 4 sieve shall be thoroughly mixed and split in accordance with ASTM C 702 Standard Practice for Reducing Samples of Aggregate to Testing Size.

- B. Sample Preparation; Composite soil samples passing a No. 4 sieve are to be thoroughly remixed and reduced to a minimum 200 g sample for testing in accordance with ASTM C 702 Standard Practice for Reducing Samples of Aggregate to Testing Size.

The reduced composite soil sample is air dried at a temperature not to exceed 140° F for a minimum of 18 hours. After the sample is air dried, process and collect material passing No. 10 (2 mm) sieve. Material retained on the No. 10 sieve will be discarded.

- C. Procedure; (EC 1:2 preparation) To determine soil EC, collect a representative 20 gram sample from the sieved air-dried material and mix with 40 mL deionized water in a 125 mL Erlenmeyer flask.

The container is sealed and the mixture is either agitated for 1 hour in a mechanical shaker or mixed by hand every 30 minutes for 3 hours.

The mixture is filtered through a Whatman 42 filter paper. EC (dS/m) of the filtrate is determined immediately using a standard conductivity meter. Follow manufacture's direction for standard conductivity meter operations and temperature corrections.

- D. Reporting; The directly-measured EC 1:2 is converted to Saturated Extract-Equivalent EC (EC_e) by multiplying by a factor of 2. (Southern Cooperative Series Bulletin No. 419 ISBN# 1581614195 January, 2014)

Total soluble salts (TSS) concentration in ppm (mg/L) is calculated by multiplying EC_e (dS/m) by 640 for EC readings <5.0 dS/m or by 800 for EC readings >5.0 dS/m. (Rhoades, 1996)

The report shall include at a minimum;

1. All sample identifications documented during sampling that at a minimum include, sample date, received date, test/sample number, location of composite sample (GPS, station, lift, , elevation, offset)
2. USCS visual description
3. Make/Model and Serial # of conductivity meter
4. Notes should include any deviations from this test method.
5. The Soil Electronic Conductivity (EC) shall be reported in decisiemens per metre (dS/m).
6. Total Soluble Salt shall be reported as Total Salinity in parts per million (ppm).

9. Field and Laboratory Determination of Non-Soil Volume for Levee Fill:

- A. The field excavation testing shall be performed by excavating a 10' wide x 10' long and to a depth of the lift thickness for each lift that is in question. The volume of the excavation shall be verified using the end area method through measuring the dimensions of the excavation with the use of survey equipment at each corner of the hole. A difference of +/- 10% of the theoretical excavation is allowed. The Contractor shall bring all material excavated to the lab in sealed airtight containers. All excavations shall be completely backfilled by the Contractor within 72 hours of inspection unless directed otherwise by the COR. All backfill shall be in accordance with the existing contract documents, especially EMBANKMENT.
- B. The unit weight of the soil shall be determined by ASTM D 6938 Field Density – Nuclear Method, ASTM D 1556 Field Density – Sand Cone Method, or ASTM D 698 Compaction Characteristics of Soil. All material testing shall be performed by a Corps validated lab.
- C. Once all the excavated material is delivered to a Corps validated lab, any clay pieces adhering to the non-soil pieces that can be removed by hand without damaging the non-soil piece shall be removed.
- D. All non-soil pieces shall be weighed in their existing conditions immediately prior to testing (wet weight as excavated). If all non-soil pieces do not fit in the Measure Box, then the non-soil pieces may be split into smaller sampling sizes for testing purposes and the cumulative volume reported.

E. Sturdy Measure Box containers shall be used for the non-soil volume determination processes. The minimum volume of the Measure Box is 0.8 cubic feet. This volume dimension is a minimum and may be enlarged if desired. The weight of the empty containers shall be determined using a calibrated scale and with the weight recorded to the nearest 0.1 lb. The container shall be filled in two layers with silica sand. The first layer of sand shall be densified by use of a Shake Table and vibrated such that the Silica sand achieves its maximum density. The second layer of silica sand shall be added and vibrated, with additional sand added as needed to “top off” the container as the sand achieves a greater density. The weight of the container filled with densified Silica sand shall be recorded to the nearest 0.1 lb using a calibrated scale. Determine the weight of the measure container plus sand three times to determine the average value. The maximum unit weight of the silica sand is the weight of the measure plus sand minus the weight of the measure divided by the known volume of the container and reported to the nearest 0.1 lb/ft³.

F. The volume of the non-soil shall be determined by the following USACE MVN developed procedure, Non-Soil Volume Determination.

- 1) **Volume and Weight Determination of Measures (annual):** The volume of the Measure Box shall be determined and verified on an annual basis by the water filled method as specified in ASTM C29/C29M paragraph 8 and recorded to the nearest 0.1 ft³.
- 2) **Density Sand:** Obtain silica sand also known as US Silica Sand. Verify that the quality of the silica or “Silica” sand meets the requirements specified in ASTM D1556 paragraph 6.2. The sand can be re-used, but it should be cleaned to comply with the previously referenced standard by sieving and/or rinsing, and oven drying prior to reuse.
- 3) **Determining Densified Sand within a Measure Box:** Before any tests determining non-soil volume content, a calibration test shall be run each day that testing is to be performed, to determine the standard weight of the sand in the Measure Box as discussed in section E. The three repeated determinations of densified sand weight per unit volume shall be within 2.0 pcf of each other.

A Measure Box shall be used to determine the densified sand and will be based upon use of a Shake Table and placement within layers. Clean and dry silica sand is placed loosely within each layer using a large scoop or the edge of a bucket by flowing and distributing the sand evenly across the surface area. The Shake Table is then to be used. The number and duration of vibrations will be determined as noted in the following trial. These times are approximate and should be modified by each laboratory to fit the Shake Table being used to achieve a consistent sand weight per unit volume.

MEASURE BOX – (1) Position measure over a large catch pan for collecting excess sand. Place loose Silica sand in one layer (half height of measure); (2) Using the Shake Table, vibrate the sand for 4-8 seconds; (3) Place loose silica sand in a second layer (full height of measure); (4) Vibrate the sand for 4-8 seconds. The sand should consolidate below the top rim of the measure; (5) Place additional (excess) sand above the top of the measure. It should appear to overflow. Vibrate for the sand for an additional 3-4 seconds. It is desired to have excess sand above the top of the rim after vibration of about 1/8 inch; (6) Using a straight metal bar, strike off the excess sand, leaving the sand flush with the top rim of the measure; (7) Weigh the measure and densified sand recorded to the nearest 0.1 lb; (8) Determine the weight per unit volume of the measure by subtracting the weight of the measure plus sand minus the weight of the measure then dividing by the known volume of the container and report to the nearest 0.1 lb/ft³; (9) Repeat steps 1 thru 8 for a total of three determinations of densified sand weight per unit volume, and calculate the average weight per unit volume to the nearest 0.1 lb/ft³.

- 4) **Standard Wood or Metal for Verification (annual):** Eight pieces of wood or metal, labeled A thru G, measuring 5 inches by 1 inch by 2 inches are to be used to verify the volume determination by the densified sand method as detailed in 5) below. Determine the weight and linearly measured volume of the eight standard pieces of wood or metal to verify the calculated non-soil content from the use of densified silica sand within Measure Boxes of known volume.
- 5) **Non-soil Verification (annual):** Wood or metal pieces measured in Step 4) above will be used in each measure by densifying sand and four wood or metal pieces in each layer, for a total of eight wood or metal pieces within each measure. The same procedures outlined in Step 4) above are used to place and densify the sand and wood or metal within the measures. The wood or metal is placed within each layer with at least ½ inch of loose sand beneath and around the wood or metal pieces. The weight of the densified sand, measure, and wood or metal is used to determine the density and subsequent volume of the wood or metal. The calculated volumes shall be compared to the known volumes of the wood or metal pieces to see if any change in shaking time or sand type is needed. If the calculated and known volumes are within +/- 2% of each other, the test verification is successful. See below for the step by step procedures for this:

MEASURE BOX - (1) Determine the volume and weight of the measure as noted in Step 1) above; (2) Determine the average densified sand weight per unit volume as noted in Step 3) above; (3) Determine volume and weight of pre-cut pieces of wood or metal as noted in Step 4) above; (4) Densify wood or metal in layers following the similar method noted in Step 3) above; (5) Determine the densified sand and wood or metal weight in the unit measure; (6) Calculate the volume of wood or metal as shown below:

- (a) Volume of Measure Box (ft³)
- (b) Weight of Measure Box (lb)

- (c) Average weight per unit volume of densified sand (lb/ft³)
- (d) Wood or metal Pieces total weight (lb)
- (e) Wood or metal Pieces total volume (ft³)
- (f) Average determined densified sand, wood or metal, & measure weight (lb)
- (g) Densified sand only weight (no wood or metal) = (c) x (a)
- (h) Densified sand only weight (with wood or metal) = (f) – (b) – (d)
- (i) Volume of wood or metal (from densified sand test) = [(g) – (h)] / (c)
- (j) % actual volume wood or metal = 100 x (e) / (a)
- (k) % tested volume wood or metal = 100 x (i) / (a)

- 6) **Non-soil Volume Determination:** Determination of non-soil volume for a test sample is as follows. Determine the wet weight of the sample prior to placement into the loose sand layers. Cleaned non-soil pieces from a sample are placed in one of the tested measures above by following procedures as outlined in Step 3). The non-soil pieces are placed within each layer of loose sand with at least ½ inch of loose sand beneath and around the various non-soil pieces. The non-soil piece may be cut to fit into the measure but care should be used to ensure that all pieces of the sample are measured. The weight of the combined densified sand, measure, and non-soil shall be recorded to the nearest 0.1 lb. To determine the density and subsequent volume of the non-soil pieces, see calculations below.

MEASURE BOX - (1) Determine the volume and weight of the measure as noted in Step 1) above; (2) Determine the average densified sand weight per unit volume as noted in Step 3) above; (3) Determine weight of sample pieces of non-soil; (4) Densify non-soil pieces in layers following the similar method noted in Step 3) above; Determine the densified sand and non-soil pieces weight in the unit measure; (5) Calculate the volume of non-soil pieces as shown below:

- (a) Volume of Measure Box (ft³)
- (b) Weight of Measure Box (lb)
- (c) Average weight per unit volume of densified sand (lb/ft³)
- (d) Weight of Sample Non-soil Pieces (lb)
- (e) Determined densified sand, non-soil pieces, & measure weight (lb)
- (f) Densified sand only weight (no non-soil pieces) = (c) x (a)
- (g) Densified sand only weight (with non-soil pieces) = (e) – (b) – (d)
- (h) Volume of non-soil pieces (from densified sand test) = [(f) – (g)] / (c)
- (i) Volume of excavation (ft³)
- (j) % tested volume non-soil pieces = 100 x (h) / (i)

- 7) **Documentation:** As a minimum, calibrations of Measure Boxes should be documented annually on the Unit Weight Measure Volume Determination Record. The Densified Sand unit weight shall be documented on the Densified Sand Calibration Record. Test records for samples shall be documented on the Non-soil pieces Volume Determination Record. Contact MVN-CD-Q for latest test forms.

- G. The percent volume determined in Step 6) (j) above shall be compared versus the acceptable value listed in the specifications. If the test shows the percent volume is greater than the acceptable value, the Contractor shall follow the corrective actions as noted in the contract specifications.

10. Additional Testing:

In addition to the above frequency of tests, additional tests may be required as follows:

- a. Where the Administrative Contracting Officer (ACO) or Contracting Officer's Representative (COR) has reason to doubt the adequacy of the compaction, moisture content, or organic content control.
- b. Where the Contractor is concentrating fill operations over a relatively small area.
- c. When embankment materials change substantially, the Administrative Contracting Officer or Contracting Officer's Representative (COR) may direct additional testing.
- d. Where special compaction procedures are being used.
- e. When the contract specifications require additional testing.
- f. When areas are found not meeting the specified in-place density, Atterberg limits, moisture content, and/or in-place organic content requirements; the Contractor shall retest, at no additional costs to the Government, after corrective measures have been applied.

Chapter 3 Concrete

1. Scope:

This chapter specifies methods and procedures for the Contractor Quality Control (QC) and Government Quality Assurance (QA) methods and procedures for the testing of fresh concrete and concrete aggregate. The Government will also perform checks, and assurance testing of control testing required by the Contractor.

2. Samples:

Fresh concrete samples shall be secured in accordance with ASTM C 172. Concrete aggregates shall be sampled in accordance with ASTM D 75. Sampling locations shall be randomly selected.

3. Testing Personnel:

The individuals who inspect, monitor, sample and test Concrete construction as required in this specification shall meet the following minimum criteria of certification and/or documented experience. Work experience shall be related to the field for which the inspector is being qualified and may be obtained by working either for an inspection/testing agency or engineering firm as a technician, inspector or engineer.

- Current ICC Reinforced Concrete Certificate with 1 year related experience, or
- ACI Concrete Construction Special Inspector Certificate, or
- Engineer Intern with one year related experience, or
- Registered Professional Engineer.

The individuals who perform testing of concrete or the constituents of concrete as required in this specification shall have an applicable and current ACI certification for testing being performed; ACI Concrete Strength Testing, ACI Concrete Laboratory Testing – Level 1, ACI Aggregate Testing Technician – Level 1, ACI Concrete Field Grade I.

The Contractors' QC laboratory shall submit certification and/or documentation to provide evidence of qualification. The appointed Registered Professional Civil Engineer, identified in Chapter 1, Section 3.b to certify inspections and test results, remains responsible for compliance of all inspection and testing activities.

All Laboratory facilities, personnel and equipment used to test soils as required in this specification shall be part of a Laboratory that has been validated by the USACE Materials Testing Center, Vicksburg, MS.

4. Typical Test Requirements:

Test requirements specified in the contracts documents may be more stringent than those listed below in Tables 3-2, 3-3 and 3-4. All test results will be entered into the MVN material testing database as described in Appendices by the laboratory performing the testing. Acceptable test values are contained in the contract documents.

The laboratory performing the tests shall be validated by the Materials Testing Center, Vicksburg, MS. and conform to ASTM C 1077.

Table 3-1
ASTM References

Concrete Lab Testing	
ASTM C 33	Specification for Concrete Aggregates
ASTM C 39	Compressive Strength of Cylindrical Concrete Specimens
ASTM C 117	Materials Finer than No. 200 Sieve in Mineral Aggregates by Washing
ASTM C 136	Sieve Analysis of Fine and Course Aggregates
ASTM C 511	Mixing Rooms, Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the Testing of Hydraulic Cements and Concretes
ASTM C 566	Total Evaporable Moisture Content of Aggregate by Drying
ASTM C 617	Capping Cylindrical Concrete Specimens
ASTM C 702	Reducing Samples of Aggregate to Testing Size
ASTM C 1231	Practice for Use of Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders
CRD-C 104	Calculation of Fineness Modulus of Aggregate
Concrete Field Testing	
ASTM C 31	Making and Curing Concrete Test Specimens in the Field
ASTM C 138	Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
ASTM C 143	Slump of Hydraulic-Cement Concrete
ASTM C 172	Sampling Freshly Mixed Concrete
ASTM C 173	Air Content of Freshly Mixed Concrete by the Volumetric Method
ASTM C 231	Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C 1064	Temperature of Freshly Mixed Hydraulic-Cement Concrete
ASTM D 75	Sampling Aggregates

5. Compilation of Test Data for Submittal:

The results of the test and inspections shall be recorded in the MVN database as directed in Appendix. Samples of the reporting forms and instruction for each form are provided on the MVN SharePoint site; **Test Form Examples** and are described as follows. The latest forms should be referenced on the MVN SharePoint site and described in Appendices. All data is to be submitted electronically **within 24 hours of completion of the tests by the laboratory performing the testing.**

- a. **MVNQC01** (Concrete Compression Test Data – ASTM C 39). This form is to be used in reporting the results of laboratory concrete compression testing. Contract specifications shall govern the required concrete compressive strength.
- b. **MVNQC02** (Concrete Field Data). This form is to be used in reporting the data collected by the laboratory while monitoring and testing concrete during placement. Contract specifications shall govern the required concrete properties during placement.
- c. **LMN FORM 853-R** (Concrete Compression Test Specimen Data). This form is to be filled out and provided to the QA laboratory for each set of cylinders delivered. This form should be filled out with information documented during concrete placement. The information on this form should match the information provided on the associated MVNQC01 and MVNQC02 test forms. The Order number on this form shall match the Batch Ticket number on the associated concrete supplier batch ticket, the MVNQC01 and the MVNQC02 test form for sample tracking purposes. The form also serves as a bill of lading for the delivered concrete samples.

Table 3-2
Test Requirements
AGGREGATE, FINE

Property	Method	Frequency	Remarks
Deleterious Substances	ASTM C 33	1 per week	
Fineness Modulus	CRD-C 104	1 per shift per batch plant when concrete plant is operating	Calculation based on gradation test results
Gradation	ASTM C 117 ASTM C 136	1 per shift per batch plant when concrete plant is operating.	Tests selected randomly.
Moisture Content	ASTM C 566	If moisture meter is working properly, 2 per week to verify	Tests selected randomly for each aggregate size.
		If moisture meter is not working, 4 every 8 hours of mixing plant operation	
		Additional tests if slump is out of control or variability is excessive	
Sampling Method	ASTM D 75	As specified for the individual material property.	

Table 3-3
Test Requirements
AGGREGATE, COURSE

Property	Method	Frequency	Remarks
Deleterious Substances	ASTM C 33	1 per week per batch plant, or as directed by COR	
Gradation	ASTM C 117 ASTM C 136	1 per shift per batch plant when concrete plant is operating	Tests selected randomly.
Moisture Content	ASTM C 566	If moisture meter is working properly, 2 per week to verify	Tests selected randomly for each aggregate size.
		If moisture meter is not working, 4 every 8 hours of mixing plant operation	
		Additional tests if slump is out of control or variability is excessive	
Sampling Method	ASTM D 75	As specified for the individual material property.	

Table 3-4
Test Requirements
FRESH CONCRETE

Property	Form	Method	Frequency	Remarks
Compression Cylinders (Quality Assurance)	MVNQC01 MVN 835	ASTM C 31 ASTM C 39	To be molded by the Contractor Quality Control Laboratory and tested by the Quality Assurance Laboratory. Mold one set of cylinders per 8 hour shift or for every 150 cubic yards placed.	Quality Assurance Cylinders shall be molded from the same sample of concrete that the Quality Control cylinders are molded.
Compression Cylinders (Quality Control)	MVNQC01 MVNQC02	ASTM C 31 ASTM C 39	To be molded and tested by the Contractor Quality Control Laboratory. Mold one set of cylinders per 8 hour shift or for every 150 cubic yards placed.	On randomly selected batches for each separate concrete mix produced. Cylinders used shall conform to paragraph 6.1 of ASTM C 31. Initial Cure in accordance with paragraph 10.1.2 of ASTM C 31.
			As a minimum; A set of test specimens for concrete with a 28-day specified strength shall consist of two cylinders to be tested at 7 days and two 6-inch by 12-inch cylinders or three 4-inch by 8-inch cylinders at 28 days. A set of test specimens for concrete with a 56-day or 90-day specified strength shall consist of two cylinders to be tested at 7 days, two 6-inch by 12-inch cylinders or three 4-inch by 8-inch cylinders at 28 days and two 6-inch by 12-inch cylinders or three 4-inch by 8-inch cylinders at 90 days.	
			Additional sets when mix proportions change or low strengths are detected.	
Compression Cylinders (QC- for putting concrete into service or other purposes indicated in paragraph 4.3 of ASTM C 31)	MVNQC01 MVNQC02	ASTM C 31 ASTM C 39	1 set of multiple pairs of QC cylinders per item to be evaluated.	Cylinders used shall conform to paragraph 6.1 of ASTM C 31. Initial Cure in accordance with paragraph 10.1.2 of ASTM C 31. Cylinders to be field cured shall conform to 10.2 of ASTM C 31.
Air Content Slump Temperature	MVNQC01 MVNQC02	ASTM C 231 ASTM C 143 ASTM C 1064	1 every time concrete cylinders are molded	On randomly selected batches for each separate concrete mix produced
			Plus 2 additional during each 8 hours of concrete production	
			Additional tests if workability variation is excessive.	

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:

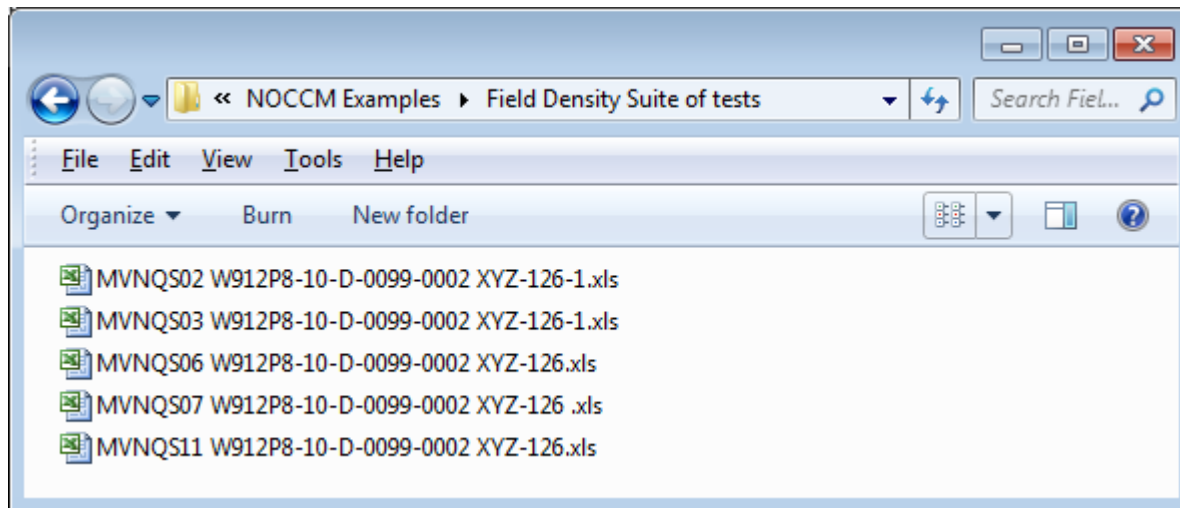
[Test Form Name][USACE Contract No][Report No][Test No (if necessary)]

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.

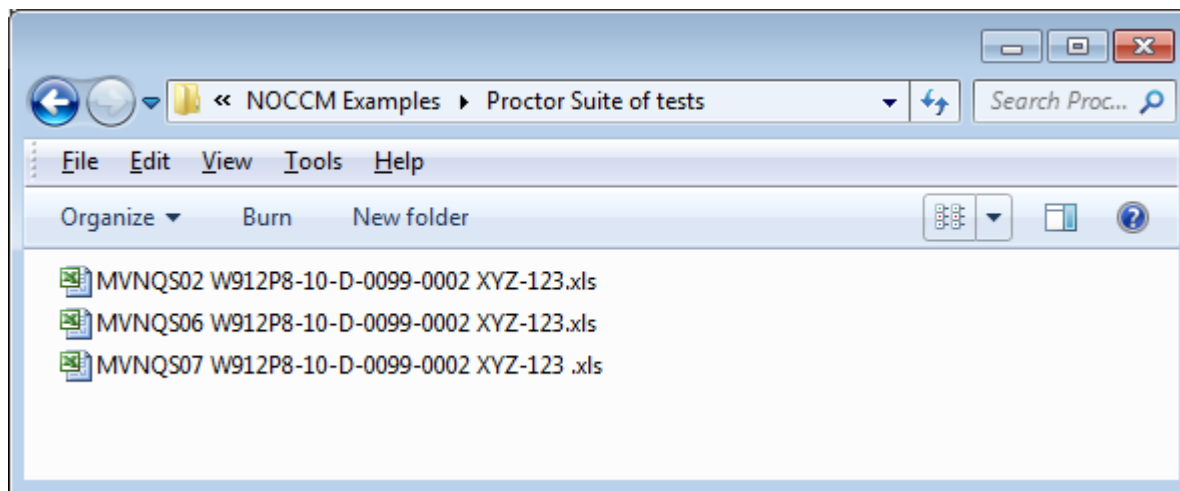
- **[Test Form Name]** is the name of the template MVNQ(C, S or W)##, for example MVNQS02. The variable letter are related to the type of test; C is for concrete, S is for soil and W is for Welds.
- **[USACE Contract No]** is the construction contract number. This must be the complete contract number 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;	CEMVN-CD@Usace.Army.Mil
MVN-CD Public Webpage;	http://www.mvn.usace.army.mil/About/Offices/Construction.aspx
MVN QACC SharePoint;	https://partners.usace.army.mil/sites/MVN/QACC/default.aspx

5. Uploading test forms.

The exact procedure for uploading test forms to the MVN Quality Assurance Control Center (QACC) SharePoint is dependent on the computer system the user is using. Once an account has been established MVN-CD can assist each user individually by introducing the QACC system and going through the processes needed to upload test files and supporting documents. If at any point a user has questions please contact the MVN-CD-Q Branch for assistance.

Important notes before beginning the upload process; The QACC SharePoint site does have restrictions on characters (delimiters) that can be used for a file name. The following characters are not accepted by the QACC SharePoint site; \ / : * ? " < > | # { } % ~ &. If these characters are used, the QACC SharePoint site may lock up or give an error that indicates 'a nonexistent file'. If this occurs remove the delimiters used in the file name, upload the files again and verify that all files upload because this will stop the upload process for all the files. If it is determined that certain files did not upload repeat the upload process.

The second note is that the QACC SharePoint site will time out and requires logging back in after an extended time of inactivity. The QACC SharePoint site will not indicate it timed out until attempting to perform a function on the site. The site will return to the Log in screen. If this happens, the function previously being performed may not have been performed completely.

6. Revisions and Special Naming Considerations:

When resubmitting files with revisions, the same filename is to be used if possible. If a file is to be submitted to the QACC SharePoint site it is not necessary to include a revision indication in the file name, such as R1 or R2 in the filename. The test form revision should be judicated in the appropriate revision field on the form. The QACC SharePoint site does allow files to be uploaded to the **Test Form** library when the same file name exists. In general, the idea is to keep the filename as simple as possible and the same throughout the submittal and revision process. Do not add unnecessary details to the filename.

If more information is needed, see the Wiki or Discussion board on the MVN Quality Assurance Control Center (QACC) SharePoint. The QA managers are also available if there are other questions.

Appendix B - Material Testing Laboratory Requirements

1. Purpose:

All construction material testing laboratories used in support of the Contractor's Quality Control (QC) testing and the Government's Quality Assurance (QA) testing must receive validation by the Material Testing Center (MTC), Engineering and Research Development Center (ERDC), in Vicksburg Mississippi. This includes all Contractor and government on-site laboratories or commercial laboratories used either for QC or QA testing.

2. Applicability:

This procedure applies to all projects being managed by the New Orleans District for which testing of construction materials is conducted

3. References:

[ASTM E 329-06a, Agencies Engaged in the Construction Inspection and/or Testing](#)

[ER 1110-1-261 \(28 April 99\), Quality Assurance of Laboratory Testing Procedures](#)

[ER 1110-1-8100 \(31 Dec 97\), Laboratory Investigations and Testing](#)

Corps of Engineers Validated Laboratories;

Engineering Research and Development Center - Material Testing Center

<http://www.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

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: _____

TABLE OF CONTENTS

- 1.0 Company Policy
- 2.0 Plan Purpose
- 3.0 Quality Control Organization
 - 3.1 CQC System Manager
 - 3.2 CQC System Manager Alternate
 - 3.3 Manager of Construction
- 4.0 Resume' of personnel
 - 4.1 CQC System Manager
 - 4.2 CQC System Manager Alternate
 - 4.3 Manager of Construction
- 5.0 Designation of CQC System Manager
- 6.0 Designation of CQC Systems Manager Alternate
- 7.0 Procedures
 - 7.1 Scheduling and Managing Submittals
 - 7.2 Control Testing
 - 7.2.1 Test List
 - 7.2.2 Testing Facilities
 - 7.2.3 Test Records
 - 7.3 Inspection
 - 7.3.1 Materials
 - 7.3.2 Off-Site Inspection
 - 7.3.3 On-Site Inspection
 - 7.3.4 Completion Inspection
 - 7.4 Control Procedures
 - 7.4.1 Preparatory Phase
 - 7.4.2 Initial Phase
 - 7.4.3 Follow-Up Phase
 - 7.5 Reporting and Documentation
 - 7.5.1 Daily Record
 - 7.5.2 Control Phase Checklists
 - 7.5.3 Tracking Construction Deficiencies
 - 7.5.4 Contract Document Control
 - 7.5.5 Changes to the CQC Plan

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 _____.

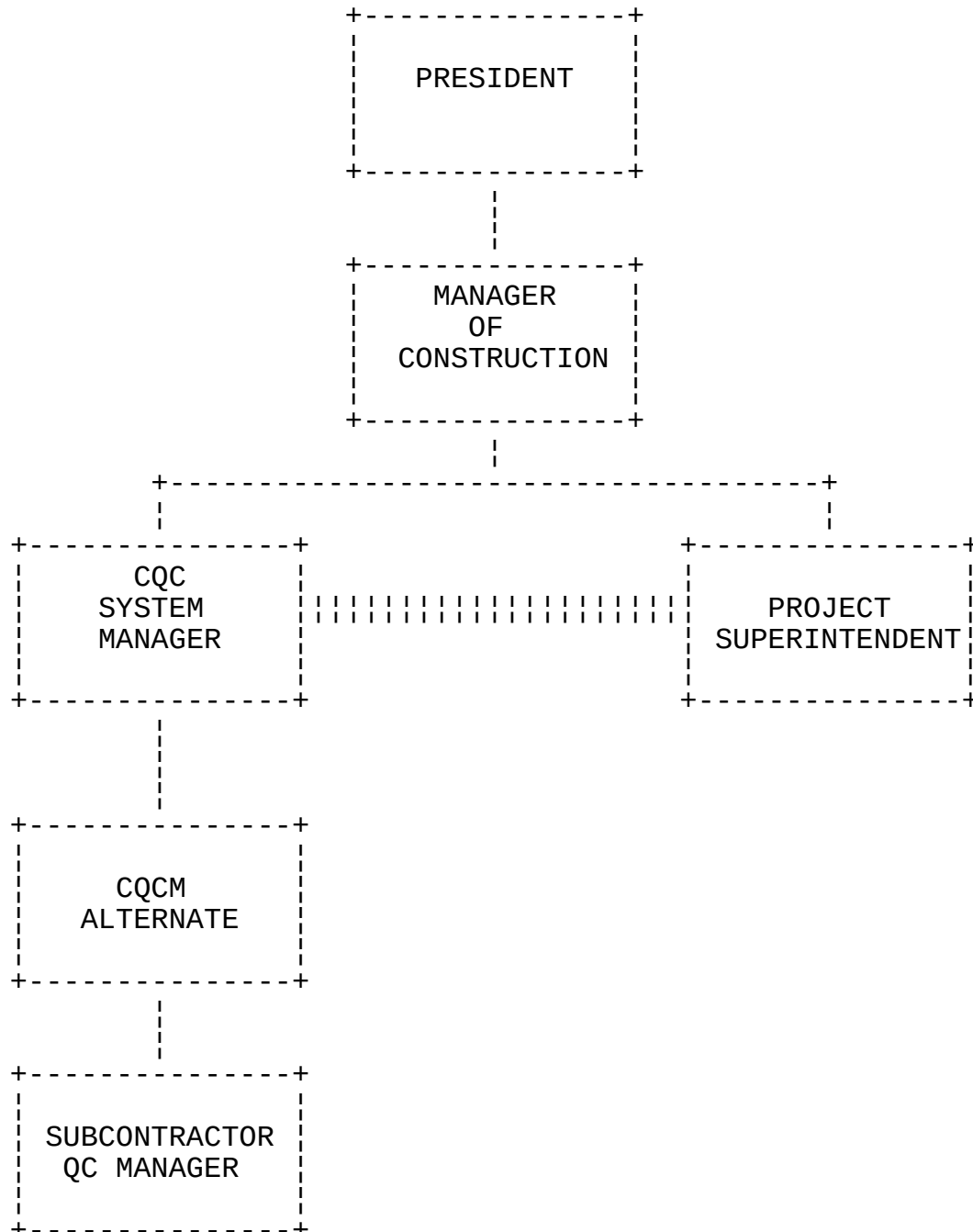
3.3 Manager of Construction

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.

SAMPLE CQC PLAN

QCFORM- 7

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.)

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.)

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

6. Materials received:

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:

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

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

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

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:

III. Material storage

Are materials stored properly? Yes___ No___
If No, what action will be taken?

IV. Specifications:

1. Review each paragraph of specifications.

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

3. Clarify any differences from specifications.

V. Preliminary Work - Ensure preliminary work is correct.

If not, what action will be taken?

PREPARATORY PHASE CHECKLIST FORM (CONT'D)

VI. Testing

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

2. When required?

3. Where required?

4. Review Testing Plan.

VII. Safety

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

2. Activity Hazard Analysis Approved? Yes___ No___

3. All equipment checked and checklists recorded? Yes___ No___
If not, what action will be taken?

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.

[illegible]

INITIAL PHASE CHECKLIST FORM (CONT'D)

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

IV. Establish Level of Workmanship.

1. Where is work located?

2. Quantity of work performed?

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.

VI. Check Safety.

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

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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|              |                |                           |                                                |                   |                   |                        |
|              |                |                           |                                                |                   |                   |                        |

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 55 26.00 12

TRAFFIC CONTROL AND COORDINATION

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 REFERENCES
- 1.3 MEASUREMENT AND PAYMENT
- 1.4 SUBMITTALS

PART 2 PRODUCTS

- 2.1 SIGNS AND BARRICADES

PART 3 EXECUTION

- 3.1 GENERAL
- 3.2 TRAFFIC CONTROL DEVICE PLAN
- 3.3 TRAFFIC CONTROL
  - 3.3.1 Coordination
  - 3.3.2 Traffic Engineer
- 3.4 PUBLIC CONVENIENCE AND SAFETY
  - 3.4.1 Road Closure
  - 3.4.2 Fire Protection
- 3.5 BARRICADES, DANGER, WARNING, AND DETOUR SIGNS
  - 3.5.1 General
  - 3.5.2 Warning Signs, Painting, Illumination
- 3.6 EMERGENCY CONTRACTOR DESIGNATION

-- End of Section Table of Contents --

SECTION 01 55 26.00 12

TRAFFIC CONTROL AND COORDINATION

PART 1 GENERAL

1.1 SCOPE

The work specified in this section consists of providing and maintaining traffic control, coordination, maintenance, including barricades, danger signs, warning signs, and detour signs. It also includes the preparation of a Traffic Control Device Plan.

1.2 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2024) Safety -- Safety and Occupational  
Health (SOH) Requirements

U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)

MUTCD (2009; Rev 2012) Manual on Uniform Traffic  
Control Devices

LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES (2016  
Edition), LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT  
(LADOTD)

LSSRB 713 Temporary Traffic Control

1.3 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the preparation of a Traffic Control Device Plan. Payment for work under this section will be included in payments to which the work is incidental. Payment shall constitute full compensation for providing all plant, labor, materials and equipment to complete the work, including maintenance, barricades, all signage required for the duration of the contract as specified herein.

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

Traffic Control Device Plan; G, CD



Prior to the commencement of construction operations the Contractor shall submit copy of the Traffic Control Device Plan as specified herein.

Truck Haul Route Plan; G, CD

See EM 385-1-1, Chapter 4-7.b. for requirements.

Qualifications; G, KO

Qualifications/credentials of the design engineer.

## PART 2 PRODUCTS

### 2.1 SIGNS AND BARRICADES

In accordance with LSSRB 713, the Contractor shall provide all necessary signs, barricades, temporary pavement markings, in accordance with the Louisiana Manual on Uniform Traffic Control Devices, Construction Section as well as all signs, barricades, blinking lights or other necessary traffic control devices required by the governing traffic engineering division and noted in the specifications.

## PART 3 EXECUTION

### 3.1 GENERAL

No signs or signals shall be removed without the Contracting Officer's approval. The Contractor shall accept all responsibilities during the time of removal. The Contractor shall notify the Contracting Officer and appropriate Traffic Engineering Department in writing within three (3) working days prior to the controls being removed and reinstalled. All signs, signals, and markings removed shall be in-place at the time of final inspection.

### 3.2 TRAFFIC CONTROL DEVICE PLAN

The Contractor shall develop and implement a site specific Traffic Control Device Plan (TCDP) and Truck Haul Route Plan which shall provide for the safe and expeditious movement of traffic through construction zones. A construction zone is defined as the immediate area of actual construction which interferes with the driving or walking public. The TCDP shall comply with the requirements set forth in the MUTCD , as revised, and with the general requirements stipulated below.

(1) The TCDP for the site shall address the conditions for providing traffic flow and/or detours within the zone during the influence of construction noting that the bridge will be closed during construction. The TCDP shall be schematically drawn on sheet(s) large enough to show adequate details and be easily readable and reproducible. If larger than eleven inches by seventeen inches (11" x 17"), the sheet(s) shall be submitted with a reproducible transparency so that the Contracting Officer and governing traffic engineering department can produce additional copies as needed.

(2) The TCDP shall be designed and stamped by a Professional Engineer registered in the State of Louisiana. The qualifications of the Engineer shall be submitted for review and approval of the Contracting Officer, and where applicable Louisiana Department of Transportation

and Development, Traffic Operations. Engineers for this project will be qualified by education and experience in Categories 1 and 2 as noted below. All categories require a minimum of four (4) years experience and education.

a. Category 1 - Traffic Control through Construction Zones. Urban experience in MUTCD applications, plan preparations, studies in volume, speed, and pedestrians, and tort liability.

b. Category 2 - Permanent Sign / Marking. Urban experience in MUTCD applications, studies in volume, speed, pedestrians, and accident analysis.

The Contractor shall submit an original and ten (10) copies of the TCDP to the Contracting Officer prior to any anticipated traffic control work for the appropriate Traffic Engineering Division's review and approval. Adequate time (a minimum of 45 calendar days exclusive of mailing time) shall be allowed for review and approval. Such approval is required prior to start of any work which might affect the traffic pattern in the area.

### 3.3 TRAFFIC CONTROL

The Contractor shall be responsible for the installation and maintenance of all devices and requirements for the duration of the construction period. The necessary precautions shall include, but not be limited to, such items as proper construction warning signs, signals, lighting devices, battery operated flashers, markings, barricades, channelization, and hand signaling devices (flagging operations). The Contractor shall monitor traffic control devices on a daily basis and shall make appropriate changes to correspond to conditions. All work shall be performed in accordance with the LSSRB 713, except as noted. Traffic control devices shall be in accordance with the MUTCD.

#### 3.3.1 Coordination

The Contractor shall consult with the Contracting Officer and the appropriate Traffic Engineering Division immediately on any vehicular or pedestrian safety or efficiency problem incurred as a result of construction of the project.

#### 3.3.2 Traffic Engineer

A qualified Traffic Engineer shall be provided by the Contractor to inspect the job site at the beginning of the project, after significant changes, and at 30 day intervals. If warranted, the Contractor's Traffic Engineer or a Traffic Control Supervisor shall make adjustments to the TCDP and the Contractor shall immediately implement the revised TCDP. A written report submitted to the Contractor, Contracting Officer, and the appropriate Traffic Engineering Division verifying compliance with the plan and adequacy of traffic control devices and operating conditions will be required for each inspection. All deficiencies noted by the report shall be immediately corrected by the Contractor.

### 3.4 PUBLIC CONVENIENCE AND SAFETY

#### 3.4.1 Road Closure

No road, including the asphalt All Weather Access Road, shall be closed by

the Contractor to the public except by written permission of the Contracting Officer, and except while so closed, the Contractor shall maintain traffic over, through, or around the work included in Contract, with the maximum practical convenience, for the full twenty-four hours of each day of the Contract, whether or not work has ceased temporarily. The Contractor shall notify the Contracting Officer at the earliest possible date after the Contract has been executed, and in any case before the starting of any construction that might in any way inconvenience or endanger traffic, so that the necessary arrangements may be determined.

#### 3.4.2 Fire Protection

Fire hydrants shall be accessible at all times to the Fire Department. No material or other obstructions shall be placed closer to a fire hydrant than permitted by ordinances, rules, or regulations or within fifteen (15) feet of a fire hydrant, in the absence of such ordinances, rules, or regulations.

### 3.5 BARRICADES, DANGER, WARNING, AND DETOUR SIGNS

#### 3.5.1 General

The Contractor shall, at their own expense, provide, erect, paint, and maintain all construction barricades. The Contractor shall provide suitable and sufficient lights, torches, reflectors, or other danger signals and signs, provide a sufficient number of watchmen and flagmen, and take all necessary precautions for the protection of the work and safety of the public. The Contractor shall replace any permanent street signs or markers which have to be moved to facilitate his construction with temporary signs as necessary.

#### 3.5.2 Warning Signs, Painting, Illumination

The Contractor shall erect warning signs beyond the limits of the project, sufficiently in advance of any place on the project where operations interfere with the use of the road by traffic, including all intermediate points where the new work crosses or coincides with the existing road. Barricades shall be kept well painted and suitable warning signs shall be placed thereon. All barricades and obstructions shall be illuminated at night and all lights or devices for this purpose shall be kept burning from sunset to sunrise.

### 3.6 EMERGENCY CONTRACTOR DESIGNATION

The Contractor shall designate a person(s) who can be contacted and shall be available on a seven day week, 24 hour basis through the entire period that the contract is in force. Name(s) and telephone number(s) of the individual(s) designated shall be furnished to the Contracting Officer's Representative prior to starting work. The person contacted shall be able to respond to emergencies occurring along the length of the project during normal, after work, and holiday hours.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 57 20.01 12

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 APPLICABLE REGULATIONS
- 1.3 MEASUREMENT AND PAYMENT
- 1.4 SUBMITTALS
- 1.5 QUALITY CONTROL
  - 1.5.1 General
  - 1.5.2 Reporting
- 1.6 NOTIFICATION
- 1.7 SUBCONTRACTORS
- 1.8 IMPLEMENTATION
- 1.9 REFERENCES

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

- 3.1 PROTECTION OF LAND RESOURCES
  - 3.1.1 General
  - 3.1.2 Prevention Of Landscape Defacement
  - 3.1.3 Temporary Excavation And Embankments
  - 3.1.4 Post-Construction Cleanup Or Obliteration
  - 3.1.5 National Historic Preservation Act Conditions
    - 3.1.5.1 Discovery of Previously Unknown Archeological Remains and Artifacts
    - 3.1.5.2 Discovery of Human Burial Sites
- 3.2 PROTECTION OF WATER RESOURCES
  - 3.2.1 Contamination Of Water
  - 3.2.2 Disposal Of Materials
  - 3.2.3 Erosion Control
- 3.3 PROTECTION OF FISH AND WILDLIFE
  - 3.3.1 Gulf Sturgeon
    - 3.3.1.1 Gulf Sturgeon Impact Minimization Measures
  - 3.3.2 Manatees
    - 3.3.2.1 Special Operating Conditions If Manatees Are Present in the Project Area
    - 3.3.2.2 Manatee Sighting Reports
- 3.4 JANITOR SERVICES
- 3.5 MAINTENANCE OF POLLUTION CONTROL FACILITIES
- 3.6 REPORTING OF POLLUTION SPILLS

-- 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 the result of construction operations under this contract except for those measures set forth in other provisions of these specifications. For the purpose of this specification, environmental pollution is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to man; or degrade the utility of the environment for esthetic and recreational purposes. The control of environmental pollution requires consideration of air, water, and land, and involves noise, solid waste-management and management of radiant energy and radioactive materials, as well as other pollutants.

1.2 APPLICABLE REGULATIONS

In order to prevent, and to provide for abatement and control of any environmental pollution arising from construction activities in the performance of this contract, the Contractor and his/her subcontractors must comply with all applicable Federal, State, and Local laws, and regulations concerning environmental pollution control and abatement.

1.3 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for environmental protection including protection of fish and wildlife. Payment for the work covered under this section shall be distributed throughout the existing bid items.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following must be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Environment Pollution Control Plan; G, PDSN

1.5 QUALITY CONTROL

1.5.1 General

The Contractor must establish and maintain quality control for environmental protection to assure compliance with contract specifications and maintain records of his quality control for all construction operations including but not limited to the following:

- (1) Submit plan of Environment Pollution Control 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 copies of these records, as well as the records of corrective action taken, must be furnished the Government daily. Format of report must 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 must, 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, must 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 must 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 must:

- (1) Submit, in writing, proposals for environmental pollution control, disposal of debris, and an Environmental Protection plan. Provide 1 copy each to the Contracting Officer and 1 copy to PDC-C; Attention Mr. Mario Price for review prior to approval of the document by the Contracting Officer.
- (2) Upon review and approval of requirements above, the Contractor must meet with representatives of the Contracting Officer to develop mutual understandings relative to compliance with these provisions and administration of the environmental pollution control program and Environmental Protection Plan.

## 1.9 REFERENCES

### U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA ESA (1973) Endangered Species Act

EPA MMPA (1972) Marine Mammal Protection Act

### U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 153.203 Procedure for the Notice of Discharge

## 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 must 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 must 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 provisions in Section 00 72 00 GENERAL CONDITIONS entitled PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS; OPERATIONS; AND STORAGE AREAS; and CLEANING UP.

#### 3.1.2 Prevention Of Landscape Defacement

The Contractor must not deface, injure, or destroy trees or shrubs, nor remove or cut them without the approval of the Contracting Officer. Felling of trees must 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 must protect adequately such trees. All monuments and markers must be protected before beginning operations near them. Any trees or other landscape feature scarred or damaged by the Contractor's equipment or operations must be restored as nearly as possible to its original condition at the Contractor's expense. Trees that are scarred must be immediately painted with an acceptable tree wound paint. Any trees which are damaged beyond restoration must 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 must obtain approval of the Contracting Officer prior to start of such temporary work.

#### 3.1.4 Post-Construction Cleanup Or Obliteration

The Contractor must 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 National Historic Preservation Act Conditions

#### 3.1.5.1 Discovery of Previously Unknown Archeological Remains and Artifacts

If during the course of work, archaeological artifacts (prehistoric or historic), unmarked graves, burials, human remains, or items of cultural patrimony are discovered, the contractor shall stop work in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. The Contractor shall inform their contacts at CEMVN, who will in turn contact CEMVN Historic Preservation (HP) staff. The contractor shall not proceed with work until CEMVN HP completes consultation with the SHPO, and others as appropriate.

#### 3.1.5.2 Discovery of Human Burial Sites

Discoveries of unmarked graves, burials, human remains, or items of cultural patrimony on Federal lands shall be subject to the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. §3001-3013, 18 U.S.C. § 1170) and the Archaeological Resources Protection Act of 1979 (ARPA) (16 U.S.C. §470aa - 470mm). CEMVN shall take these action steps in the case of a Discovery:

- (1) CEMVN shall notify SHPO, Tribe(s), and other parties, that may have an interest in discovery of the previously unidentified property or unexpected effects at the earliest possible time, but no later than seventy-two (72)-hours after CEMVN is notified by Contractors. CEMVN shall consult with SHPO, Tribe(s), and other consulting parties to develop a mutually agreeable action plan with timeframe's to identify the discovery or previously unidentified property and determine the National Register eligibility of any previously unidentified property; take into account the effects of the Undertaking on historic properties; resolve adverse effects if necessary; and ensure compliance with applicable Federal, State, and local statutes.

- (2) CEMVN will coordinate with Contractor regarding any needed modification to the scope of work for the Undertaking necessary to implement recommendations of the consultation and facilitate proceeding with the Undertaking.

- (3) In cases where discovered human remains are determined to be Native American, CEMVN shall consult with the appropriate Tribal representatives and SHPO. In addition, CEMVN shall follow the guidelines outlined in the Advisory Council on Historic Preservation's Policy Statement Regarding the Treatment of Burial Sites, Human Remains, and Funerary Objects (2007) and any state-specific policies that may be in force.

### 3.2 PROTECTION OF WATER RESOURCES

#### 3.2.1 Contamination Of Water

The Contractor must 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 disposal of materials, wastes, effluent, trash, garbage, oil, grease, chemicals, etc., within the right-of-way limits must 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 Erosion Control

Surface drainage from cuts and fills within the construction limits, whether or not completed, and from waste disposal areas, must, if turbidity producing materials are present, be held in suitable sedimentation ponds or must 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, must be provided and maintained until permanent drainage and erosion control facilities are completed and operative. Waste areas must 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 must at all times perform all work and take such steps required to prevent any interference or disturbance to fish and wildlife. The Contractor shall not be permitted to alter water flows or otherwise disturb native habitat adjacent to the project area which are critical to fish or wildlife.

### 3.3.1 Gulf Sturgeon

Gulf Sturgeon may be present in the project vicinity.

#### 3.3.1.1 Gulf Sturgeon Impact Minimization Measures

To avoid and minimize impacts from proposed actions silt curtains would be employed during construction, which include:

- (1) All silt curtains and other in-water equipment must be properly secured with materials that reduce the risk of entanglement and entrapment of protected species. Silt curtains likewise must be made of materials that reduce the risk of entanglement of marine species.
- (2) In-water lines (rope, chain, and cable, including the lines to secure silt curtains) must be stiff, taut, and non-looping. Examples of such lines are heavy metal chains or heavy cables that do not readily loop and tangle. Flexible in-water lines, such as nylon rope or any lines that could loop or tangle, must be enclosed in a plastic or rubber sleeve/tube to add rigidity and prevent the line from looping and tangling. In all instances, no excess line is allowed in the water.
- (3) Silt curtains and other in-water equipment must be placed in a manner that does not entrap species within the construction area.
- (4) Position turbidity barriers in a way that does not block species' entry to or exit from designated critical habitat and other important habitats.

Dredging is allowed for the duration of the contract.

Pre-construction surveys would be conducted to delineate existing SAV to facilitate avoidance of impacts.

Additionally, in project areas the bucket drop procedure will be utilized. The bucket drop procedure was developed by the USFWS, which involves dropping the bucket into water and retrieving empty one time prior to starting work. After the bucket is dropped and retrieved, a one-minute no work period would be observed. During this no work period, personnel shall carefully observe the work area in an effort to visually detect Gulf Sturgeon. If sturgeons are sighted, no dredging should be initiated until they have left the work area. If the water turbidity makes such visual sightings impossible, work may proceed after the one-minute no work period. If more than fifteen minutes elapses with no dredging, then the empty bucket drop/ retrieval process shall be performed again prior to work.

Furthermore, all construction personnel must watch for and avoid collision with listed species. All construction personnel would be responsible for observing water-related activities for the presence of these species. All construction personnel would be advised that there are civil and criminal penalties for harming, harassing, or killing Gulf Sturgeon, which are protected under the Endangered Species Act of 1973. Vessel operators must avoid potential interactions and operate in accordance with the following protective measures:

- (1) All vessels associated with the proposed construction project shall operate at "idle speed/no wake" at all times while operating in water depths where the draft of the vessel provides less than a 4-foot clearance from the bottom and in all depths after a protected species has been observed in and has departed the area.
- (2) All vessels will follow marked channels and routes using the maximum water depth whenever possible.

CEMVN would adhere to the Measures for Reducing Entrapment Risk to Protected Species. Siltation and turbidity barriers would be made of materials in which Gulf Sturgeon cannot become entangled, would be properly secured, and would be regularly monitored to avoid protected species entrapment.

### 3.3.2 Manatees

The West Indian manatee may be present in the project vicinity. The Contractor must 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 must be advised that there are civil and criminal penalties for harming, harassing, or killing manatees, which are protected under the EPA ESA and the EPA MMPA. The Contractor shall be responsible for any manatee harmed, harassed, or killed as a result of construction activities not conducted in accordance with these specifications.

#### 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 must be implemented by the Contractor to

ensure protection of the manatee. These precautions must 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 must be shut down and all construction activities must cease to ensure protection of the manatee. Construction activities must 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 must 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 must follow routes of deep water whenever possible. Boats used to transport personnel must be shallow-draft vessels, preferably of the light-displacement category, where navigational safety permits.

(3) If siltation barriers are used, they must 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 must 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" must 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" must be posted at the dredge operator control station and at a location prominently adjacent to the issued construction permit. The Contractor must remove the signs upon completion of construction.

#### 3.3.2.2 Manatee Sighting Reports

Any sightings of manatees, or collisions with a manatee, must be reported immediately to the Corps of Engineers. The point of contact within the Corps of Engineers will be the USACE Environmental Manager, Ms. Tammy Gilmore, phone (504)862-1002 or email to tammy.h.gilmore@usace.army.mil. In addition, collisions with, injury to, or sightings of manatees should be immediately reported to the U.S. Fish and Wildlife Service's Louisiana Ecological Services Office (337)291-3100 and the Louisiana Department of Wildlife and Fisheries, Natural Heritage Program (225)765-2821. Please provide the nature of the call (i.e., report of an incident, manatee sighting, etc.); time of incident/sighting; and the approximate location, including the latitude and longitude coordinates, if possible.

#### 3.4 JANITOR SERVICES

The Contractor must 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 must be kept clean and sanitary at all times. Services must 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 must be accomplished to the satisfaction of the Contracting Officer. The Contractor must also provide

daily trash collection and cleanup of the buildings and adjacent outside areas, and must dispose of all discarded debris in a manner approved by the Contracting Officer.

### 3.5 MAINTENANCE OF POLLUTION CONTROL FACILITIES

During the life of this contract the Contractor must 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 must conduct a training course that will emphasize all phases of environmental protection.

### 3.6 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 must comply with any instructions from the responding agency concerning containment and/or cleanup of the spill.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 57 23.00 12

STORM WATER POLLUTION PREVENTION PLAN

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 MEASUREMENT AND PAYMENT
- 1.3 REFERENCES
- 1.4 DEFINITIONS
- 1.5 GENERAL
  - 1.5.1 Environmental Assessment of Contract Deviations
  - 1.5.2 Notice Of Intent
- 1.6 RECORD RETENTION REQUIREMENTS
  - 1.6.1 Documents
  - 1.6.2 Plan Accessibility
  - 1.6.3 Activity Records
  - 1.6.4 LDEQ Correspondence
- 1.7 MAINTENANCE AND SURVEILLANCE FEES
- 1.8 EROSION AND SEDIMENT CONTROLS
  - 1.8.1 Stabilization Controls
    - 1.8.1.1 Unsuitable Conditions
    - 1.8.1.2 No Activity for Less Than 21 Days
  - 1.8.2 Structural Controls

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

- 3.1 MAINTENANCE
- 3.2 INSPECTIONS
  - 3.2.1 General
  - 3.2.2 Inspections Details
  - 3.2.3 Inspection Reports
- 3.3 NOTICE OF TERMINATION
- 3.4 ADDITIONAL INFORMATION

-- End of Section Table of Contents --

SECTION 01 57 23.00 12

STORM WATER POLLUTION PREVENTION PLAN

PART 1 GENERAL

1.1 SCOPE

The work specified in this section consists of the Contractor implementing, and diligently pursuing all measures required in the Storm Water Pollution Prevention Plan (SWPPP). The SWPPP consists of this Section, 01 57 23.00 12, and any and all references and attachments including existing and future signed certification statements. The purpose of the SWPPP is to control soil erosion and the resulting sediment to the extent necessary to prevent sediment from leaving the contract rights-of-way and prevent pollution of any water body caused by the runoff from the areas of construction activities under this contract, under the terms of PERMIT NO. LAR100000 (copy attached at the end of this section), and as specified herein and shown on the drawings. The requirements of these specifications are supplemental to and must become part of the overall Environmental Protection Plan required by Section 01 57 20.01 12 ENVIRONMENTAL PROTECTION. The Contractor must review the SWPPP to determine requirements for compliance. In addition, the Contractor must ascertain that his/her subcontractors have reviewed the plan, and that they comply with its provisions. The Contractor must ensure that all subcontractors sign, "Certification Statements #2 and #3" (blank forms attached at the end of this section).

1.2 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for the implementation of the Storm Water Pollution Prevention Plan required by this section. Price and payment must be distributed amongst the existing bid items.

1.3 REFERENCES

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

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)

|                      |                                                                                             |
|----------------------|---------------------------------------------------------------------------------------------|
| PERMIT NO. LAR100000 | (2024) Storm Water General Permit for<br>Construction Activities, Five (5) Acres or<br>More |
|----------------------|---------------------------------------------------------------------------------------------|

1.4 DEFINITIONS

a. Construction Owner - The construction owner is the party that has operational control over plans and specifications including the ability to make changes to those items. The New Orleans District (Government) is the construction owner.

b. Construction Operators - The construction operators are the party having control over the plans and specifications and the party having

day-to-day operational control over those activities at a project site which are necessary to ensure compliance with the SWPPP or other permit conditions. Both the Government and the Contractor are the construction operators.

c. Notice of Intent (NOI) - A document that is completed and submitted to the Louisiana Department of Environmental Quality as application for coverage to discharge under the PERMIT NO. LAR100000.

d. Notice of Termination (NOT) - A document that is completed and submitted to the Louisiana Department of Environmental Quality to terminate permission to discharge under the PERMIT NO. LAR100000. The NOT must be filed within 30 days after final stabilization of the construction site has been achieved or the Contractor is no longer the construction operator.

#### 1.5 GENERAL

The Contractor must implement the Storm Water Pollution Prevention Plan (SWPPP) specified in a manner which will meet the requirements of Section 01 57 20.01 12 ENVIRONMENTAL PROTECTION, and the requirements of the Louisiana Pollution Discharge Elimination System (LPDES) permit, PERMIT NO. LAR100000 effective October 1, 2024.

##### 1.5.1 Environmental Assessment of Contract Deviations

The Contractor is advised that deviations from the SWPPP could result in the requirement for the Government to reanalyze the project from an environmental standpoint. Deviations from the SWPPP erosion control requirements as specified herein and as shown on the drawings which may have an environmental impact will require an extended review, processing, and approval time by the Government. If the Contractor proposes a deviation from the drawings or specifications (e.g., proposed borrow, disposal areas, staging areas, alternate access routes etc) for their convenience, the Contractor shall notify the Contracting Officer or its representative in writing. The Contractor is cautioned that any deviation from the drawings or specifications 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 proposed deviation to the Government furnished disposal areas. For any environmental investigations the Government is to perform on area outside of Government furnished rights of way, the Contractor shall provide sufficient rights of entry. The Contracting Officer will advise the Contractor of the additional environmental coordination and documentation that must be completed prior to the use of the Contractor furnished right of way. 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 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 right 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 the 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.

#### 1.5.2 Notice Of Intent

Upon preparation of a complete SWPPP, the NOI will be submitted by the Government to the LDEQ as application for the Government's coverage under the terms of PERMIT NO. LAR100000. A copy of the Government's NOI, will be provided to the Contractor at the Pre-construction Conference for the Contractor's use in preparing their NOI. If a specific LPDES permit applicable to this construction item has been received from the LDEQ in response to the NOI, a copy of the specific LPDES permit will also be provided to the Contractor. The Contractor must make any necessary modification to this SWPPP; attach the Construction Owner / Operator certification statement provided at the end of this section to the SWPPP; and certify by signing the statement as the construction operator. The Contractor must then submit an NOI to the LDEQ as application for his/her coverage under the terms of PERMIT NO. LAR100000, prior to initiating any construction activities. Certified mail is recommended for Contractor's proof of submittal. A copy of the Contractor's NOI submittal must be provided to the Contracting Officer's representative at the time of submittal. LDEQ will provide a specific LPDES permit to the Contractor in response to that NOI submittal. The NOI's of both the Contractor and the Government, as well as the specific permits in response to the NOI, must be posted at the job site by the Contractor. (Forms are attached at the end of this Section.)

#### 1.6 RECORD RETENTION REQUIREMENTS

##### 1.6.1 Documents

The Contractor must retain copies of the SWPPP and all reports required by the general permit, and all records of data used to complete the NOI, for a period of at least three years from the date that the construction site is finally stabilized. Records of the NOI as well as any data used to complete it, the SWPPP, and any reports required by PERMIT NO. LAR100000 must be retained by the permittee for at least three years from the date that the site is finally stabilized.

##### 1.6.2 Plan Accessibility

A copy of the SWPPP and a copies of all permits received, must be retained at the construction site (or other local location accessible to the State



Administration Authority and the public) from the date of construction initiation to the date of final stabilization. The Contractor must have a copy of the plan available at a central location on-site for the use of all operators and those identified as having responsibilities under the plan whenever they are on the construction site. A notice must be posted near the main entrance to the construction site with the following information: (1) the LPDES permit number for the project or a copy of the NOI if a permit has not yet been assigned; (2) the name and telephone number of a local contact person; (3) a brief description of the project; and (4) the location of the SWPPP if the site is inactive or does not have an on-site location to store the plan.

#### 1.6.3 Activity Records

The dates of the following activities must be recorded:

- (1) Major grading activities occurred.
- (2) Construction activities temporarily or permanently ceased.
- (3) Stabilization measures were initiated.

#### 1.6.4 LDEQ Correspondence

Any written correspondence with the LDEQ concerning the NOI, NOT, SWPPP, or discharges from any facility covered under PERMIT NO. LAR100000, must be identified by permit number, if one has been assigned, and sent to the address below:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P.O. Box 4313  
Baton Rouge, LA 70821-4313

Attn: Permits Division

#### 1.7 MAINTENANCE AND SURVEILLANCE FEES

In accordance with the Contract provision in Section 00 72 00 GENERAL CONDITIONS entitled PERMITS AND RESPONSIBILITIES, the Contractor must, without additional expense to the Government, be responsible for paying any state required annual maintenance and surveillance fee for work associated with coverage under PERMIT NO. LAR100000.

#### 1.8 EROSION AND SEDIMENT CONTROLS

The controls and measures required for controlling sediment during construction are described below.

##### 1.8.1 Stabilization Controls

The stabilization practices to be implemented must include fertilizing, seeding, and mulching as specified in Section 32 92 19.04 12 TURF ESTABLISHMENT AND MAINTENANCE or any other temporary measure to restrict erosion from the construction site. On the daily CQC Report, the Contractor must record the dates when the major grading activities occur, (e.g., clearing and grubbing, excavation, embankment, and grading); when construction activities temporarily or permanently cease on a portion of the site; and when stabilization practices are initiated. Except as

provided in paragraphs "Unsuitable Conditions" and "No Activity for Less Than 21 Days," stabilization practices must be initiated as soon as practicable, but no more than 14 days, in any portion of the site where construction activities have temporarily or permanently ceased.

#### 1.8.1.1 Unsuitable Conditions

Where the initiation of stabilization measures by the fourteenth day after construction activity temporarily or permanently ceases is precluded by unsuitable conditions caused by the weather, stabilization practices must be initiated as soon as practicable after conditions become suitable.

#### 1.8.1.2 No Activity for Less Than 21 Days

Where construction activity will resume on a portion of the site within 21 days from when activities ceased (e.g., the total time period that construction activity is temporarily ceased is less than 21 days), then stabilization practices do not have to be initiated on that portion of the site by the fourteenth day after construction activity temporarily ceased. Stabilization practices must be initiated on that portion of the site by the fourteenth day in the case where construction activities will not resume within 21 days after construction activities have ceased.

#### 1.8.2 Structural Controls

Structural practices must be implemented to divert flows from exposed soils, temporarily store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Structural practices must be implemented in a timely manner during the construction process to minimize erosion and sediment runoff.

### PART 2 PRODUCTS (Not Used)

### PART 3 EXECUTION

#### 3.1 MAINTENANCE

The Contractor must maintain the temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by repair of erosion and sediment control measures and other protective measures. The following procedures must be followed to maintain the protective measures.

#### 3.2 INSPECTIONS

##### 3.2.1 General

The Contractor must inspect disturbed areas of the construction site, areas used for storage of materials that are exposed to precipitation that have not been finally stabilized, stabilization practices, structural practices, other controls, and area where vehicles exit the site at least once every fourteen (14) calendar days, before anticipated storm events (or series of storm events such as intermittent showers over one or more days) expected to cause a significant amount of runoff, and within 24 hours of the end of any storm that produces 0.5 inches or more rainfall at the site. Where sites have been finally stabilized, such inspection must be conducted at least once every two weeks.

### 3.2.2 Inspections Details

Disturbed areas and areas used for material storage that are exposed to precipitation must be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the SWPPP must be observed to ensure that they are operating correctly. Discharge locations or points must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles exit the site must be inspected for evidence of offsite sediment tracking.

### 3.2.3 Inspection Reports

For each inspection conducted, the Contractor must prepare a report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWPPP, maintenance performed, and actions taken. The report must be furnished to the Contracting Officer within 24 hours of the inspection as a part of the Contractor's daily CQC REPORT. A copy of the inspection report must be maintained on the job site. Sample inspection reports (Exhibit D-2, Exhibit D-3, Exhibit D-4, and Table D-5) are included at the end of this section.

### 3.3 NOTICE OF TERMINATION

Upon stabilization and elimination of all storm water discharges authorized by PERMIT NO. LAR100000, or where the operator of all storm water discharges at a facility changes, a Notice of Termination (NOT) must be certified and submitted by the Contractor to the Permits Division at the LDEQ. A copy of the NOT form is provided at the end of this section. Certified mail is recommended for proof of the NOT submittal. The NOT must be submitted within 30 days of final stabilization of the construction site or when the Contractor is no longer the construction operator.

### 3.4 ADDITIONAL INFORMATION

(a) Job description. The project consists of construction of a stone dike cap, embankment repairs, and a splash pad. The project includes stone placement, demolition, clearing and grubbing, embankment repairs, and seeding and mulching.

(b) Activity sequence. The anticipated construction sequence is placement of R-2200 lb stone for the foreshore dike, clearing and grubbing, embankment repairs, and construction of the splash pad.

(c) Disturbed area. The project area consists of approximately 25 acres which are to be disturbed by excavation, grading, clearing, and grubbing as required for construction.

(d) Runoff coefficient. The construction area is considered undeveloped in nature. As such, the approximate runoff coefficient for this land (using the Rational Method as defined by LADOTD and others) is approximately 0.3. Following construction, the area will still be undeveloped in nature, therefore the post-construction runoff coefficient will be the same as the pre-construction runoff coefficient.

(e) Location. The general location and site map is included in the drawings.

(f) Associated discharges. There are no additional discharges associated with any industrial activity other than the proposed construction.

(g) Name of receiving waters / wetlands / special aquatic sites. The pre-construction and post-construction drainage predominantly flows and will predominantly flow to Lake Pontchartrain.

(h) Permit requirements. Permit requirements are described in the copy of Permit No. LAR100000 attached at the end of this section.

(i) Endangered or Threatened Species Concerns. Threatened and Endangered Species Concerns. The project may affect but is not likely to adversely affect the following federally listed species or their designated critical habitat: West Indian Manatee and Gulf Sturgeon. Presence of West Indian Manatee shall be immediately reported to Ms. Jordan Logarbo at 504-862-1158. Standard Manatee Conditions for in-water activities must be adhered to.

(j) National Register of Historic Places Concerns. No National Register Of Historical Places Concerns are anticipated.

CERTIFICATION STATEMENT #1

*Any person, including the construction owner/operator, signing documents (the SWPPP, modifications to the SWPPP, or other reports) under Part VI.G. of PERMIT NO. LAR100000 or PERMIT NO. LAR200000 must make the following certification.*

(Contract Title)

(Permit Number)

(Document being Certified, such as SWPPP)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I also certify that a storm water pollution prevention plan, including both construction and post construction controls, has been prepared for the site in accordance with the permit and that such plan complies with approved State, Tribal and/or local sediment and erosion plans or permits and/or storm water management plans or permits. I am aware that signature and submittal of the Notice of Intent is deemed to constitute my determination of eligibility under one or more of the requirements of Permit Part I.A.3.e(1), related to the Endangered Species Act requirements. To the best of my knowledge, I further certify that such discharges and discharge related activities will not have an effect on properties listed or eligible for listing on the National Register of Historic Places under the National Historic Preservation Act, or are otherwise eligible for coverage under Part I.A.3.f of the permit. I am also aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

|              |       |
|--------------|-------|
| Signature    | _____ |
| Printed Name | _____ |
| Title        | _____ |
| Company      | _____ |
| Date         | _____ |
| Telephone    | _____ |

*CERTIFICATION STATEMENT #2*

*Any Contractor or subcontractor implementing any part of this plan must prepare and sign a copy of the following certification.*

(Contract Title)

(Permit Number)

I certify, under penalty of law, that I understand the terms and conditions of the Louisiana Pollutant Discharge Elimination System (LPDES) general permit that authorizes storm water discharges associated with construction activity from the construction site identified as part of this certification.

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

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

\_\_\_\_\_ Telephone No: \_\_\_\_\_

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

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

CERTIFICATION STATEMENT #3

*Any Contractor or subcontractor that does not meet the definition of "operator" that will conduct activities that may impact the effectiveness of the SWPPP control measures must prepare and sign the following certification.*

(Contract Title)

(Permit Number)

I certify, under penalty of law, that I will coordinate, through the contractor, owner, or directly, with the Contractor (s) identified in the pollution prevention plan having responsibility for implementing storm water control measures to minimize any impact my actions may have on the effectiveness of these storm water control measures.

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

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

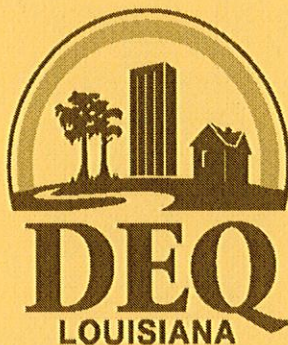
\_\_\_\_\_ Telephone No: \_\_\_\_\_

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

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

-- End of Section --





**OFFICE OF ENVIRONMENTAL SERVICES**  
**Water Discharge Permit**

**STORM WATER GENERAL PERMIT FOR LARGE CONSTRUCTION**  
**ACTIVITIES**

**MASTER GENERAL PERMIT NO. LAR100000**

**AUTHORIZATION TO DISCHARGE UNDER THE**  
**LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM**

Pursuant to the Clean Water Act, as amended (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act, as amended (La. R. S. 30:2001 et seq.), rules and regulations effective or promulgated under the authority of said Acts, this Louisiana Pollutant Discharge Elimination System (LPDES) General Permit is reissued. This permit authorizes operators of storm water discharges from construction activities of five (5) acres or more, including smaller areas that are part of a larger plan of development or sale that cumulatively disturb at least five acres, and defined dedicated support activities, to discharge to waters of the State, in accordance with the conditions and requirements set forth herein.

Only those operators who obtain coverage in accordance with Parts I and II of this permit are authorized under this general permit.

This permit shall become effective on October 1, 2024

This permit and the authorization to discharge shall expire five years from the effective date of the permit.

Issued on September 24, 2024

Amanda Vincent

Amanda Vincent, PhD, PMP  
Assistant Secretary



**LPDES GENERAL PERMIT  
FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES  
FIVE (5) ACRES OR MORE  
TABLE OF CONTENTS**

|            |                                                                                 |    |
|------------|---------------------------------------------------------------------------------|----|
| Part I.    | COVERAGE UNDER THIS PERMIT                                                      | 3  |
|            | A. Applicability                                                                | 3  |
|            | B. Obtaining Authorization                                                      | 11 |
|            | C. Annual Maintenance and Surveillance Fees                                     | 13 |
|            | D. Notice of Extension                                                          | 14 |
|            | E. Automatic Termination of Coverage                                            | 14 |
|            | F. Notice of Termination                                                        | 15 |
| Part II.   | NOTICE OF INTENT REQUIREMENTS                                                   | 17 |
|            | A. Deadlines for Notification                                                   | 17 |
|            | B. Contents of Notice of Intent                                                 | 18 |
|            | C. Where to Submit                                                              | 19 |
| Part III.  | SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-<br>NUMERIC LIMITATIONS | 20 |
|            | A. Prohibition on Non-Storm Water Discharges                                    | 20 |
|            | B. Requirements for Notification                                                | 21 |
|            | C. Spills                                                                       | 21 |
|            | D. Discharge Compliance with Water Quality Standards                            | 22 |
|            | E. Responsibilities of Operators                                                | 22 |
| Part IV.   | STORM WATER POLLUTION PREVENTION PLANS                                          | 24 |
|            | A. Deadlines for Plan Preparation and Compliance                                | 24 |
|            | B. Signature, Plan Review and Making Plans Available                            | 24 |
|            | C. Keeping Plans Current                                                        | 25 |
|            | D. Contents of Plan                                                             | 26 |
|            | E. Contractor and Subcontractor Responsibilities                                | 37 |
|            | F. Wash Water from Concrete Trucks                                              | 37 |
| Part V.    | RETENTION OF RECORDS                                                            | 39 |
|            | A. Documents                                                                    | 39 |
|            | B. Accessibility                                                                | 39 |
|            | C. Addresses                                                                    | 39 |
| Part VI.   | STANDARD PERMIT CONDITIONS FOR LPDES PERMITS                                    | 40 |
| Part VII.  | REOPENER CLAUSE                                                                 | 64 |
| Part VIII. | ADDITIONAL DEFINITIONS                                                          | 65 |

ADDENDA

- A. ENDANGERED SPECIES GUIDANCE
- B. HISTORIC PRESERVATION
- C. LIST OF ADDRESSES FOR LDEQ OFFICES
- D. LIST OF OUTSTANDING NATURAL RESOURCE WATERS AND SCENIC  
STREAMS

## PART I. COVERAGE UNDER THIS PERMIT

### A. Applicability

1. This storm water general permit for large construction activities authorizes discharges of storm water from construction activities that disturb five acres or more of total land area, including the disturbance of less than five acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or more, as defined in LAC 33:IX.2511.B.14.j and 40 CFR 122.26(b)(14)(x) and those construction site discharges designated by the State Administrative Authority as needing a storm water permit under LAC 33:IX.2511.A.1.e and A.9.a, except for discharges identified below under Permit Part I.A.3. Permit coverage is required from the “commencement of construction activities” until “final stabilization” as defined in Permit Part VIII.

Construction activities regulated under this permit include clearing, grading, excavation operations, and/or adding fill material that result in the disturbance of five acres of land or more. Construction of residential houses, office buildings, industrial facilities, roadways, and runways are examples of construction activities.

The **clearing of land solely for agricultural purposes is NOT a regulated activity** so it is exempted from Louisiana Pollutant Discharge Elimination System (LPDES) permitting requirements (LAC 33:IX.2315.A). Projects on cultivated croplands are not regulated, as these are already “disturbed” areas.

**Construction activities related to oil and gas exploration, production, processing, or treatment, or transmission activities are exempt** from regulation. The exemption from obtaining LPDES permit coverage for storm water discharges from construction activities at oil and gas sites is codified in the Environmental Regulatory Code at LAC 33:IX.2511.A.2. Consequently, construction activities related to these oil and gas exploration, production, processing, or treatment operations or transmissions facilities, which are necessary to prepare a site for drilling and the movement and placement of drilling equipment, constructing access roads, drilling waste management pits, in field treatment plants and the transportation infrastructure (e.g., crude oil and natural gas pipelines, natural gas treatment plants and both natural gas transmission pipeline compressor and oil pumping stations) necessary for the operation of most producing oil and gas fields, are exempt from regulation, regardless of the amount of disturbed acreage.

Section 323 of the Energy Policy Act of 2005 modified paragraph (24) of Section 502 of the Clean Water Act (CWA) to define the term “oil and gas exploration, production, processing, or treatment, or transmission facilities”. This term is used in the CWA Section 402(1)(2) to identify oil and gas activities for which the Environmental Protection Agency (EPA) shall not require National Pollutant Discharge Elimination System (NPDES) permit coverage for certain storm water discharges. The effect of this statutory change is to make construction activities at oil and gas sites eligible for the exemption established by the CWA Section 402(1)(2). The types of oil and gas facilities/activities that are subject to the waiver/exemption for NPDES storm water permitting are further explained on the EPA website at <https://www.epa.gov/npdes/oil-and-gas-stormwater-permitting>. This website also addresses

the 9<sup>th</sup> Circuit Court's vacatur (*Natural Resources Defense Council v. United States Environmental Protection Agency*, 526 F.3d 591) of federal regulatory text at 40 CFR 122.26(a)(2)(ii) stating that discharges of sediment from these same construction activities are not subject to the provisions of 40 CFR 122.26(c)(1)(iii), which would require permit coverage if such discharges contribute to a violation of a water quality standard. This means that an NPDES permit would be required if a discharge of sediment from the oil and gas activities described above contributes to a water quality standard violation." Additionally, the LDEQ notes that federal regulations require NPDES permit coverage for discharges from these construction activities if there is a discharge of storm water resulting in a reportable quantity discharge pursuant to 40 CFR 122.26(c)(1)(iii)(A) and (B).

Repaving of roads and reworking of utility lines or pipelines are not regulated under this permit unless five or more acres of underlying and/or surrounding soil are cleared, graded or excavated as part of the operation. **A construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site/facility.** If a construction activity is only performed to maintain its original purpose, then LPDES permit coverage under this general permit is not required to discharge storm water from that construction activity. Such activities include replacing structures that are due for and require maintenance. In order to qualify as a routine maintenance activity, the land disturbance shall not go beyond the footprint of the previous structure. Examples of routine maintenance include:

- Berm Repair or Topsoil Replacement Along Shoulders - placing berm material or topsoil on shoulders adjacent to pavement to eliminate drop-offs;
- Bridge Abutment Repairs, Deck Overlays, and Deck Replacement;
- Bridge Replacement without widening;
- Chip Sealing – placing asphalt or polymer binder and stone on existing roads;
- Culvert Replacement/Repair/Lining – replacing/repairing/relining a culvert with the same line, grade, and hydraulic capacity and within US Army Corps of Engineers (USACE) Nationwide Permit (NWP) #3 parameters;
- Curb Repairs – repairing existing curbing along a roadway;
- Ditch Cleanout – maintaining or restoring original flow line and cross-section only;
- Fence Repair/Replacement;
- Lighting Maintenance;
- Linear Grading – reshaping of graded shoulders to establish proper drainage away from pavement;
- Loop Detector Repairs – repairing loop detectors in existing pavement;
- Noise Wall Repair;
- Partial Depth Pavement Repairs – isolated repairs of surface courses of pavement;
- Pothole Filling; Resurfacing – replacing several inches of asphalt wearing course by milling existing surface and replacing with new material;
- Road Re-paving with new asphalt provided the activity does not expose soil to storm water;
- Sign Repair/Maintenance – installing or repairing traffic signs and poles/posts;
- Signal Installation/Maintenance – installing or repairing traffic signals and poles/posts; and
- Tree/Brush Removal – when it is considered a road maintenance activity.

The following examples of activities that commonly disturb less than five acres, and if disturbing less than one acre and not part of a common plan of development, do not require a permit:

- Full Depth Pavement Repairs – isolated repairs of pavement build-up down to sub-grade;
- Guardrail Installation/Replacement – installing or repairing with minor grading work to create proper grade for end assemblies; and
- Road Replacement without adding any lanes.

To determine if construction activities at a particular site are regulated under this general permit, the total amount of land area that will be disturbed during a construction project rather than the total land area owned at a project site must be determined. Construction activities that require storm water permit coverage under this general permit are activities that result in the disturbance of five or more acres of total land area, including smaller areas that are part of a larger plan of development or sale that cumulatively disturb at least five acres.

Any discharge authorized by a different LPDES permit may be commingled with discharges authorized by this permit. Any permittee covered by an individual permit may request that the individual permit be terminated if the permitted source or activity is also eligible for coverage under this general permit. Upon written notification by this Office, the individual permit will be terminated and the permittee will be covered by this general permit.

Assistance/additional information about the permit may be obtained by contacting the Water Permits Division General and Municipal Water Permits Section, at (225) 219-3590 or by e-mail at [DEQ-LAR10Permits@la.gov](mailto:DEQ-LAR10Permits@la.gov), or at the address in Part II.C.

2. This permit also authorizes discharges from support activities related to a construction site (e.g., equipment staging yards, material storage areas, excavated material disposal areas, borrow areas, etc.) from which there otherwise is a storm water discharge from a construction activity provided:
  - a. the support activity is directly related to a construction site that is required to have LPDES permit coverage for discharges of storm water associated with construction activity;
  - b. the support activity is not a commercial operation serving multiple unrelated construction projects by different operators, and does not operate beyond the completion of the construction activity at the last construction project it supports;
  - c. appropriate controls and measures are identified within the Storm Water Pollution Prevention (SWPPP) to minimize discharges from the support activity areas.
  - d. effective pollution prevention measures must be designed, installed, implemented, and maintained to minimize:
    - (1) Discharges of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;

- (2) Exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to storm water and to precipitation. Minimization of exposure is not required in cases where the exposure to precipitation and to storm water will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of storm water contamination (such as final products and materials intended for outdoor use);
- (3) Discharges of pollutants from spills and leaks, and implement chemical spill and leak prevention and response procedures; and
- (4) Pollutant discharges from the support activity areas located on and off the construction site to the maximum extent practicable and comply with all permit conditions.

### **3. Discharge Limitations**

The permit conditions which were determined applicable to these discharges are narrative effluent limitations and conditions on storm water discharges and requirements for developing and implementing SWPPPs to comply with those limits and conditions. These narrative effluent limit guidelines are intended to minimize and control pollutants in storm water discharges associated with large construction activities. These requirements were developed by the EPA under authority of 40 CFR 122.44(k)(2), which allows for BMPs in lieu of numeric effluent limitations in NPDES permits when the EPA finds numeric effluent limitations to be infeasible. The SWPPP requirements (see Part IV) describe the construction and development point source category effluent limit guidelines found in 40 CFR 450, Subpart B, which are considered narrative discharge limitations.

#### **a. Technology-Based Effluent Limitations**

The following conditions are included as requirements for the SWPPPs and are hereby adopted as enforceable Technology-based Effluent Limitations of the permit:

- (1) 40 CFR 450.21(a) *Erosion and sediment controls*: see Part IV.D.2.a(1), (2), and (4) and Part IV.D.3;
- (2) 40 CFR 450.21(b) *Soil stabilization*: see Part IV.D.2.a(3), Part IV.D.2.b, and Part VIII. "Final Stabilization";
- (3) 40 CFR 450.21(c) *Dewatering*: see Part III.A.3.m, Part III.A.4.d, and Part IV.D.1.g;
- (4) 40 CFR 450.21(d) *Pollution prevention measures*: see Part I.A.2.d.(1) – (3) and Part IV.D.2.c;
- (5) 40 CFR 450.21(e) *Prohibited discharges*: see Parts I.A.4 and 5, Part III.A.4, and Part IV.F; and
- (6) 40 CFR 450.21(f) *Surface outlets*: see Part IV.D.2.a(2)(i).

#### **b. Water Quality-Based Effluent Limitations**

- (1) Discharges Threatening Water Quality and Water Quality Standards/TMDL Requirements: see Parts I.A.4.d and g and Part IV.D.1 and 4.a;

- (2) Buffer Zone Requirements: see Part IV.D.2.a.(2)(g); and
- (3) Approved State or Local Plans: see Part IV.D.2.d.

**4. Limitations on Coverage:** The following storm water discharges from construction sites are not authorized by this permit.

**a. Post-Construction Discharges**

Storm water discharges that originate from the site after construction activities have been completed, and the site, including any temporary support activity, has undergone final stabilization. Industrial post-construction storm water discharges may need to be covered by a separate LPDES permit.

**b. Discharges Mixed with Non-storm Water**

Discharges that are mixed with sources of non-storm water other than:

- (1) discharges which are identified in Part I.A.2 above (including equipment staging yards and material storage areas), and
- (2) non-storm water discharges listed in Part III.A.3 which are authorized under this permit, and
- (3) discharges of material other than storm water that are in compliance with another LPDES permit issued for that discharge, and which are addressed in the SWPPP in such a manner as to identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge, as required below in Part IV.D.5. Any discharge authorized by a different LPDES permit may be commingled with discharges authorized by this permit.

**c. Discharges Covered by Another Permit**

Storm water discharges associated with construction activity that have been issued an individual permit or required to obtain coverage under an alternative general permit. As provided in Part I.A.1 above, any permittee covered by an individual permit may request that the individual permit be terminated if the permitted source or activity is also eligible for coverage under this general permit. Upon written approval of that request by this Office, the individual permit will be terminated and the permittee will be covered by this general permit.

**d. Discharges Threatening Water Quality**

*Storm water discharges from construction sites that the LDEQ determines will cause, or have the reasonable potential to cause or contribute to, violations of water quality standards. Where such determinations have been made, the discharger will be notified by the LDEQ that an individual permit application is necessary. However, the LDEQ may authorize coverage under this permit after appropriate controls and implementation*

procedures designed to bring the discharges into compliance with water quality standards have been included in the SWPPP.

Furthermore, if a discharge flows into a water body that is listed on the most recent EPA-approved 303(d) list, then the permittee's SWPPP must include specific control measures targeting the pollutant(s) of concern for any impairment(s). The control measures must be designed and implemented to ensure discharges of storm water will not have the reasonable potential to cause or contribute to the impairment. Impaired water bodies (without a TMDL) are listed as Category 5 in Appendix A of the LDEQ's most recent Integrated Report (IR), located at: <https://deq.louisiana.gov/page/579>.

e. Discharges That Are Not Protective of Endangered and Threatened Species

- (1) Coverage under this permit is available only if the storm water discharges, allowable non-storm water discharges, and storm water discharge-related activities will not adversely affect any species that are federally-listed as endangered or threatened ("listed") under the Endangered Species Act (ESA) and will not result in the adverse modification or destruction of habitat that is federally-designated as "critical habitat" under the ESA. All operators must follow the procedures in Addendum A and meet at least one of the eligibility criteria (Criteria A - E) described in the addendum when determining eligibility for coverage under the permit. Failure to continue to meet one or more of these criteria during the entire term of the permit will result in the storm water discharges associated with construction activity being ineligible for coverage under this permit.
- (2) The operator must comply with any terms and conditions imposed under the eligibility requirements above to ensure that storm water discharges or Best Management Practices (BMPs) to control storm water runoff are protective of listed endangered and threatened species and/or critical habitat. Such terms and conditions must be incorporated in the operator's SWPPP.
- (3) This permit does not authorize any "take" (as defined under Section 9 of the ESA) of endangered and/or threatened species unless such take is authorized under Section 7 or 10 the ESA.
- (4) This permit does not authorize any storm water discharges or require any BMPs to control storm water runoff that are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the Endangered Species Act or result in the adverse modification or destruction of habitat that is designated as critical under the ESA.

f. Discharges Adversely Affecting Properties Eligible for Protection Under the National Historic Preservation Act.

Eligibility for coverage under this permit is contingent upon compliance with the National Historic Preservation Act (NHPA). Discharges are authorized under this permit only if:



- (1) the site ensures storm water discharges, allowable non-storm water discharges, and discharge-related activities do not have the potential to adversely affect a property that is listed or is eligible for listing on the National Register of Historic Places as maintained by the Secretary of the Interior; or
- (2) if historical properties are identified and it is determined there is the potential to adversely affect the property, the site has obtained and is in compliance with a written agreement with the Louisiana State Historic Preservation Officer (LSHPO) that outlines all measures to be undertaken to mitigate or prevent adverse effect(s) to the historic property.

Addendum B of this permit provides guidance and references to assist operators with determining permit eligibility concerning this provision. The operator must certify coordination and compliance with the SHPO requirements upon submittal of the NOI.

**g. Discharges Not in Compliance with State Water Quality Standards/TMDL Requirements**

Covered dischargers shall not cause, have the reasonable potential to cause, or contribute to a violation of a state water quality standard. New or proposed dischargers must evaluate eligibility by determining compliance with this provision prior to submission of the NOI.

The discharge of any pollutant into any water for which a Total Maximum Daily Load (TMDL) has been either established or approved by the LDEQ is not authorized unless the discharge is consistent with the requirement(s) of that TMDL. During determination of eligibility for coverage under the permit, **new dischargers** (see LAC 33:IX.2313) to a 303(d) water body must determine that their proposed discharges will be in compliance with LAC 33:IX.2317.A.9. In essence, a new discharger is one initiated after August 13, 1979, and not previously permitted. Any discharger (**both existing and new**) to a water body for which there is an impairment and/or an approved or established TMDL must confirm that the impairment and/or TMDL allocated a portion of the load for storm water point source discharges if the proposed discharges will contain the pollutant(s) for which the water body is impaired or the TMDL developed. Such discharges are expected to be rare for the wastewater types covered by the reissued permit because the required control/prevention measures are designed to prevent the release of these pollutants in storm water. Permittees located within a regulated Municipal Separate Storm Sewer System (MS4) that has been assigned a wasteload allocation (WLA) may be required to implement additional BMPs in accordance with local ordinances and/or the MS4's Storm Water Management Plan (SWMP).

In a situation where an LDEQ-approved or established TMDL has specified a general WLA applicable to construction storm water discharges, but no specific requirements for construction sites have been identified in the TMDL, the operator must consult with the LDEQ to confirm that adherence to a SWPPP that meets the requirements of this permit will be consistent with the approved TMDL. The SWPPP must clearly state which BMPs were selected for the site, including on and off-site construction support activities, and describe how the design and implementation of the selected BMPs are expected to ensure that storm water discharges from the construction site are in compliance with the

established TMDL. If the LDEQ-approved or established TMDL specifically precludes such discharges, the operator is not eligible for coverage under this permit.

Where an LDEQ-approved or established TMDL has not specified a WLA applicable to construction storm water discharges, but has not specifically excluded these discharges, adherence to a SWPPP that meets the requirements of this permit will be considered to be consistent with the approved TMDL. Current TMDL reports may be found at: <http://deq.louisiana.gov/page/tmld-reports-and-models> and <https://mywaterway.epa.gov/>.

Broadly stated, new or existing discharges of a particular pollutant are prohibited where there is a TMDL unless the discharge meets the requirements established in the TMDL. If a discharge is not/will not meet these requirements, the operator must seek coverage under an alternative permit. Where a discharger is already operating under the permit and is later discovered to cause or have the reasonable potential to cause or contribute to the violation of a state water quality standard, the permitting authority will notify the operator of such violation(s) and the permittee shall take all necessary actions to ensure that future discharges do not cause, have the reasonable potential to cause, or contribute to the violation of a water quality standard and document these actions in the pollution prevention plan. If violations remain or recur, then coverage under the permit is automatically terminated and alternate coverage must be obtained. Compliance with this requirement does not preclude any enforcement activity as provided by the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.) for the underlying violation.

In order to verify the impaired status of the water body and determine if any TMDLs have been established, the permit applicant shall consult the most recent Integrated Report (also referred to as the 305(b) Report) at: <https://deq.louisiana.gov/page/579> or obtain a copy of the report from the Office of Environmental Services, Water Permits Division. This list is updated every even-numbered year. Operators are expected to utilize the most recent Integrated Report.

## 5. Exclusions

This general permit **shall not** apply to:

- a. Storm water discharges associated with industrial activity that originate from the site after construction activities have been completed and the site has undergone final stabilization.
- b. Non-storm water discharges (except certain non-storm water discharges specifically listed in this general permit). However, this permit can authorize storm water discharges from construction where the discharges are mixed with non-storm water discharges that are authorized by a different LPDES permit.
- c. Storm water discharges from construction activities that are covered by an existing LPDES permit. However, any permittee covered by another permit may request that the other permit be terminated if the permitted source or activity is also eligible for coverage under this general permit. Upon written approval of that request by this Office, the permittee will be covered by this general permit, and the other permit terminated.

- d. Storm water discharges from construction activities that the LDEQ has determined to be causing, or has the reasonable potential to cause, or will contribute to a violation of a water quality standard.
- e. Storm water discharges from construction activities, allowable non-storm water discharges, and storm water discharge-related activities, if the discharges are likely to adversely affect a listed endangered or threatened species or its critical habitat (unless in compliance with specific ESA related conditions in the permit).
- f. Storm water discharges from construction activities and storm water discharge-related activities, if the discharges are not in compliance with the NHPA.

**B. Obtaining Authorization**

1. In order for storm water discharges from construction activities to be authorized to discharge under this general permit, an applicant must:
  - a. meet the Part I.A applicability requirements;
  - b. develop a SWPPP covering either the entire site or all portions of the site for which the applicant is the operator (see definition of operator in Part VIII) according to the requirements in Part IV (preparation and implementation of the SWPPP may be a cooperative effort where there is more than one operator at a site); and then
  - c. submit payment for the annual maintenance and surveillance fee(s) in accordance with Part I.C of this permit and a complete and accurate NOI form (Form CSW-G) in accordance with the requirements of Part II, using an NOI form provided by the State Administrative Authority (or a photocopy thereof). **Only one NOI needs to be submitted to cover all of the applicant's activities on the common plan of development or sale (e.g., there is no need to submit a separate NOI for each separate lot in a residential subdivision or for two separate buildings being constructed at a manufacturing facility, provided the applicant's SWPPP covers each area for which the applicant is an operator.)** The SWPPP must be implemented upon commencement of construction activities.

Application for coverage shall be made by:

- a party having operational control over construction plans and specifications (including the ability to make modifications in those specifications); and/or
- a party having day-to-day operational control over those activities at a project site which are necessary to ensure compliance with the SWPPP or other permit conditions.

When operational control over plans and specifications, and control over the day-to-day activities described above, are held by separate parties, each party shall submit an NOI. In cases with only one control party, that party alone is required to submit the NOI.

**Operators will commonly consist of the owner or developer of a project (the party with control of project specifications) and the general contractor (the party with day to day operational control of the activities at the project site which are necessary to ensure compliance with the permit).**

**For subdivisions and commercial developments, an NOI shall be submitted by the owner/developer, the general contractor, and each individual builder within the subdivision or commercial development.**

Any party with operational control over only a portion of a larger project (e.g., one of four homebuilders in a subdivision), must submit its own NOI and obtain its own permit authorization number. They may share a SWPPP with other permittees operating in the area of the larger project; however, each permittee is responsible for compliance with all conditions of this permit as it relates to their activities on their portion of the construction site. Each permittee shall ensure either directly or through coordination with other permittees, that their activities do not render another party's pollutant discharge controls ineffective. Any party with operational control over only a portion of a larger project shall either implement their portion of a common SWPPP or develop and implement their own site specific SWPPP.

For more effective coordination of BMPs and opportunities for cost sharing, a cooperative effort by the different operators at a site to prepare and participate in a comprehensive SWPPP is encouraged. Individual operators at a site may, but are not required to develop separate SWPPPs that cover only their portion of the project provided reference is made to other operators at the site.

In instances where there is more than one SWPPP for a site, cooperation between the permittees is encouraged to ensure storm water discharge control measures are consistent with one another (e.g., provisions to protect listed species and critical habitat).

All permitted parties are responsible for compliance with all applicable conditions of this permit as it relates to their activities on their portion of the construction site, including protection of endangered species, critical habitat, and historic properties, and implementation of control measures described in the SWPPP.

**Subcontractors who are under the general supervision of the general contractor are not considered operators and would not need to submit NOIs. The general contractor shall be responsible for submitting the NOI, implementing the SWPPP, and ensuring that subcontractors actions/activities do not render the general contractor's pollutant discharge controls ineffective.**

2. For construction sites where the operator changes, or where a new operator is added after the submittal of an NOI under Part II, a new NOI must be submitted in accordance with Part II.
3. Unless notified by the LDEQ to the contrary, all applicants who submit payment for the annual maintenance and surveillance fee(s) and a complete and accurate NOI in accordance with the requirements of this permit are authorized to discharge storm water from construction activities under the terms and conditions of the permit 48 hours after the receipt of the hand-delivered

NOI with the payment of the annual maintenance and surveillance fee(s), 48 hours after the submittal of a payment of the annual maintenance and surveillance fee(s) and complete and accurate electronic NOI (e-NOI) should e-NOIs become available for use during this permit term, or 48 hours after the postmark date on the envelope that contains the correct and accurate NOI with the payment of the annual maintenance and surveillance fee(s) by the Office of Environmental Services, Water Permits Division.

Operators who submit incomplete NOIs, NOIs without payment of the annual fee(s), or NOIs with errors will be notified and are not authorized to discharge storm water from construction activities until the errors or deficiencies have been corrected and the corrected NOI has been delivered to the LDEQ.

If warranted, the LDEQ may deny coverage under this general permit and require submittal of an application for an individual LPDES permit (see Part VI of this permit).

A printed hard copy of this permit may be obtained by contacting the LDEQ's Water Permits Division at (225) 219-3590 or by e-mail at [DEQ-LAR10Permits@la.gov](mailto:DEQ-LAR10Permits@la.gov), or a copy can be downloaded from the LDEQ website at <http://deq.louisiana.gov/page/lpdes-water-permits>. Go through the following links to find the permit: Water – Permits – LPDES Permit Information – LAR100000 –. A printed hard copy of the NOI can be downloaded from the LDEQ website at <http://deq.louisiana.gov/page/lpdes-water-permits>. Go through the following links to find the NOI form: Water – Permits – LPDES Forms – LPDES Permit Application Forms – CSW-G.

### **C. Annual Maintenance and Surveillance Fees**

An annual maintenance and surveillance fee will be assessed for coverage under the permit. Operators applying for coverage under the general permit shall select the time frame for which permit coverage is needed, a minimum of one year and up to five years. Prior to receiving coverage, the applicant(s) shall submit payment of the annual maintenance fee(s) for the entirety of the selected coverage (LAC 33:IX.1309.F and N).

1. The annual maintenance and surveillance fee(s) must be submitted with the NOI in accordance with the following time frames:
  - a. \$291.00 – 0 months – 1 year
  - b. \$582.00 – 2 years
  - c. \$873.00 – 3 years
  - d. \$1164.00 – 4 years
  - e. \$1455.00 – 5 years
2. Fees are due upon submission of the NOI. An NOI will not be declared administratively complete unless the associated fee has been paid in full.
3. Permittees will not receive annual invoices as the annual maintenance and surveillance fee(s) will be paid in advance as described above.

**D. Notice of Extension (NOE)**

If a continuation of coverage under this permit is needed beyond the selected number of years, the permittee must submit two copies (one original and one copy) of the completed and signed NOE (Form NOE-G) with payment of the annual maintenance and surveillance fee(s) 30 days before the permittee's expiration date of permit coverage to avoid a lapse in coverage. The full payment of the fee(s) must be submitted in accordance with the same time frames as specified for the NOI in Part I.C.1.

**Please note that authorizations under this general permit and/or extensions of coverage shall not exceed the 5-year term of the permit.**

**E. Automatic Termination of Coverage**

1. Termination of coverage under the permit shall be automatic. The termination date shall be determined by the number of years selected by the permittee (see Part I.C above) and the date the NOI is received by the Water Permits Division. To clarify, an NOI that is received and processed on October 1, 2024, and where the applicant selected one year of coverage shall automatically terminate on September 30, 2025. Permittees will be notified of the automatic termination date in the permit authorization letter that this Office will send to them, and **they will not be required to submit a Notice of Termination (NOT) unless Permit Part I.F applies.**

The automatic termination date is an estimate provided by the owner and/or operator regarding when construction activities will be completed. The automatic termination date is not intended to allow additional time to comply with final stabilization requirements. If construction activities are completed prior to the termination date, the owner and/or operator must comply with final stabilization deadlines and requirements in Part IV.D.2.a(3) at the time construction activities have ceased.

2. One or more of the following conditions must be met by the termination date:
  - a. final stabilization has been achieved on all portions of the site for which the permittee is responsible (including, if applicable, returning agricultural land to its pre-construction agricultural use);
  - b. another operator/permittee has assumed operational control according to Part VI.D.10 over all areas of the site that have not been finally stabilized;
  - c. coverage under an individual or alternative general LPDES permit has been obtained; or
  - d. for residential construction only, temporary stabilization has been completed and the residence has been transferred to the homeowner.
3. If one or more of the above conditions are not met, the permittee must submit a NOE in accordance with Part I.D.

4. Enforcement actions may be taken if a permittee does not meet one or more of the above conditions by the termination date.
5. **For owners and/or operators with effective permit authorizations at the time this permit is reissued:** If a permittee received authorization to discharge under the previous LAR100000 general permit and the authorization of coverage has an expiration date of September 30, 2024, the construction activity will be reauthorized under the terms and conditions of the reissued general permit for a period of 180 days (October 1, 2024 - March 28, 2025). **If construction activities, including final stabilization, are expected to continue beyond March 28, 2025, the permittee must submit a NOE by March 1, 2025, with payment of the surveillance and maintenance fee, in order to avoid a lapse in permit coverage.** In accordance with 40 CFR 122.28(b)(2)(vi) and LAC 33:IX.2515.B.2.f, currently permitted owners and/or operators shall be notified in writing of the requirements for continued coverage prior to permit reauthorization.

#### **F. Notice of Termination**

Termination of coverage is automatic provided that the owner and/or operator has complied with the requirements in Part I.E. Owners and/or operators are responsible for ensuring the elimination of storm water discharges associated with construction activity by the automatic termination date. All disturbed soils at the portion of the construction site where the operator had control shall be finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time to ensure final stabilization is maintained, or that all storm water discharges associated with construction activities from the identified site that are authorized by an LPDES general permit have otherwise been eliminated from the portion of the construction site where the operator had control.

Permittees shall be aware that final stabilization often takes time (weeks or even months), especially during times of low rainfall or during the colder months of the year. If final stabilization requirements of the permit have not been met, a NOE must be submitted. Termination of permit coverage does not relieve the permittee of any future liabilities associated with environmental damage caused by the permittee's activities.

Where another owner and/or operator has assumed operational control (see Part III.E and Part IV.E) over all areas of the site that have not been finally stabilized, the previous owner and/or operator must submit a complete and accurate NOT (Form CSW-T), which may be obtained from the LDEQ website at <https://www.deq.louisiana.gov/page/lpdes-permit-termination-forms>. Current permitted owners and/or operators who determine that coverage is no longer needed may also submit an NOT. The NOT shall include the following information:

1. the name (or other identifier), street address (description of location if no street address is available), city, parish, and the latitude and longitude of the approximate center of the construction site/project for which the notification is submitted;
2. the name, address and telephone number of the permittee submitting the NOT;

3. the LPDES permit authorization number for the storm water discharge identified by the NOT;
4. an indication of whether the storm water discharges associated with construction activity have been eliminated or the operator of the discharges has changed; and
5. the following certification signed in accordance with Part VI.D.10 (Signatory Requirements) of this permit:

*"I certify under penalty of law that all storm water discharges associated with construction activity from the portion of the identified site where I was an operator have ceased or have been eliminated or that I am no longer an operator at the construction site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge storm water associated with construction activity under this general permit, and that discharging pollutants in storm water associated with construction activity to waters of the State is unlawful under the Clean Water Act where the discharge is not authorized by an LPDES permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violation of this permit or the Clean Water Act."*

All NOTs are to be sent, using the forms provided by the State Administrative Authority, to the Water Permits Division at the address specified on the NOT form.



## PART II. NOTICE OF INTENT REQUIREMENTS

### A. Deadlines for Notification

1. Except as provided below in Parts II.A.3 and II.A.4, for parties required to obtain permit authorization, defined above in Part I.B.1, an initial complete and accurate NOI with payment of the annual maintenance and surveillance fee(s) in accordance with the requirements of Part I.C must be received by this Office prior to the commencement of construction activities (i.e., the initial disturbance of soils associated with clearing, grading, excavation activities, or other construction activities).
2. Except as provided in Parts II.A.3 and II.A.4, for parties defined as operators solely due to their day-to-day operational control over those activities at a project site which are necessary to ensure compliance with the SWPPP or other permit conditions (e.g., general contractor, erosion control contractor, etc.), a complete and accurate NOI with payment of maintenance and surveillance fee(s) must be received by this Office prior to commencing work at the site.
3. For storm water discharges from construction sites where the operator changes, (including projects where an operator is added after an NOI has been submitted under Parts II.A.1 or II.A.2), a complete and accurate NOI with payment of the annual maintenance and surveillance fee(s) in accordance with the requirements of this Part I.C must be received by this Office from the new operator prior to when the new operator assumes operational control over site specifications or commences work at the site.
4. Applicants are not prohibited from submitting late completed NOIs. When a late completed NOI is submitted, authorization is only for discharges that occur after permit coverage is granted. The Agency reserves the right to bring appropriate enforcement actions for any unpermitted activities that may have occurred between the time construction commenced and authorization of future discharges is granted.
5. This permit replaces the LPDES General Permit for Storm Water Discharges from Construction Activities, issued June 21, 2019. **Current permitted owners and/or operators:** If a permittee received authorization to discharge under the previous LAR100000 general permit and the authorization of coverage has an expiration date of September 30, 2024, the construction activity will be reauthorized under the terms and conditions of the reissued general permit for a period of 180 days (October 1, 2024 - March 28, 2025). **If construction activities, including final stabilization, are expected to continue beyond March 28, 2025, the permittee must submit a NOE by March 1, 2025, with payment of the surveillance and maintenance fee, in order to avoid a lapse in permit coverage.** In accordance with 40 CFR 122.28(b)(2)(vi) and LAC 33:IX.2515.B.2.f, currently permitted owners and/or operators shall be notified in writing of the requirements for continued coverage prior to permit reauthorization.

**B. Contents of Notice of Intent**

The Notice(s) of Intent shall be signed in accordance with Part VI.D.10 of this permit and shall include at a minimum:

1. the name, address, and telephone number of the construction site owner or operator filing the NOI for permit coverage and operator status as a Federal, State, Tribal, private, or other public entity;
2. the name (or other identifier), street address (description of location if no street address is available), city, parish, and the latitude and longitude of the approximate center of the construction site/project for which the notification is submitted;
3. whether or not the construction project is located on Tribal Lands;
4. a certification that a SWPPP, including both construction and post-construction controls, has been developed, and that the SWPPP is compliant with any applicable state and/or local sediment and erosion plans. (A copy of the plans or permits shall not be included with the NOI submission);
5. the location where the SWPPP may be viewed and the name and telephone number of a contact person for scheduling viewing times;
6. an estimate of project start date and selected number of years for which permit coverage is needed (i.e. the projected completion date is assumed to be "x" number of years after the estimated start date, as indicated by the permit applicant), estimates of the number of acres of the site on which soil will be disturbed, and the type of facility being constructed;
7. the name of the receiving water(s);
8. based on Addendum D of the NOI, whether the storm water runoff from the site will flow directly into a water body listed as an Outstanding Natural Resource Water (ONRW); (if the discharge will ultimately enter a Scenic Stream, the applicant is instructed to contact the Louisiana Department of Wildlife and Fisheries (LDWF) at 318-343-4044);
9. based on the instructions in Addendum A of the NOI, whether any listed or proposed threatened or endangered species, or designated critical habitat, are in proximity to the storm water discharges covered by this permit;
10. based on the instructions in Addendum B of the NOI, whether any properties listed or eligible for listing on the National Register of Historic Places under the National Historic Preservation Act are located on the construction site and whether the SHPO was involved in the determination of eligibility;
11. the permit number of any LPDES permit(s) for any discharge(s) (including any storm water discharges or any non-storm water discharges) from the site, to the extent available.

12. certification page that has been dated and signed by permittee or authorized responsible representative as described in Permit Part V.D.10 who certifies the following:

*"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I also certify that a storm water pollution prevention plan, including both construction and post construction controls, has been prepared for the site in accordance with the permit and that such plan complies with approved State, Tribal and/or local sediment and erosion plans or permits and/or storm water management plans or permits. I am aware that signature and submittal of the NOI is deemed to constitute my determination of eligibility under one or more of the requirements of Permit Part I.A.3.e(1), related to the Endangered Species Act requirements. To the best of my knowledge, I further certify that such discharges and discharge related activities will not have an effect on properties listed or eligible for listing on the National Register of Historic Places under the National Historic Preservation Act, or are otherwise eligible for coverage under Part I.A.3.f of the permit. I am also aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

Should electronic NOIs (e-NOIs) become available during the term of this permit, the Department may suspend the use of paper NOIs. However, applicants will be expected to continue to comply with the above requirements through the electronic submittal process.

### **C. Where to Submit**

Two copies (one original and one copy) of the completed NOI, signed in accordance with Part VI.D.10 of this permit and accompanied by the payment for the annual maintenance and surveillance fee(s) in accordance with Part I.C of the permit, must be submitted to the LDEQ at the following address:

**Mailing Address:**

Department of Environmental Quality  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, LA 70821-4313  
Attention: Water Permits Division

**Physical Address (if NOI is hand-delivered):**

Department of Environmental Quality  
Office of Environmental Services  
602 North Fifth Street  
Baton Rouge, LA 70802  
Attention: Water Permits Division

Current mailing addresses for the different Department offices are posted on the LDEQ web page at <https://www.deq.louisiana.gov/directory>.

## **Part III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS**

### **A. Prohibition on Non-Storm Water Discharges**

1. Except as provided in Part I.A.2 and in items 2 and 3 below, all discharges covered by this permit shall be composed entirely of storm water associated with construction activity.
2. Discharges of material other than storm water that are in compliance with an LPDES permit (other than this permit) issued for that discharge may be mixed with discharges authorized by this permit.
3. The following non-storm water discharges are authorized by this permit provided the non-storm water component of the discharge is in compliance with the permit terms and conditions:
  - a. discharges from firefighting activities;
  - b. fire hydrant flushings;
  - c. waters used to wash vehicles where detergents, soaps, or solvents are not used;
  - d. waters used to control dust in accordance with Part IV.D.2.c.(2) – minimizing dust from vehicles;
  - e. potable water sources including uncontaminated waterline flushings;
  - f. routine external building wash down which does not use detergents, soaps, or solvents (the use of non-biodegradable or emulsifying soaps and detergents, tire cleaners containing potentially hazardous chemicals, and solvents is prohibited);
  - g. diverted stream flows in compliance with a USACE 404 permit;
  - h. pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where soaps, solvents, and detergents are not used; directing pavement wash waters directly into any surface water, storm drain inlet, or storm water conveyance, unless the conveyance is connected to a sediment basin, sediment trap, or other effective control is prohibited;
  - i. uncontaminated air conditioning or compressor condensate;
  - j. uncontaminated and/or non-turbid ground water infiltration (as defined at 40 CFR 35.2005(b)(20));
  - k. uncontaminated and/or non-turbid pumped ground water or spring water;
  - l. foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated groundwater;
  - m. uncontaminated excavation dewatering if the discharge is managed by an appropriate control; and
  - n. landscape irrigation.
4. The following dischargers are prohibited:
  - a. wastewater from washout of concrete, **unless managed by an appropriate control**;
  - b. wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

- c. discharges related to concrete or asphalt batch plant operations located at the construction site. The presence of any such discharges require coverage by an alternative LPDES permit (e.g. LAG110000 or an individual permit);
- d. discharges from dewatering activities, including discharges from dewatering of trenches and excavations, **unless managed by an appropriate control**;
- e. fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
- f. soaps or solvents used in vehicle and equipment washing;
- g. storm water discharges that originate from the site after construction activities have been completed and the site, including any temporary support activity, has undergone final stabilization. Once the site has undergone final stabilization, any post-construction storm water discharges may need to be covered by a separate LPDES permit; and
- h. discharges mixed with sources of non-storm water other than the discharges identified in and are in compliance with Part III.A.3. Any discharge authorized by a different LPDES permit may be commingled with discharges authorized by this permit.

## **B. Requirements for Notification**

The discharge of hazardous substances or oil in the storm water discharge(s) from a site shall be prevented or minimized in accordance with the applicable SWPPP for the site. This permit does not relieve the permittee of the reporting requirements of LAC 33:I.3915 and LAC 33:I.3917.

### **1. Emergency Notification**

The permittee shall report any unauthorized discharges which may endanger human health or the environment. Please note that discharges in direct noncompliance with LPDES permit conditions must also comply with the reporting requirements in LAC 33:IX.2701.L, which requires written notification within 5 days. The report shall contain information as required in Part VI.D.6 of this permit and compliance with the procedures in this part are required.

- 2. The LDEQ may waive the written report on a case-by-case basis, if the oral report has been received within 24 hours of the incident.
- 3. The SWPPP required under Part IV of this permit must be modified within 14 calendar days of the permittee's knowledge of the release to provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the recurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

## **C. Spills**

This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill. Spills resulting in an emergency condition or non-compliance under this general permit must be reported in accordance with LAC 33:I.3923 or LAC 33:IX.2701.L.6.

**D. Discharge Compliance with Water Quality Standards**

1. Operators must select, install, implement and maintain control measures at the construction site that minimize pollutants in the discharge as necessary to meet applicable water quality standards. In general, except in situations explained below, the storm water controls must be developed, implemented, and updated consistent with the other provisions of Part III. The storm water controls must be as stringent as necessary to ensure that the discharges do not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.
2. Operators covered under this permit shall not cause or have the reasonable potential to cause or contribute to a violation of a water quality standard. At any time after authorization, the LDEQ may determine that the operator's storm water discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, the LDEQ will require the following:
  - a. Modify storm water controls in accordance with Part IV.C to address adequately the identified water quality concerns;
  - b. Submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or
  - c. Cease discharge of pollutants from construction activity and submit an individual application.
3. All written responses required under this part must include a signed certification consistent with Part VI.D.10.
4. If violations remain or recur, then coverage under this permit may be terminated by the permitting authority and an alternative permit may be issued. Compliance with this requirement does not preclude any enforcement activity as provided by the Clean Water Act and Environmental Quality Act for the underlying violation.

**E. Responsibilities of Operators**

Permittees may meet one or both of the operational control components in the definition of "operator" found in Part VIII (Additional Definitions). Either Part III.E.1 or Part III.E.2 or both will apply depending on the type of operational control exerted by an individual permittee. Part III.E.3 applies to all permittees.

1. Permittee(s) with operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications (e.g., developer or owner) must:
  - a. ensure the project specifications that they develop meet the minimum requirements of Part IV (Storm Water Pollution Prevention Plans) and all other applicable conditions;
  - b. ensure that the SWPPP indicates the areas of the project where they have operational control over project specifications (including the ability to make modifications in the specifications), and ensure all other permittees implementing portions of the SWPPP

impacted by any changes they make to the plan are notified of such modifications in a timely manner; and

- c. ensure that the SWPPP, for portions of the project for which they are operators, indicates the name and LPDES permit number for parties with day-to-day operational control of those activities necessary to ensure compliance with the SWPPP or other permit conditions. If these parties have not been identified at the time the SWPPP is initially developed, the permittee with operational control over project specifications shall be considered to be the responsible party until such time as the authority is transferred to another party (e.g., general contractor) and the plan updated.
2. Permittee(s) with day-to-day operational control of those activities at a project which are necessary to ensure compliance with the SWPPP for the site or other permit conditions (e.g., general contractor) must:
  - a. ensure the SWPPP, for portions of the project for which they are operators, meets the minimum requirements of Part IV (Storm Water Pollution Prevention Plans), all other permit conditions, and identifies the parties responsible for implementation of control measures identified in the plan;
  - b. ensure that the SWPPP indicates areas of the project where they have operational control over day-to-day activities; and
  - c. ensure that the SWPPP, for portions of the project for which they are operators, indicates the name and LPDES permit number of the party(ies) with operational control over project specifications (including the ability to make modifications in the specifications).
3. Permittees with operational control over only a portion of a larger construction site (e.g., one of four homebuilders in a subdivision) are responsible for compliance with all applicable terms and conditions of this permit as it relates to their activities on their portion of the construction site, including: (1) protection of endangered and/or threatened species and their critical habitat (2) protection of historic sites listed and/or proposed to be listed on national and state registries and (3) implementation of BMPs and other controls required by the SWPPP. Permittees shall ensure either directly or through coordination with other permittees that their activities do not render another party's pollution controls ineffective. Permittees must either implement their portions of a common SWPPP or develop and implement their own SWPPP.

## **PART IV. STORM WATER POLLUTION PREVENTION PLANS**

At least one SWPPP shall be developed for each construction project or site covered by this permit. For more effective coordination of BMPs and opportunities for cost sharing, a cooperative effort by the different operators at a site to prepare and participate in a comprehensive SWPPP is encouraged. Individual operators at a site may, but are not required to, develop separate SWPPPs that cover only their portion of the project provided that reference is made to other operators at the site. In instances where there is more than one SWPPP for a site, coordination must be conducted between the permittees to ensure the storm water discharge controls and other measures are consistent with one another (e.g., provisions to protect listed species and critical habitat).

SWPPPs shall be prepared in accordance with good engineering practices. The SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site. The SWPPP shall describe and ensure the implementation of practices which will be used to minimize the pollutants in storm water discharges associated with construction activity at the construction site and to assure compliance with the terms and conditions of this permit. When developing SWPPPs, operators must follow the procedures in Addendum A of this permit to determine whether listed endangered and/or threatened species or critical habitat would be affected by the operator's storm water discharges or storm water discharge-related activities. Any information on whether listed species or critical habitat is found in proximity to the construction site must be included in the SWPPP. Any terms or conditions that are imposed under the eligibility requirements of Part I.A.4.e and Addendum A of this permit to protect listed species or critical habitat from storm water discharges or storm water discharge-related activity must be incorporated into the SWPPP. The SWPPP must be implemented upon commencement of construction activities. Permittees must implement the applicable provisions of the SWPPP required under this Part as a condition of this permit. SWPPP templates may be found at <http://deq.louisiana.gov/page/storm-water-protection>.

### **A. Deadlines for Plan Preparation and Compliance**

The SWPPP shall:

1. Be completed prior to the submittal of an NOI to be covered under this permit (except as provided in Part II.A.5) and updated as appropriate; and
2. Provide for compliance with the terms and schedule of the SWPPP beginning with the initiation of construction activities.

### **B. Signature, Plan Review and Making Plans Available**

1. The SWPPP shall be signed in accordance with Part VI.D.10 (Signatory Requirements), and be retained on-site at the site (or other local site accessible to the LDEQ and the public) which generates the storm water discharge in accordance with Part V (Retention of Records) of this permit.



2. The permittee shall post a notice near the main entrance of the construction site with the following information:
  - a. LPDES permit number for the project or a copy of the NOI if a permit authorization number has not yet been assigned;
  - b. name and telephone number of a local contact person;
  - c. brief description of the project; and
  - d. SWPPP's location if the site is inactive or lacks an on-site location to store the plan.

If posting this information near a main entrance is infeasible due to safety concerns, the notice shall be posted in a local public building. For a linear construction project (e.g., pipeline, highway, etc.), the notice must be placed in a publicly-accessible location in close proximity to where construction is actively underway, and it is moved as necessary. This permit does not require permittees to allow the public's access to a construction site for any reason, including inspection of a site, nor does it provide the public any right to trespass on a construction site.

3. The permittee shall make SWPPPs available upon request to: the LDEQ; the local agency approving sediment and erosion plans, grading plans, or SWMPs; local government officials; or the operator of a MS4 receiving discharges from the site. The copy of the SWPPP that is required to be kept on-site (or locally available, including electronic copies) must be made available to the LDEQ (or authorized representative) for review at the time of an on-site inspection. Also, in the interest of public involvement, the LDEQ encourages permittees to make their SWPPPs available to the public for viewing during normal business hours.
4. The LDEQ may notify the permittee (co-permittees) at any time that the SWPPP does not meet one or more of the minimum requirements of Part IV. Such notification shall identify those provisions of the permit which are not being met by the SWPPP and those provisions of the SWPPP requiring modifications to meet the minimum requirements. Within 7 calendar days of receipt of the notification from the LDEQ (or authorized representative), the permittee shall make the required changes to the SWPPP and shall submit to the LDEQ a written certification that the changes have been made. The LDEQ may take appropriate enforcement action for the period of time the permittee was operating under a SWPPP that did not meet the minimum requirements of the permit.

### **C. Keeping Plans Current**

The permittee must amend the SWPPP within 7 calendar days whenever:

1. there is a change in design, construction, operation, or maintenance, which has or may have a significant effect on the discharge of pollutants to the waters of the State and which has not otherwise been addressed in the SWPPP;

2. inspections or investigations by site operators, local, state, or federal officials indicate the SWPPP is proving ineffective in eliminating or significantly minimizing pollutants from sources identified under Part IV.D.1 of this permit, or is otherwise not achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity; and
3. the plan shall be amended to identify any new contractor and/or subcontractor that will implement a measure of the SWPPP (see Part IV.E). The plan must also be amended to address any measures necessary to protect endangered and/or threatened species and their critical habitat, and historic sites listed and/or proposed to be listed on national and state registries, if applicable. Amendments to the plan may be reviewed by the LDEQ in the same manner as Part IV.B above.

#### **D. Contents of Plan**

The SWPPP shall include the following items:

##### **1. Site Description**

Each SWPPP shall provide a description of potential pollutant sources and other information as indicated below:

- a. a description of the nature of the construction activity and function of the project (i.e., highway, mall, etc.);
- b. a description of the intended sequence and timing of major activities (i.e. initial land clearing, installing sewer lines, roads, major buildings) which disturb soils for major portions (i.e. defined phases of a subdivision) of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation, etc);
- c. estimates of the total area of the site and the total area of the site that is expected to be disturbed by excavation, grading, or other activities including off-site borrow and fill areas;
- d. an estimate of the runoff coefficient of the site for both the pre-construction and post-construction conditions and data describing the soil or the quality of any discharge from the site;
- e. a general location map (e.g., portion of a city or county map or other map with enough detail to identify the location of the construction site and waters of the United States within one mile of the site);
- f. a site map indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, an outline of areas which will not be disturbed, the location of major structural and nonstructural controls identified in the SWPPP, locations of off-site material, waste, borrow or equipment storage areas, surface waters (including wetlands), locations where storm water is discharged to a surface water; the location of areas where stabilization practices are expected to occur;

- g.** the location and description of any allowable non-storm water discharges covered by the permit;
- h.** the name of the receiving water(s), and areal extent and description of wetland or other special aquatic sites at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project;
- i.** a copy of the permit requirements (may simply attach a copy of this permit);
- j.** information on whether listed endangered and/or threatened species and/or critical habitat are found in proximity to the construction activity and whether such species or critical habitat may be affected by the operator's storm water discharges or storm water discharge-related activities;
- k.** documentation supporting the permittee's determination of permit eligibility and compliance with Permit Part I.A.4.f (National Historic Preservation Act), including:

  - (1)** information on whether storm water discharges or storm water discharge-related activities would have an effect on a property that is listed or proposed to be listed on the National Register of Historic Places or state registries;
  - (2)** where effects may occur, any written agreements made between the operator and the SHPO to mitigate those effects;
  - (3)** results of the Addendum B historic places screening determinations; and
  - (4)** a description of measures necessary to avoid or minimize adverse impacts on places listed, or eligible for listing, on the National Register of Historic Places, including any terms or conditions that are imposed under the eligibility requirements of Part I.A.4.f of this permit.
- l.** documentation supporting the permittee's determination of permit eligibility and compliance with Part I.A.4.g regarding discharges to waters that are impaired and/or have an LDEQ-established or approved TMDL, including:

  - (1)** identification of whether the permittee's discharge is identified, either specifically or generally, in an LDEQ-established or approved TMDL and any associated allocations, requirements, and assumptions identified for the discharge;
  - (2)** summaries of consultation with the LDEQ authorities on consistency of SWPPP conditions with the approved TMDL; and
  - (3)** measures taken to ensure that the discharge of pollutants for the site is consistent with Water Quality Standards and the assumption and requirements of the LDEQ-established or approved TMDL, including any specific WLA that has been established that would apply to the permittee's discharge.

## 2. Controls

Each SWPPP shall include a description of all appropriate control measures (i.e., structural and non-structural BMPs) that will be installed and implemented as part of the construction activities and construction support activities to control pollutants in storm water discharges. The SWPPP must clearly describe for each major activity identified in Part IV.D.1.b: a) appropriate control measures and the general timing (or sequence) during the construction process that the measures will be implemented; and b) which permittee is responsible for implementation (e.g., perimeter controls for one portion of the site will be installed by Contractor A after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls will be actively maintained by Contractor B until final stabilization of those portions of the site upward of the perimeter control. Temporary perimeter controls will be removed by Owner after final stabilization).

In a situation where an LDEQ-approved or established TMDL has specified a general WLA applicable to construction storm water discharges, but no specific requirements for construction sites have been identified in the TMDL, the SWPPP must specifically state which BMPs were selected for the site and describe how the design and implementation of the selected BMPs are expected to ensure that storm water discharges from the construction site are in compliance with the approved or established TMDL.

The description and implementation of control measures shall address the following minimum components:

### a. Erosion and Sediment Controls

#### (1) Short and Long Term Goals and Criteria:

- (a) The construction-phase erosion and sediment controls shall be designed to retain sediment on site to the maximum extent practicable.
- (b) All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the permittee must replace or modify the control for site situations in accordance with Parts IV.D.3 and IV.D.4. For additional guidance, see the EPA's recommendations for silt fences (<https://www3.epa.gov/npdes/pubs/siltfences.pdf>) and SWPPPs ([https://www3.epa.gov/npdes/pubs/sw\\_swppp\\_guide.pdf](https://www3.epa.gov/npdes/pubs/sw_swppp_guide.pdf)).
- (c) If sediments escape the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment on the street could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets).

- (d) Sediment must be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%.
  - (e) Trapped sediment must be removed from a silt fence before the deposit reaches 50 percent of the above-ground fence height (or before it reaches a lower height based on manufacturer's specifications).
  - (f) On-site and off-site material storage areas (also including overburden and stockpiles of dirt, borrow areas, etc.) used solely by the permitted project are considered a part of the project and shall be addressed in the SWPPP.
- (2) Effluent limitations reflecting the best practicable technology currently available (BPT) [40 CFR 450.21 (a)]. Design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:
- (a) Control storm water volume and velocity to minimize soil erosion in order to minimize pollutant discharges.
  - (b) Control storm water discharges, including both peak flow rates and total storm water volume to minimize channel and stream bank erosion and scour in the immediate vicinity of discharge points.
  - (c) Minimize amount of soil exposed during construction activity.
  - (d) Unless infeasible, preserve topsoil. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.
  - (e) Minimize the disturbance of steep slopes.
  - (f) Minimize sediment discharge from the site: design, install, and maintain erosion and sediment controls to address factors such as the amount, frequency, intensity and duration of precipitation, the nature of the resulting storm water runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.
  - (g) Provide and maintain natural buffers around Waters of the State, direct storm water to the vegetated areas, and maximize storm water infiltration to reduce pollutant discharges, unless infeasible;
    - i. A buffer zone of sufficient width to reduce pollutant discharges and minimize erosion shall be maintained between disturbed areas and all Waters of the State;
    - ii. For discharges to waters designated as Outstanding Natural Resource Waters, permittees are required to maintain at a minimum a 100-foot natural,

vegetated riparian buffer zone between any disturbance and all edges of the receiving water as means of providing adequate protection to receiving waters, unless infeasible. Additional buffer zone/riparian requirements may be imposed through a Louisiana Department of Wildlife and Fisheries Scenic River permit.

iii. For discharges to waters that are listed as impaired (Category 5 or 4a) on the most recent Integrated Report for sedimentation/siltation or turbidity AND where the suspected source is site clearance (land development or redevelopment), permittees are required to maintain at a minimum a 50-foot natural buffer zone between any disturbance and all edges of the receiving water as means of providing adequate protection to receiving waters, unless infeasible. This requirement does not supersede any additional requirements of a WLA. The most recent Integrated Report can be found at: <https://deq.louisiana.gov/page/579>.

iv. If the buffer zone between any disturbance and the edge of the receiving water on all edges of the water body cannot be maintained due to site constraints, an adequately protective alternate practice may be employed, or a combination of alternative practices with a narrower buffer zone. The SWPPP shall explain any alternate practices and how these practices are adequately protective. Such cases include, but are not limited to, redevelopment in an urban setting or construction of water features, such as: docks, bridges, levees, dams, and dredge and fill areas.

(h) Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted.

(i) When discharging storm water from settling basins or impoundments, utilize outlet structures that withdraw water from the surface of the basin or impoundment, unless infeasible.

### **(3) Stabilization Practices**

The SWPPP must include a description of interim and permanent stabilization practices for the site, including a site-specific scheduling of the implementation of the practices. Site plans shall ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized. Final stabilization practices may include, but are not limited to: establishment of permanent self-sustaining perennial vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Use of impervious surfaces for stabilization should be avoided.

The following records shall be maintained and attached to the SWPPP: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; and the dates when stabilization measures are initiated.

- (a) Deadline to Initiate Stabilization Measures.** Stabilization measures shall be initiated immediately in portions of the site where clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site or temporarily ceased and will not resume for a period exceeding 14 calendar days.

For the purposes of this permit, “immediately” is interpreted to mean no later than the next work day. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 14 days, stabilization measures do not have to be initiated on that portion of site.

For the purposes of this permit, the types of activities that constitute the initiation of stabilization include, but are not limited to:

- i. prepping the soil for vegetative or non-vegetative stabilization;
- ii. applying mulch or other non-vegetative product to the exposed area;
- iii. seeding or planting the exposed area;
- iv. starting any of the activities above in Part IV.D.2.a(3)(a)(i - iii) on a portion of the area to be stabilized, but not on the entire area; and
- v. finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization.

- (b) Deadline to Complete Installation of Stabilization Measures.** As soon as practicable, but no later than 14 calendar days after the initiation of soil stabilization measures, permittees are required to have completed:

- i. For vegetative stabilization, all activities necessary to initially seed or plant the area to be stabilized; and/or
- ii. For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

In extenuating circumstances and per 40 CFR 450.21(b), stabilization must be completed within the time period as follows: in areas experiencing droughts where the completion of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be completed as soon as practicable. These extenuating circumstances must be documented in the SWPPP.

In general, permittees shall be aware that final stabilization often takes time (weeks or even months), especially during times of low rainfall or during the colder months of the year. Permittees must continue routine inspections until they have met the final stabilization requirements of the permit.

- (c) Deadlines for projects that are affected by circumstances beyond the permittee’s control that delay the initiation and/or completion of vegetative stabilization.** If permittees are

unable to meet the deadlines in sections (a) or (b) above due to circumstances beyond their control, and they are using vegetative cover for temporary or permanent stabilization, they may comply with the following stabilization deadlines instead:

- i. Immediately initiate, and within 14 calendar days complete, the installation of temporary **non-vegetative** stabilization measures to prevent erosion;
- ii. Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on the site; and
- iii. Document the circumstances that prevent the previous stabilization measures deadlines required in sections (a) and (b) from being met and the schedule for initiating and completing stabilization that will be followed.

#### **(4) Structural Practices**

The SWPPP must include a description of structural practices to divert flows from exposed soils, retain flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Such practices may include but are not limited to: silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Placement of structural practices in floodplains shall be avoided to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.

- (a)** For common drainage locations that serve an area with 10 or more acres disturbed at one time, a temporary (or permanent) sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained, or equivalent control measures, shall be provided where attainable until final stabilization of the site. The 3,600 cubic feet of storage area per acre drained does not apply to flows from off-site and on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin.

In determining whether installing a sediment basin is attainable, the permittee may consider factors such as site soils, slope, available area on-site, etc. In any event, the permittee must consider public safety, especially relative to children, as a design factor for the sediment basin would preclude a safe design. For drainage locations which serve 10 or more disturbed acres at one time and where a temporary sediment basin or equivalent controls is not attainable, smaller sediment basins and/or sediment traps shall be used. Where neither the sediment basin nor equivalent controls are attainable due to site limitations, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all downslope boundaries of the construction area and for those side slope boundaries deemed appropriate as dictated by individual site conditions. The LDEQ encourages the use of a combination of sediment and erosion control measures in order to achieve maximum pollutant removal.



- (b) For drainage locations serving less than 10 acres, small sediment basins and/or sediment traps shall be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all downslope boundaries (and those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction area unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm or 3,600 cubic feet of storage per acre drained is provided.

**b. Storm Water Management**

A description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed must be included in the SWPPP. Structural measures shall be placed on upland soils to the degree attainable. The installation of these devices may also require a separate permit under Section 404 of the CWA. Permittees are only responsible for the installation and maintenance of storm water management measures until final stabilization is achieved, and are not responsible for maintenance after storm water discharges associated with construction activity have been eliminated from the site. Final stabilization often takes time (weeks or even months), especially during times of low rainfall or during the colder months of the year. Routine inspections must continue until the final stabilization requirements of the permit are met. However, post-construction storm water BMPs that discharge pollutants from point sources once construction is completed may need authorization under a separate LPDES permit.

- (1) Such practices may include, but are not limited to: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on-site; and sequential systems (which combine several practices). The SWPPP shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed pre-development levels.
- (2) Velocity dissipation devices may be needed at discharge locations and along the length of any outfall channel for the purpose of providing a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water).

**c. Other Controls**

- (1) No solid materials, including building materials, shall be discharged to waters of the State, except as authorized by a permit issued under Section 404 of the CWA. "Solid materials" refers to such items as boards, wrapping materials, bricks and concrete debris, and land clearing debris such as leaves and tree limbs, but does not include total suspended solids.
- (2) Off-site vehicle tracking of sediments and the generation of dust shall be minimized.

- (3) The SWPPP shall ensure and demonstrate compliance with applicable state and/or local waste disposal, sanitary sewer or septic system regulations to the extent these are located within the permitted area.
- (4) The SWPPP shall include a narrative description of construction and waste materials expected to be stored on-site, with updates as appropriate. The SWPPP shall also include a description of controls developed to reduce pollutants from these materials, including storage practices to minimize exposure of the materials to storm water runoff and precipitation and spill prevention and response.
- (5) The SWPPP shall include a description of pollutant sources from areas other than construction and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.
- (6) The SWPPP shall include a description of measures necessary to protect endangered and/or threatened species and their critical habitat, and historic sites listed and/or proposed to be listed on national and state registries that are imposed under the eligibility requirements of Parts I.A.4.e and I.A. 4.f and Addenda A and B of this permit. Failure to describe and implement such measures will result in the storm water discharges from the construction activities being ineligible for coverage under this permit.
- (7) The SWPPP shall identify appropriate controls and measures to minimize discharges from the support activity areas.
- (8) Effective pollution prevention measures must be designed, installed, implemented, and maintained to minimize:
  - i. Discharges of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Prior to discharge wash waters must be treated in a sediment basin or an alternative control that provides equivalent or better treatment;
  - ii. Exposure of building materials and products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to storm water and to precipitation. Minimization of exposure is not required in cases where the exposure to precipitation and to storm water will not result in a discharge of pollutants or where exposure of a specific material or product poses little risk of storm water contamination (such as final products and materials intended for outdoor use);
  - iii. Discharges of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures; and
  - iv. Pollutant discharges from the support activity areas located on and off the construction site to the maximum extent practicable and comply with all permit conditions.

**d. Approved State or Local Plans**

- (1) Permittees which discharge storm water associated with construction activities must include in their SWPPP the procedures and requirements which are specified in applicable sediment and erosion site plans or site permits or storm water management site plans or site permits approved by State or local officials.
- (2) Permittees which discharge storm water associated with construction activities must include in their SWPPP any measures that result from agreements from the LSHPO or tribal historic preservation offices.
- (3) SWPPPs must be updated as necessary to reflect any changes which are applicable to protecting surface water resources in the sediment and erosion site plans or site permits, or storm water management site plans or site permits approved by State, or local officials for which the permittee receives written notice.

**3. Maintenance**

A description of procedures to ensure the timely maintenance of vegetation, erosion and sediment control measures, and other protective measures identified in the site plan are in good and effective operating condition must be provided. Maintenance needs identified in inspections or by other means shall be accomplished before the next anticipated storm event or as necessary to maintain the continued effectiveness of storm water controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable. Employees and subcontractors as necessary shall be made aware of the applicable control measures implemented at the site so that they follow applicable procedures.

**4. Inspections**

Except for linear or remote projects as discussed below, qualified personnel (provided by the permittee or cooperatively by multiple permittees) shall inspect the construction site in accordance with one of the two schedules listed below. Areas to be inspected include disturbed areas that have not been finally stabilized; areas used for storage of materials that are exposed to precipitation and storm water runoff; structural and non-structural control measures; and locations where vehicles enter or exit the site. It must be specified in the SWPPP which schedule will be followed, and the schedule must be adhered to throughout the term of the permit.

- At least once every 7 calendar days, or
- At least once every 14 calendar days, before anticipated storm events (or series of storm events such as intermittent showers over one or more days) and within 24 hours of the end of a storm event of 0.5 inches or greater.

Employees and subcontractors, as necessary, shall be made aware of the applicable control measures implemented at the site so that they follow applicable procedures.

Because linear or remote, unmanned projects often cannot be inspected from stabilized locations without damage to BMPs or re-vegetation efforts, these operators have the option of either 1) conducting regular visual inspections every 14 days, or 2) performing visual inspections within 24 hours following a storm event of 0.5 inches or greater. The option selected by the operator must be identified in the SWPPP and must be adhered to throughout the term of permit coverage.

- a.** Disturbed areas and areas used for storage of materials that are exposed to precipitation and storm water runoff shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. All storm water control measures identified in the SWPPP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in meeting water quality standards and preventing significant impacts to the receiving waters. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking.
- b.** Based on the results of the inspection, the site description identified in the plan in accordance with Part IV.D.1 of this permit and control measures and pollution prevention measures identified in the plan in accordance with Part IV.D.2 of this permit shall be revised as appropriate, but in no case later than seven calendar days following the inspection. Such modifications shall provide for timely implementation of any changes to the plan within seven calendar days following the inspection.
- c.** For each inspection required above, an inspection report must be completed and, which, at a minimum, must include:

  1. The inspection date;
  2. Names, titles, and qualifications of personnel making the inspection;
  3. Weather information for the period since the last inspection (or since commencement of construction activity if the first inspection), including a best estimate of each storm event's beginning, duration, and approximate amount of rainfall (in inches), and whether any discharges occurred;
  4. Weather information and a description of any discharges occurring at the time of the inspection;
  5. Location(s) of discharges of sediment or other pollutants from the site;
  6. Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location;
  7. Location(s) of BMPs that need to be maintained;
  8. Location(s) where additional BMPs are needed that did not exist at the time of inspection; and
  9. Corrective action required including implementation dates.

The inspection report which includes the information listed in items 1-9 above and all actions taken in accordance with Part IV.D.4.b of the permit shall be made within 7 calendar days and retained as part of the SWPPP for at least three years from the date that

the site is finally stabilized. Such reports shall identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the site is in compliance with the SWPPP and this permit. The report shall be signed in accordance with Part VI.D.10 of this permit.

## **5. Non-Storm Water Discharges**

Except for flows from fire-fighting activities, sources of non-storm water listed in Parts I.A.2 and III.A.2 and 3 of this permit that are combined with storm water discharges associated with construction activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures to reduce and/ or eliminate the non-storm water component(s) of the discharge.

## **E. Contractor and Subcontractor Responsibilities**

Permittees must either implement their portion of a common SWPPP or develop and implement their own SWPPP. In instances where there is more than one SWPPP for a site, cooperation between the permittees is encouraged to ensure the storm water discharge control measures are consistent with one another (e.g., provisions to protect endangered and/or threatened species and their critical habitat, and historic sites listed and/or proposed to be listed on national and state registries). Permittees must ensure either directly or through coordination with other permittees, that their activities do not render another party's pollutant discharge controls ineffective.

- 1. Contractors and Subcontractors Implementing Storm Water Control Measures.** The SWPPP must clearly identify for each control measure included in the plan, the party that will implement the measure. The permittee(s) shall ensure that all contractors and subcontractors are identified in the plan as being responsible for implementing storm water control measures.
- 2. Contractors and Subcontractors Impacting Storm Water Control Measures.** The permittee shall ensure that the contractor(s) and the subcontractor(s) who will conduct activities which might impact the effectiveness of control measures but who do not meet the definition of "operator" are identified in the plan and which control measures might be impacted.
- 3. Utility Companies.** The SWPPP must clearly identify, for each control measure identified in the plan relating to the installation of utility service, the party that will implement the measure.

## **F. Wash Water from Concrete Trucks**

- 1. Concrete wash water from rinsing the chute.** Wash water generated during the rinsing of the chute of a concrete truck at a construction site may be rinsed if managed by an appropriate control structure, such as into a trap on the ground at the construction site. This activity usually generates a *de minimis* quantity of wash water that can be easily managed at the construction site. The rinsing activity must be done in such a manner that there is no runoff of rinse water from the construction site (unless managed by an appropriate control), especially into surface drainage, storm sewers, or surface waters.

Contractors may follow the EPA guidance ([https://www.epa.gov/sites/default/files/2015-11/documents/concretewashout\\_0.pdf](https://www.epa.gov/sites/default/files/2015-11/documents/concretewashout_0.pdf)) for rinsing out the chute of a concrete mixer and hoppers of concrete pumps at a construction site, provided they understand that the wash out structure is temporary and must be cleaned out and removed from the site when the construction project is completed. If a contractor follows the EPA guidance for rinsing out the chute of a concrete mixer and hoppers of concrete pumps at a construction site, he must contact the LDEQ Solid Waste Permits Section to determine if additional environmental protection regulations govern the containment and storage of the wash out material at the construction site.

2. **Concrete wash out from the drum. The permit does not authorize the discharge of drum wash out water at a construction site.** More wash water is generated during the wash out of the drum of a concrete truck than is generated during the rinsing of the chute. The drum of a concrete truck shall be washed out at a ready mix concrete plant that is permitted to discharge the wash water.

## **PART V. RETENTION OF RECORDS**

### **A. Documents**

The permittee shall retain copies of SWPPPs and all records and reports required by this permit, and records of all data used to complete the NOI to be covered by this permit, for a period of at least three years from the date that the site is finally stabilized. This period may be extended by request of the LDEQ at any time.

### **B. Accessibility**

The permittee shall retain a copy of the SWPPP required by this permit (including a copy of the permit language) at the construction site (or other local site accessible to the LDEQ and the public) from the date of project initiation to the date of final stabilization. The permittees with day-to-day operational control over SWPPP implementation shall have a copy of the plan available at a central location on-site for the use of all operators and those identified as having responsibilities under the plan whenever they are on the construction site. A copy of the plan must be readily available to inspectors during normal business hours.

### **C. Addresses**

All written correspondence concerning discharges in Louisiana from any site covered under this permit, including the submittal of individual permit applications, shall be identified by agency interest number and/or permit number, if one is assigned, and sent to the address below.

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, LA 70821-4313  
Attn: Water Permits Division

## **Part VI. STANDARD PERMIT CONDITIONS**

### SECTION A. GENERAL CONDITIONS

#### 1. Introduction

In accordance with the provisions of LAC 33:IX.2701, et seq., this permit incorporates either expressly or by reference ALL conditions and requirements applicable to the Louisiana Pollutant Discharge Elimination System Permits (LPDES) set forth in the Louisiana Environmental Quality Act (LEQA), as amended, as well as ALL applicable regulations.

#### 2. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Louisiana Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

#### 3. Penalties for Violation of Permit Conditions

- a. R.S. 30:2025 provides for civil penalties for violations of these regulations and the Louisiana Environmental Quality Act. R.S. 30:2076.2 provides for criminal penalties for violation of any provisions of the LPDES or any order or any permit condition or limitation issued under or implementing any provisions of the LPDES program. (See Section E. Penalties for Violation of Permit Conditions for additional details.)
- b. Any person may be assessed an administrative penalty by the state administrative authority under R.S. 30:2025 for violating a permit condition or limitation implementing any of the requirements of the LPDES program in a permit issued under the regulations or the Louisiana Environmental Quality Act.

#### 4. Toxic Pollutants

- a. Other effluent limitations and standards under Sections 301, 302, 303, 307, 318, and 405 of the Clean Water Act. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant, and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, the state administrative authority shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.
- b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions, or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.



5. Duty to Reapply

- a. Individual Permits. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The new application shall be submitted at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the state administrative authority. (The state administrative authority shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) Continuation of expiring permits shall be governed by regulations promulgated at LAC 33:IX.2321 and any subsequent amendments.
- b. General Permits. General permits expire five years after the effective date. The 180-day reapplication period as defined above is not applicable to general permit authorizations. Reissued general permits may provide automatic coverage for permittees authorized under the previous version of the permit, and no new application is required. Requirements for obtaining authorization under the reissued general permit will be outlined in Part I of the new permit. Permittees authorized to discharge under an expiring general permit should follow the requirements for obtaining coverage under the new general permit to maintain discharge authorization.

6. Permit Action

This permit may be modified, revoked and reissued, or terminated for cause in accordance with LAC 33:IX.2903, 2905, 2907, 3105, and 6509. The causes may include, but are not limited to, the following:

- a. Noncompliance by the permittee with any condition of the permit;
- b. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time; or
- c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;
- d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge;
- e. Failure to pay applicable fees under the provisions of LAC 33:IX.Chapter 13; or
- f. Change of ownership or operational control.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to private or public property, nor any infringement of federal, state, or local laws or regulations.

8. Duty to Provide Information

The permittee shall furnish to the state administrative authority, within a reasonable time, any information which the state administrative authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the state administrative authority, upon request, copies of records required to be kept by this permit.

9. Criminal and Civil Liability

Except as provided in permit conditions on "Bypassing" and "Upsets," nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit may subject the permittee to criminal enforcement pursuant to R.S. 30:2025.

10. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

11. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

12. Severability

If any provision of these rules and regulations, or the application thereof, is held to be invalid, the remaining provisions of these rules and regulations shall not be affected, so long as they can be given effect without the invalid provision. To this end, the provisions of these rules and regulations are declared to be severable.

13. Dilution

A permittee shall not achieve any effluent concentration by dilution unless specifically authorized in the permit. A permittee shall not increase the use of process water or cooling water or otherwise attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve permit limitations or water quality.

14. Facilities Requiring Approval from Other State Agencies

In accordance with R.S. 40:4(A)(6) the plans and specifications of all sewerage works, both public and private, must be approved by the Louisiana Department of Health state health officer or his designee. It is unlawful for any person, firm, or corporation, both municipal and private, to operate

a sanitary sewage treatment facility without proper authorization from the state health officer.

In accordance with R.S. 40:1281.9, it is unlawful for any person, firm or corporation, both municipal and private, operating a sewerage system to operate that system unless the competency of the operator is duly certified by the Louisiana Department of Health state health officer. Furthermore, it is unlawful for any person to perform the duties of an operator without being duly certified.

In accordance with R.S. 48.385, it is unlawful for any industrial wastes, sewage, septic tanks effluent, or any noxious or harmful matter, solid, liquid, or gaseous to be discharged into the side or cross ditches or placed upon the rights-of-ways of state highways without the prior written consent of the Department of Transportation and Development chief engineer or his duly authorized representative and of the secretary of the Louisiana Department of Health.

15. The standards provided in Chapter 11 – Surface Water Quality Standards are official regulations of the state, and any person who discharges pollutants to the waters of the state in such quantities as to cause these standards to be violated shall be subject to the enforcement procedures of the state as specified in R.S. 30:2025.
16. The General Criteria, as listed in LAC 33:IX.1113.B, including criteria for floating, suspended, and settleable solids, aesthetics, color, taste and odor, toxic substances, oil and grease, foaming or frothing materials, nutrients, turbidity, flow, radioactive materials, and biological and aquatic community integrity shall apply at all times to the surface waters of the state, including wetlands, whether they are identified in the standards or not (except where specifically exempted elsewhere in the standards). These general criteria specifically apply to human activities and not to naturally occurring conditions.

#### SECTION B. PROPER OPERATION AND MAINTENANCE

##### 1. Need to Halt or Reduce not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

##### 2. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

##### 3. Proper Operation and Maintenance

- a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance

also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

- b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance, and other functions necessary to ensure compliance with the conditions of this permit.

#### 4. Bypass of Treatment Facilities

- a. Bypass. The intentional diversion of waste streams from any portion of a treatment facility.
- b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section B.4.c. and 4.d of these standard conditions.
- c. Notice
  - (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Office of Environmental Services, Water Permits Division, if possible at least 10 days before the date of the bypass.
  - (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in LAC 33:IX.2701.L.6 (24-hour notice) and Section D.6.e of these standard conditions.
- d. Prohibition of bypass
  - (1) Bypass is prohibited, and the state administrative authority may take enforcement action against a permittee for bypass, unless:
    - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    - (c) The permittee submitted notices as required by Section B.4.c of these standard conditions.
  - (2) The state administrative authority may approve an anticipated bypass after considering its adverse effects, if the state administrative authority determines that it will meet the three conditions listed in Section B.4.d(1) of these standard conditions.

5. Upset Conditions

- a. Upset. An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Section B.5.c are met. No determination made during administrative review of claims that noncompliance was caused by an upset, and before an action for noncompliance, constitutes final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
  - (2) The permitted facility was at the time being properly operated;
  - (3) The permittee submitted notice of the upset as required by LAC 33:IX.2701.L.6.b.ii and Section D.6.e(2) of these standard conditions; and
  - (4) The permittee complied with any remedial measures required by Section B.2 of these standard conditions.
- d. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. Removed Substances

Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be properly disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the state and in accordance with environmental regulations.

7. Percent Removal

For Publicly Owned Treatment Works, the 30-day average percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent in accordance with LAC 33:IX.5905.A.3 and B.3. Publicly owned treatment works utilizing waste stabilization ponds/oxidation ponds are not subject to the 85 percent removal rate for Total Suspended Solids.

SECTION C. MONITORING AND RECORDS

1. Inspection and Entry

The permittee shall allow the state administrative authority or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the

presentation of credentials and other documents as may be required by the law to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

Enter upon the permittee's premises where a discharge source is or might be located or in which monitoring equipment or records required by a permit are kept for inspection or sampling purposes. Most inspections will be unannounced and should be allowed to begin immediately, but in no case shall begin more than 30 minutes after the time the inspector presents his/her credentials and announces the purpose(s) of the inspection. Delay in excess of 30 minutes shall constitute a violation of this permit. However, additional time can be granted if the inspector or the administrative authority determines that the circumstances warrant such action;

- b. Have access to and copy, at reasonable times, any records that the department or its authorized representative determines are necessary for the enforcement of this permit. For records maintained in either a central or private office that is open only during normal office hours and is closed at the time of inspection, the records shall be made available as soon as the office is open, but in no case later than the close of business the next working day;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Louisiana Environmental Quality Act, any substances or parameters at any location.
- e. Sample Collection

- (1) When the inspector announces that samples will be collected, the permittee may be given an additional 30 minutes to prepare containers in order to collect duplicates. If the permittee cannot obtain and prepare sample containers within this time, he is considered to have waived his right to collect duplicate samples and the sampling will proceed immediately. Further delay on the part of the permittee in allowing initiation of the sampling will constitute a violation of this permit.

- (2) At the discretion of the administrative authority, sample collection shall proceed immediately (without the additional 30 minutes described in Section C.1.a above), and the inspector shall supply the permittee with a duplicate sample.

- f. It shall be the responsibility of the permittee to ensure that a facility representative familiar with provisions of its wastewater discharge permit, including any other conditions or limitations, be available either by phone or in person at the facility during all hours of operation. The absence of such personnel on-site who are familiar with the permit shall not be grounds for delaying the initiation of an inspection except in situations as described in Section C.1.b of these standard conditions. The permittee shall be responsible for providing witnesses/escorts during inspections. Inspectors shall abide by all company safety rules and shall be equipped with standard safety equipment (hard hat, safety shoes, safety glasses) normally required by industrial facilities.

- g. Upon written request, copies of field notes, drawings, etc., taken by department personnel during an inspection shall be provided to the permittee after the final inspection report has been completed.

2. Representative Sampling

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All samples shall be taken at the outfall location(s) indicated in the permit. The state administrative authority shall be notified prior to any changes in the outfall location(s). Any changes in the outfall location(s) may be subject to modification, revocation, and reissuance in accordance with LAC 33:IX.2903.

3. Retention of Records

Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer, as required by 40 CFR 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the state administrative authority at any time.

4. Record Contents

Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The time(s) analyses were begun;
- e. The individual(s) who performed the analyses;
- f. The analytical techniques or methods used;
- g. The results of such analyses; and
- h. The results of all quality control procedures.

5. Monitoring Procedures

- a. Measurements and analyses must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in this permit.
- b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to ensure accuracy of measurements and shall maintain appropriate records of such activities.
- c. The permittee or designated laboratory shall have an adequate analytical quality assurance/quality control program to produce defensible data of known precision and accuracy.

All quality control measures shall be assessed and evaluated on an ongoing basis, and quality control acceptance criteria shall be used to determine the validity of the data. All method-specific quality controls as prescribed in the method shall be followed. If quality control requirements are not included in the method, the permittee or designated laboratory shall follow the quality control requirements as prescribed in the Approved Edition (40 CFR Part 136) *Standard Methods for the Examination of Water and Wastewater*, Sections 1020A and 1020B. General sampling protocol shall follow guidelines established in the *Handbook for Sampling and Sample Preservation of Water and Wastewater*, 1982 U.S. Environmental Protection Agency. This publication is available from the National Service Center for Environmental Publications

<https://nepis.epa.gov/Exe/ZyNET.exe/30000QSA.TXT?ZyActionD=ZyDocument&Client=EPA&Index=1981+Thru+1985&Docs=&Query=&Time=&EndTime=&SearchMethod=1&To cRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&Int QFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C81thru85%5CTxt%5C00000001%5C30000QSA.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL>

## 6. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10 percent from true discharge rates throughout the range of expected discharge volumes and shall be calibrated by a qualified source at least once a year to ensure their accuracy. A qualified source is a person that has received formal training and/or has practical field experience in the calibration of the flow measurement device used at the facility. Guidance in selection, installation, calibration, and operation of acceptable flow measurement devices can be obtained from the following references:

- a. *A Guide to Methods and Standards for the Measurement of Water Flow*, 1975, U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, telephone number (800) 553-6847. Order by NTIS publication number COM-75-10683.

<https://www.govinfo.gov/content/pkg/GOVPUB-C13-a301a5f6bf6ec378b4fabc9c626c03e2/pdf/GOVPUB-C13-a301a5f6bf6ec378b4fabc9c626c03e2.pdf>

- b. *Flow Measurement in Open Channels and Closed Conduits*, Volumes 1 and 2 U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Service (NTIS), Springfield, VA, 22161, telephone number (800) 553-6847. Order by NTIS publication number PB-273 535.

Volume 1:

<https://www.govinfo.gov/content/pkg/GOVPUB-C13-c0f8a094b9fcc5c32be685edbd48f942/pdf/GOVPUB-C13-c0f8a094b9fcc5c32be685edbd48f942.pdf>



Volume 2:

<https://www.govinfo.gov/content/pkg/GOVPUB-C13-b3daf36f1cc0f770bc04d66da5cdc937/pdf/GOVPUB-C13-b3daf36f1cc0f770bc04d66da5cdc937.pdf>

- c. *NPDES Compliance Flow Measurement Manual*, U.S. Environmental Protection Agency, Office of Water Enforcement. This publication is available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, telephone number (800) 553-6847. Order by NTIS publication number PB-82-131178.

<https://nepis.epa.gov/Exe/ZyNET.exe/9101TZLK.TXT?ZyActionD=ZyDocument&Client=EPA&Index=1981+Thru+1985&Docs=&Query=&Time=&EndTime=&SearchMethod=1&To cRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&Int QFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C81thru85%5CTxt%5C00000026%5C9101TZLK.txt&User=ANONYMOUS&Password=a nonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality =r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL &Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPa ge=x&ZyPURL>

7. Prohibition for Tampering: Penalties

- a. R.S. 30:2025 provides for punishment of any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit.
- b. R.S. 30:2076.2 provides for penalties for any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance.

8. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 (see LAC 33:IX.4901), or in the case of sludge use and disposal, approved under 40 CFR Part 136 (see LAC 33:IX.4901) unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the state administrative authority.

9. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the state administrative authority in the permit.

10. Laboratory Accreditation

- a. LAC 33:I.Subpart 3, Chapters 45–59 provide requirements for an accreditation program specifically applicable to commercial laboratories, wherever located, that provide chemical

analyses, analytical results, or other test data to the department, by contract or by agreement, and the data is:

- (1) Submitted on behalf of any facility, as defined in R.S. 30:2004;
  - (2) Required as part of any permit application;
  - (3) Required by order of the department;
  - (4) Required to be included on any monitoring reports submitted to the department;
  - (5) Required to be submitted by contractor; and/or
  - (6) Otherwise required by department regulations.
- b. The department laboratory accreditation program, Louisiana Environmental Laboratory Accreditation Program (LELAP) is designed to ensure the accuracy, precision, and reliability of the data generated, as well as the use of department-approved methodologies in generation of that data. Laboratory data generated by commercial environmental laboratories that are not LELAP-accredited will not be accepted by the department. Retesting of analysis by an accredited commercial laboratory will be required.

Where retesting of effluent is not possible (for example, data reported on DMRs for prior month's sampling), the data generated will be considered invalid and in violation of the LPDES permit.

- c. Regulations on the Louisiana Environmental Laboratory Accreditation Program and a list of labs that have applied for accreditation are available on the department's website located under LDEQ → About LDEQ → Public Participation and Permit Support → LA Lab Accreditation at the following link: <http://deq.louisiana.gov/page/la-lab-accreditation>.

Questions concerning the program may be directed to (225) 219-3247.

#### SECTION D. REPORTING REQUIREMENTS

##### 1. Facility Changes

The permittee shall give notice to the state administrative authority as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit nor to notification requirements under LAC 33:IX.2703.A.1.
- c. For Municipal Permits. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Section 301 or 306 of the CWA if it were directly discharging those pollutants, and any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.

2. Anticipated Noncompliance

The permittee shall give advance notice to the state administrative authority of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

This permit is not transferable to any person except after notice to the state administrative authority. The state administrative authority may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act or the Louisiana Environmental Quality Act. (See LAC 33:IX.2901; in some cases, modification or revocation and reissuance is mandatory.)

A permit may be transferred by the permittee to a new owner or operator only if: (1) the permit has been modified or revoked and reissued (under LAC 33:IX.2903.A.2.b) by the permittee and new owner submitting a Name/Ownership/Operator Change Form (NOC-1 Form) and approved by LDEQ (LAC 33:I.Chapter 19); or (2) a minor modification made (under LAC 33:IX.2905) to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act and the Louisiana Environmental Quality Act.

The NOC-1 form can be found using the pathway LDEQ → Water → LPDES Application Forms at the following link: <http://deq.louisiana.gov/page/lpdes-water-permits>

4. Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be submitted through a department-approved electronic document receiving system (NetDMR) in accordance with LAC 33:I.Chapter 21 unless the state administrative authority gives written authorization to the permittee to submit monitoring results in an alternative format such as paper DMRs.

Information about NetDMR and gaining access can be viewed using the pathway LDEQ → Water → Enforcement → NETDMR on the department's website at: <http://deq.louisiana.gov/page/netdmr>.

The permittee shall submit properly completed Discharge Monitoring Reports (DMRs) using the format specified in the permit.

If authorized to report using an alternative format such as paper DMRs, then preprinted DMRs will be provided to majors and other designated facilities. Please contact the Permit Compliance Unit (PCU) concerning preprints. Self-generated DMRs must be pre-approved by the PCU prior to submittal. Self-generated DMRs are approved on an individual basis. Requests for approval of self-generated DMRs should be submitted to the following address:

Supervisor, Permit Compliance Unit  
Office of Environmental Compliance  
Post Office Box 4312  
Baton Rouge, LA 70821-4312

5. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

6. Requirements for Notification

a. Emergency Notification

As required by LAC 33:I.3915, in the event of an unauthorized discharge that causes an emergency condition, the discharger shall notify the hotline [Department of Public Safety (DPS) 24-hour Louisiana Emergency Hazardous Materials Hotline] by telephone at (225) 925-6595 (collect calls accepted 24 hours a day) immediately (a reasonable period of time after taking prompt measures to determine the nature, quantity, and potential off-site impact of a release, considering the exigency of the circumstances), but in no case later than one hour after learning of the discharge. (An emergency condition is any condition which could reasonably be expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property.) Notification required by this section will be made regardless of the amount of discharge. Prompt Notification Procedures are listed in Section D.6.c of these standard conditions.

A written report shall be provided within seven calendar days after the notification. The report shall contain the information listed in Section D.6.d of these standard conditions and any additional information in LAC 33:I.3925.B.

b. Prompt Notification

As required by LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Chapter 39.Subchapter E, but does not cause an emergency condition, the discharger shall promptly notify DPS by telephone at (225) 925-6595 (collect calls accepted 24 hours a day) within 24 hours after learning of the discharge.

In the event of an unauthorized discharge that requires notification, the DPS 24-hour Louisiana Emergency Hazardous Materials Hotline will notify the Department of Environmental Quality.

In accordance with LAC 33:I.3923, notifications not required by LAC 33:I.3915 or 3917 shall be provided to the department within a time frame not to exceed 24 hours, or as specified by the specific regulation or permit provision requiring the notification, and shall be given to Single Point of Contact (SPOC), as follows:

- (1) by the Online Incident Reporting screens found at <http://deq.louisiana.gov/page/file-a-complaint-report-an-incident>; or

- (2) by e-mail utilizing the Incident Report Form and instructions found at <https://www.deq.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=single-point-of-contact>; or
- (3) by telephone at (225) 219-3640 during office hours, or (225) 342-1234 after hours and on weekends and holidays.

c. Content of Prompt Notifications

The following guidelines will be utilized as appropriate, based on the conditions and circumstances surrounding any unauthorized discharge, to provide relevant information regarding the nature of the discharge:

- (1) the name of the person making the notification and the telephone number where any return calls from response agencies can be placed;
- (2) the name and location of the facility or site where the unauthorized discharge is imminent or has occurred, using common landmarks. In the event of an incident involving transport, include the name and address of the transporter and generator;
- (3) the date and time the incident began and ended, or the estimated time of continuation if the discharge is continuing;
- (4) the extent of any injuries and identification of any known personnel hazards that response agencies may face;
- (5) the common or scientific chemical name, the U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all discharged pollutants; and
- (6) a brief description of the incident sufficient to allow response agencies to formulate their level and extent of response activity.

d. Written Notification Procedures

Written reports for any unauthorized discharge that requires notification under Section D.6.a or b, shall be submitted by the discharger to the Office of Environmental Compliance, Emergency and Radiological Services Division - SPOC in accordance with LAC 33:I.3925 within seven calendar days after the notification required by D.6.a or 6.b, unless otherwise provided for in a valid permit or other department regulation. Written notification reports shall include, but not be limited to, the following information:

- (1) the name, address, telephone number, Agency Interest (AI) number (number assigned by the department) if applicable, and any other applicable identification numbers of the person, company, or other party who is filing the written report, and specific identification that the report is the written follow-up report required by this section;
- (2) the time and date of prompt notification, the state official contacted when reporting, the name of person making that notification, identification of the site or facility, vessel, transport vehicle, or storage area from which the unauthorized discharge occurred, and the location where the incident occurred;

- (3) date(s), time(s), and duration of the unauthorized discharge and, if not corrected, the anticipated time it is expected to continue;
- (4) details of the circumstances (unauthorized discharge description and root cause) and events leading to any unauthorized discharge, including incidents of loss of sources of radiation, and if the release point is subject to a permit:
  - (a) the current permitted limit for the pollutant(s) released and
  - (b) the permitted release point/outfall ID;
- (5) the common or scientific chemical name of each specific pollutant that was released as the result of an unauthorized discharge, including the CAS number and U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all released pollutants (total amount of each compound expressed in pounds, including calculations);
- (6) a statement of the actual or probable fate or disposition of the pollutant or source of radiation and what off-site impact resulted; and
- (7) remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants or sources of radiation.

Written notification reports shall be submitted to the Office of Environmental Compliance, SPOC by mail or e-mail. The transmittal envelope and report or e-mail subject line and report should be clearly marked **“UNAUTHORIZED DISCHARGE NOTIFICATION REPORT.”**

Written reports (LAC 33:I.3925) should be mailed to:

Louisiana Department of Environmental Quality  
Post Office Box 4312  
Baton Rouge, LA 70821-4312  
ATTENTION: OFFICE OF ENVIRONMENTAL COMPLIANCE – SPOC  
"UNAUTHORIZED DISCHARGE NOTIFICATION REPORT"

The Written Notification Report may be e-mailed to the Louisiana Department of Environmental Quality, Office of Environmental Compliance, Single Point of Contact at: [writtennotificationLDEQ@la.gov](mailto:writtennotificationLDEQ@la.gov).

Please see LAC 33:I.3925.B for additional written notification procedures.

e. Twenty-four Hour Reporting

The permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been

corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The following shall be included as information which must be reported within 24 hours:

- (1) Any unanticipated bypass which exceeds any effluent limitation in the permit (see LAC 33:IX.2701.M.3.b);
- (2) Any upset which exceeds any effluent limitation in the permit; and/or
- (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the state administrative authority in Part II of the permit to be reported within 24 hours (LAC 33:IX.2707.G).

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Section D.4, 5, and 6, at the time monitoring reports are submitted. The reports shall contain the information listed in Section D.6.e.

8. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the state administrative authority, it shall promptly submit such facts or information.

9. Discharges of Toxic Substances

In addition to the reporting requirements under Section D.1–8, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Office of Environmental Services, Water Permits Division as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant:
  - (1) listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
    - (a) One hundred micrograms per liter (100 µg/L);
    - (b) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
    - (c) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC 33:IX.2501.G.7; or
    - (d) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or
  - (2) which exceeds the reportable quantity levels for pollutants at LAC 33:I.Chapter 39.Subchapter E.

- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant:
  - (1) listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
    - (a) Five hundred micrograms per liter (500 µg/L);
    - (b) One milligram per liter (1 mg/L) for antimony;
    - (c) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC 33:IX.2501.G.7; or
    - (d) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or
  - (2) which exceeds the reportable quantity levels for pollutants at LAC 33:I.Chapter 39.Subchapter E.

#### 10. Signatory Requirements

All applications, reports, or information submitted to the state administrative authority shall be signed and certified.

- a. All permit applications shall be signed as follows:
  - (1) For a corporation—by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
    - (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,
    - (b) The manager of one or more manufacturing, production, or operating facilities, provided: the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and the authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

**NOTE:** The department does not require specific assignments or delegations of authority to responsible corporate officers identified in Section D.10.a(1)(a). The agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the state administrative authority to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under Section D.10.a(1)(b) rather than to specific



individuals.

- (2) For a partnership or sole proprietorship—by a general partner or the proprietor, respectively; or
  - (3) For a municipality, state, federal, or other public agency—by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes:
    - (a) The chief executive officer of the agency, or
    - (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (for example, Regional Administrators of EPA).
- b. All reports required by permits and other information requested by the state administrative authority shall be signed by a person described in Section D.10.a, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described in Section D.10.a of these standard conditions;
  - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (a duly authorized representative may thus be either a named individual or an individual occupying a named position); and
  - (3) The written authorization is submitted to the state administrative authority.
- c. Changes to authorization. If an authorization under Section D.10.b is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section D.10.b must be submitted to the state administrative authority prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. Certification. Any person signing a document under Section D.10.a or b above, shall make the following certification:
- "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

## 11. Availability of Reports

All recorded information (completed permit application forms, fact sheets, draft permits, or any

public document) not classified as confidential information under R.S. 30:2030(A) and 30:2074(D) and designated as such in accordance with these regulations (LAC 33:IX.2323 and LAC 33:IX.6503) shall be made available to the public for inspection and copying during normal working hours in accordance with the Public Records Act, R.S. 44:1 et seq.

Claims of confidentiality for the following will be denied:

- a. The name and address of any permit applicant or permittee; or
- b. Permit applications, permits, and effluent data.

Information required by LPDES application forms provided by the state administrative authority under LAC 33:IX.2501 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

## SECTION E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS

### 1. Criminal

#### a. Negligent Violations

R.S. 30:2076.2 provides that any person who negligently violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any such provision in a permit issued under the LPDES by the secretary, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than \$50,000 per day of violation, or imprisonment of not more than two years, or both.

#### b. Knowing Violations

R.S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any permit condition or limitation implementing any such provisions in a permit issued under the LPDES, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or imprisonment for not more than three years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than \$100,000 per day of violation, or imprisonment of not more than six years, or both.

#### c. Knowing Endangerment

R.S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any of such provisions in a permit issued under the LPDES by the secretary, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this Paragraph, be subject to a fine of not more than one million dollars. If a conviction of a person is for a violation committed after a first conviction

of such person under this Paragraph, the maximum punishment shall be doubled with respect to both fine and imprisonment.

d. False Statements

R.S. 30:2076.2 provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the LPDES or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under the LPDES, shall, upon conviction, be subject to a fine of not more than \$10,000, or imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this Subsection, he shall be subject to a fine of not more than \$20,000 per day of violation, or imprisonment of not more than four years, or both.

2. Civil Penalties

R.S. 30:2025 provides that any person found to be in violation of any requirement of this Subtitle may be liable for a civil penalty, to be assessed by the secretary, an assistant secretary, or the court, of not more than the cost to the state of any response action made necessary by such violation which is not voluntarily paid by the violator, and a penalty of not more than \$32,500 for each day of violation. However, when any such violation is done intentionally, willfully, or knowingly, or results in a discharge or disposal which causes irreparable or severe damage to the environment or if the substance discharged is one which endangers human life or health, such person may be liable for an additional penalty of not more than one million dollars.

**(PLEASE NOTE:** These penalties are listed in their entirety in Subtitle II of Title 30 of the Louisiana Revised Statutes.)

SECTION F. DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

1. Clean Water Act (CWA) means the Public Law 92-500 as amended by Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et seq. The CWA was formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972.
2. Accreditation means the formal recognition by the department of a laboratory's competence wherein specific tests or types of tests can be accurately and successfully performed in compliance with all minimum requirements set forth in the regulations regarding laboratory accreditation.
3. Administrator means the Administrator of the U.S. Environmental Protection Agency, or an authorized representative.
4. Applicable Standards and Limitations means all state, interstate and federal standards and limitations to which a discharge is subject under the Clean Water Act, including effluent limitations, water quality standards of performance, toxic effluent standards or prohibitions, best

management practices, and pretreatment standards under Sections 301, 302, 303, 304, 306, 307, 308, and 403.

5. Applicable water quality standards means all water quality standards to which a discharge is subject under the Clean Water Act.
6. Commercial Laboratory means any laboratory, wherever located, that performs analyses or tests for third parties for a fee or other compensation and provides chemical analyses, analytical results, or other test data to the department. The term commercial laboratory does not include laboratories accredited by the Louisiana Department of Health in accordance with R.S. 49:1001 et seq.
7. Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day. Daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample.
8. Daily Maximum discharge limitation means the highest allowable "daily discharge."
9. Director means the U.S. Environmental Protection Agency Regional Administrator, or the state administrative authority, or an authorized representative.
10. Domestic septage means either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from grease trap at a restaurant.
11. Domestic sewage means waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.
12. Environmental Protection Agency (or EPA) means the U.S. Environmental Protection Agency.
13. Grab sample means an individual sample collected over a period of time not exceeding 15 minutes, unless more time is needed to collect an adequate sample, and is representative of the discharge.
14. Industrial user means a nondomestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.
15. LEQA means the Louisiana Environmental Quality Act.
16. Loading is presented in the permit and reported in the DMR as the total amount of a pollutant entering the facility or discharged in the effluent. It is calculated by knowing the amount of flow, the concentration, and the density of water. Results should be rounded off and expressed with the same number of significant figures as the permit limit. If the permit does not explicitly state how many significant figures are associated with the permit limit, the permittee shall use two.

Loading (lbs/day) = Flow (in MGD) x Concentration (mg/L) x 8.34\*

\*8.34 is the unit conversion for the weight of water

17. Louisiana Pollutant Discharge Elimination System (LPDES) means those portions of the Louisiana Environmental Quality Act and the Louisiana Water Control Law and all regulations promulgated under their authority which are deemed equivalent to the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act in accordance with Section 402 of the Clean Water Act and all applicable federal regulations.
18. Monthly Average discharge limitations (other than for bacteria indicators, such as fecal coliform and enterococci) are calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes monthly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the monthly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily discharge concentration, F = daily flow and n = number of daily samples; monthly average discharge =

$$\frac{C_1F_1 + C_2F_2 + \dots + C_nF_n}{F_1 + F_2 + \dots + F_n}$$

When the permit establishes monthly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the monthly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar month.

The monthly average for bacteria indicators is the geometric mean of the values for all effluent samples collected during a calendar month.

19. National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Clean Water Act.
20. POTW means Publicly Owned Treatment Works.
21. Sanitary Wastewater Term(s):
- a. 3-hour composite sample consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 3-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 3-hour period.
  - b. 6-hour composite sample consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 6-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 6-hour period.

- c. 12-hour composite sample consists of 12 effluent portions collected no closer together than one hour over the 12-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 12-hour period. The daily sampling intervals shall include the highest flow periods.
  - d. 24-hour composite sample consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample continuously collected in proportion to flow over the 24-hour period.
22. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
23. Sewage sludge means any solid, semisolid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage. *Sewage sludge* includes, but is not limited to, solids removed during primary, secondary, or advanced wastewater treatment, scum, domestic septage, portable toilet pumpings, Type III marine sanitation device pumpings (33 CFR Part 159), and sewage sludge products. *Sewage sludge* does not include grit or screenings, or ash generated during the incineration of sewage sludge.
24. Stormwater Runoff means aqueous surface runoff including any soluble or suspended material mobilized by naturally occurring precipitation events.
25. Surface Water means all lakes, bays, rivers, streams, springs, ponds, impounding reservoirs, wetlands, swamps, marshes, water sources, drainage systems and other surface water, natural or artificial, public or private within the state or under its jurisdiction that are not part of a treatment system allowed by state law, regulation, or permit.
26. Treatment works means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Clean Water Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof. (See Part 212 of the Clean Water Act.)
27. For fecal coliform bacteria, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.
28. The term MGD shall mean million gallons per day.
29. The term GPD shall mean gallons per day.
30. The term mg/L shall mean milligrams per liter or parts per million (ppm).
31. The term SPC shall mean Spill Prevention and Control. This is a plan covering the release of pollutants as defined by the Louisiana Administrative Code (LAC 33:IX.Chapter 9).
32. The term SPCC shall mean Spill Prevention Control and Countermeasures Plan. This is a plan

covering the release of pollutants as defined in 40 CFR Part 112.

33. The term µg/L shall mean micrograms per liter or parts per billion (ppb).
34. The term ng/L shall mean nanograms per liter or parts per trillion (ppt).
35. Visible Sheen means a silvery or metallic sheen, gloss, or increased reflectivity; visual color; or iridescence on the water surface.
36. Wastewater means liquid waste resulting from commercial, municipal, private, or industrial processes. Wastewater includes, but is not limited to, cooling and condensing waters, sanitary sewage, industrial waste, and contaminated rainwater runoff.
37. Waters of the State means for the purposes of the Louisiana Pollutant Discharge Elimination System, all surface waters within the state of Louisiana and, on the coastline of Louisiana and the Gulf of Mexico, all surface waters extending therefrom three miles into the Gulf of Mexico. For purposes of the Louisiana Pollutant Discharge Elimination System, this includes all surface waters which are subject to the ebb and flow of the tide, lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, impoundments of waters within the state of Louisiana otherwise defined as "waters of the United States" in 40 CFR 122.2, and tributaries of all such waters. "Waters of the state" does not include waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act, 33 U.S.C. 1251 et seq.
38. Weekly average, other than for bacteria indicators, such as fecal coliform and enterococci, is the highest allowable arithmetic mean of the daily discharges over a calendar week, calculated as the sum of all "daily discharge(s)" measured during a calendar week divided by the number of "daily discharge(s)" measured during that week. When the permit establishes weekly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the weekly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar week where C = daily discharge concentration, F = daily flow and n = number of daily samples; weekly average discharge

$$= \frac{C_1F_1 + C_2F_2 + \dots + C_nF_n}{F_1 + F_2 + \dots + F_n}$$

When the permit establishes weekly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the weekly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar week.

The weekly average for bacteria indicators is the geometric mean of the values for all effluent samples collected during a calendar week.

**PART VII. REOPENER CLAUSE**

If there is evidence indicating that the discharges authorized by this permit cause, have the reasonable potential to cause, or contribute to a violation of a water quality standard, the discharger may be required to obtain an individual permit or an alternative general permit in accordance with Part III.D and VI.A.6 of this permit or the permit may be modified to include different requirements and/or limitations.



## PART VIII. ADDITIONAL DEFINITIONS

**Aggregate Spray** – potable water used to cool aggregate stockpiles and to maintain the specific gravity of lightweight aggregate.

**Alternative permit** means another permit – either an individual permit or a different general permit.

**Arid Areas** – areas with an average annual rainfall of 0 to 10 inches.

**Best Management Practices** (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to Waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

(<https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu>)

**Bypass** – the intentional diversion of waste streams from any portion of a treatment facility.

**Control Measure** – as used in this permit, refers to any BMP or other method used to prevent or reduce the discharge of pollutants to Waters of the State.

**Commencement of Construction Activities** – the initial disturbance of soils associated with clearing, grading, or excavating activities as well as support activities related to a construction site.

**Common Plan of Development** – a contiguous (sharing a boundary or edge; adjacent; touching) area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan. Such a plan might consist of many small projects (e.g., a common plan of development for a residential subdivision might lay out the streets, house lots, and areas for parks, schools, commercial and industrial development that the developer plans to build or sell to others for development.) All these areas would remain part of the common plan of development or sale. The following items can be used as guidance for deciding what might or might not be considered a Common Plan of Development or Sale:

If a smaller project is part of a large common plan of development or sale that collectively will disturb five or more acres (e.g., the project is being built on 6 half-acre residential lots in a 10-acre development or put in a fast food restaurant on a  $\frac{3}{4}$  acre pad that is part of a 20 acre retail center) permit coverage is needed.

If a small portion of the original common plan of development remains undeveloped and there has been a period of time where there is no on-going construction activities (i.e., all areas are either undisturbed or have been finally stabilized), re-evaluate the original project based on the acreage remaining from the original “common plan.” If less than five but more than one acre remains to build out the original “common plan”, coverage under this permit may not be required. However, compliance with the terms and conditions of the Small Construction General Permit is required. If less than one acre remains of the original common plan, the individual project may be treated as a part of a less than one acre development and no permit would be required.

If there is a long-range master plan of development where some portions of the master plan are a conceptual rather than a specific plan of future development and the future construction activities would, if they occur at all, happen over an extended period of time, consider the “conceptual” phases of development to be separate a “common plans” provided the periods of construction for the physically interconnected phases will not overlap.

A public entity (a municipality, state or federal agency) need not consider all construction projects within their entire jurisdiction to be part of an overall “common plan.” Only the interconnected parts of a project would be considered to be a “common plan.”

Where discrete construction projects within a larger common plan of development or sale are located ¼ mile or more apart and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same “common plan” is not concurrently being disturbed.

**Discharge of Storm Water Associated with Construction Activity** – as used in this permit, refers to storm water “point source” discharges from areas where soil-disturbing activities (e.g., clearing, grading, or excavation, etc.), construction materials or equipment storage, maintenance (e.g., fill piles, fueling, etc.) or defined dedicated construction support activities are located.

**Drought-Stricken Area** – for the purposes of this permit, an area in which the National Oceanic and Atmospheric Administration’s U.S. Seasonal Drought Outlook indicates for the period during which the construction will occur that any of the following conditions are likely: (1) “Drought to persist or intensify”, (2) “Drought ongoing, some improvement”, (3) “Drought likely to improve, impacts ease”, or (4) “Drought development likely”.

See [http://www.cpc.ncep.noaa.gov/products/expert\\_assessment/season\\_drought.gif](http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.gif).

**Facility** means a pollution source, or any public or private property or site and all contiguous land and structures, other appurtenances and improvements, where any activity is conducted which discharges or may result in the discharge of pollutants into waters of the state.

**Final Stabilization** – means that:

- (i) all soil disturbing activities at the site have been completed, and that a **uniform** (e.g., evenly distributed, without large bare areas) **perennial vegetative cover** with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geo-textiles) have been employed. Establishing at least 70% of the natural cover of self-sustaining native vegetation meets the vegetative cover criteria for final stabilization. For example, if the native vegetation covers 50% of the ground prior to commencement of construction activities, 70% of 50% would require 35% total cover for final stabilization.

A site does not meet the final stabilization permit requirement until self-sustaining native vegetation is established uniformly over each disturbed area on the site. Stabilizing seven of ten slopes or leaving an area equivalent to 30 percent of the disturbed area completely destabilized will not satisfy the **uniform vegetative cover** standard.

- (ii) In arid and semi-arid areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:
  - a. Temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the operator.
  - b. The temporary erosion control measures are selected, designed, and installed to achieve 70 percent vegetative coverage within three years.
- (iii) For individual lots in residential construction, final stabilization means that either:
  - a. The homebuilder has completed final stabilization as specified above, or
  - b. The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.
- (iv) For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land, staging areas for highway construction, etc.) final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to waters of the State, and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization criteria (i) or (ii) or (iii) above.

**Infeasible** – not technologically possible, or not economically practicable and achievable in light of best industry practices.

**Municipal Separate Storm Sewer System (MS4)** – refers to a publicly-owned conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that discharges to Waters of the State and is designed or used for collecting or conveying storm water, is not a combined sewer, and is not part of a publicly-owned treatment works (POTW)(see LAC 33:IX.2511.B.4, B.7, and B.16 or 40 CFR 122.26(b)(4), (b)(7), and (b)(16)).

**Natural Buffer** – as used in this permit, an area of undisturbed natural cover surrounding surface waters. Natural cover includes vegetation, exposed rock, or barren ground that exists prior to commencement of construction activities at the site

**New Source** – any building, structure, site, or installation from which there is or may be discharge of pollutants, the construction of which commenced:

- a. after promulgation of standards of performance under Section 306 of the CWA which are applicable to such source; or
- b. after proposal of standards of performance in accordance with Section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal.

**Non-turbid** – for the purposes of this permit, means that the discharge does not cause or contribute to an exceedance of turbidity-related water quality standards.

**NOE** – notice of extension to continue coverage or to reauthorize under the reissued LAR100000 (see Part I.D of this permit).

**NOI** – notice of intent to be covered by this permit (see Part II of this permit).

**NOT** – notice of termination of permit coverage (see Part VII of this permit).

**Operator** – any party associated with the construction project that meets either of the following two criteria: (1) the party has operational control over project plans and specifications (including the ability to make modifications in those specifications) or (2) the party has day-to-day operational control of those activities at a project site which are necessary to ensure compliance with the SWPPP or other permit conditions (e.g., they are authorized to direct workers at the site to carry out activities identified in the SWPPP or comply with other permit conditions).

**Permittee** - an operator with permit authorization to discharge storm water associated with construction activity in Louisiana under the terms and conditions of this permit.

**Person** – an individual, association, partnership, corporation, municipality, state or federal agency, or any agency thereof, or an agent or employee thereof.

**Point Source** – any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are, or may be, discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

**Process Wastewater** – any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. Process wastewater may include interior or exterior washing of plant trucks or product receptacles.

**Qualified Personnel** – a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity.

**Runoff Coefficient** – the fraction of total rainfall that will leave the site as runoff.

**Semi-Arid Areas** – areas with an average annual rainfall of 10 to 20 inches.

**Site** – the land or water area where any “facility or activity” is physically located or conducted, including adjacent land used in connection with the facility or activity and/or off-site construction support activities.

**State Administrative Authority** – the Secretary of the Department of Environmental Quality or his/her designee, or the appropriate assistant secretary or his/her designee.

**Storm Water Associated with Industrial Activity** – defined at LAC 33:IX.2511.B.14 and incorporated here by reference.

**Storm Water Discharge Associated with Large Construction Activity** – this includes discharges of storm water from construction activities including clearing, grading excavating, and support activities related to a construction site that results in land disturbance greater than five acres. Also included is construction activity that disturbs less than five acres of total land area that is part of a larger common plan of development or sale, if the larger common plan will ultimately disturb greater than five acres.

**Support Activities Related to Construction Sites** - includes, but is not limited to, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas, material stockpiles, and placement of raw material. Support activities related to the operation of concrete or asphalt batch plants located at a construction site are not authorized by this permit.

**Total Suspended Solids (TSS)** – the amount of solid material suspended in water commonly expressed as a concentration in terms of mg/L.

**Uncontaminated** – for the purposes of this permit, means that the discharge does not cause or contribute to an exceedance of applicable water quality standards.

**Wasteload allocation (WLA)** means that portion of the assimilative capacity of the receiving water apportioned to a specific discharger in such a way that water quality standards are maintained under design conditions

## ADDENDUM A

### ENDANGERED SPECIES GUIDANCE

# ENDANGERED SPECIES GUIDANCE

## I. INSTRUCTIONS

A list of endangered and threatened species that the US Fish and Wildlife Service (FWS) has determined may be affected by the activities covered by the Construction General Permit is available in the Fish and Wildlife Service Memorandum of Understanding (MOU) letter at <http://deq.louisiana.gov/page/lpdes>.

The species listing by parish is found using the link labeled Endangered Species Act (ESA) and Migratory Bird Treaty Act (MBTA) Project Review. In order to be eligible for coverage under this permit, operators must:

- Determine whether any species listed in this Guidance or critical habitat are in proximity to the site,
- Pursuant to Permit Part I.A.4.e follow the procedures found in this Guidance to protect listed endangered and/or threatened species and designated critical habitat and determine that the storm water discharges and BMPs to control storm water runoff covered under this permit meet one or more of the eligibility requirements of Part I.A.4.e.(1) of this permit. Signature and submittal of the Notice of Intent form is deemed to constitute the Operator's compliance with eligibility requirements for permit coverage.

To determine permit eligibility and to avoid unauthorized impacts upon listed threatened or endangered species or on the critical habitat for those species, the operator must follow this Guidance's Steps 1 through 4 (and 5 if applicable) when developing the SWPPP.

NOTE: At any step in the determination operators may contact the FWS for guidance. That request should be in writing and should include a description of the facility and a topographic map depicting the locations of the facility, the proposed construction activities, and the associated storm water discharges.

U.S. Fish and Wildlife Service  
Louisiana Ecological Services  
200 Dulles Drive  
Lafayette, LA 70506  
(337) 291-3100  
[lafayette@fws.gov](mailto:lafayette@fws.gov)

### **STEP 1: DETERMINE IF THE CONSTRUCTION SITE OR ASSOCIATED STORM WATER DISCHARGES ARE WITHIN THE VICINITY OF FEDERALLY LISTED THREATENED OR ENDANGERED SPECIES, OR THEIR DESIGNATED CRITICAL HABITAT.**

If either the proposed site or the path of storm water from the site to the receiving stream is in a parish included on the Endangered Species List, the applicant shall proceed to Step 2 below. If, however, neither is located in a listed parish, then the applicant shall enter "no" in Section I.D.3 of the NOI, and move to the next item.

If no species are listed in the site's parish or if a site's parish is not found on the list, the applicant is eligible for permit coverage and may indicate in the Notice of Intent that no species are found in the project area

and certify that it is eligible for permit coverage by marking “No” on the NOI. Where a project is located in more than one parish, the lists for all parishes shall be reviewed.

**STEP 2: DETERMINE IF ANY SPECIES MAY BE FOUND "IN PROXIMITY" TO THE CONSTRUCTION ACTIVITY'S STORM WATER DISCHARGES:**

A species is in proximity to a construction activity's storm water discharge when the species is:

- Located in the path or immediate area through which or over which contaminated point source storm water flows from construction activities to the point of discharge into the receiving water; or
- Located in the immediate vicinity of, or nearby, the point of discharge into receiving waters; or
- Located in the area of a site where storm water BMPs are planned or are to be constructed.

The area in proximity to be searched/surveyed for listed species will vary with the size and structure of the construction activity, the nature and quantity of the storm water discharges, and the type of receiving waters. Given the number of construction activities potentially covered by the permit, no specific method to determine whether species are in proximity is required for permit coverage. Instead, operators should use the method or methods which best allow them to determine to the best of their knowledge whether species are in proximity to their particular construction activities. These methods may include:

- Conducting visual inspections: This method may be particularly suitable for construction sites that are smaller in size or located in non-natural settings such as highly urbanized areas or industrial parks where there is little or no natural habitat, or for construction activities that discharge directly into municipal storm water collection systems.
- Contacting the nearest State or Tribal Wildlife Agency or U.S. Fish and Wildlife Service (FWS) offices. Many endangered and threatened species are found in well-defined areas or habitats. That information is frequently known to State, Tribal, or Federal wildlife agencies.
- Contacting local/regional conservation groups. These groups inventory species and their locations and maintain lists of sightings and habitats.
- Conducting a formal biological survey. Larger construction sites with extensive storm water discharges may choose to conduct biological surveys as the most effective way to assess whether species are located in proximity and whether there are likely adverse effects.
- Conducting an Environmental Assessment Under the National Environmental Policy Act (NEPA). Some construction activities may require environmental assessments under the NEPA. Such assessments may indicate if listed species are in proximity. (Construction General Permit coverage does not trigger the NEPA because it does not regulate any dischargers subject to New Source Performance Standards under Section 306 of the Clean Water Act. See CWA 511(c). However, some construction activities might require review under the NEPA because of federal funding or other federal nexus.)
- Using the ESA and MBTA project review application at the FWS Louisiana Ecological Services website (<https://www.fws.gov/office/louisiana-ecological-services>).

If no species are in proximity and there is no likelihood of any BMPs to control storm water causing adverse



effects on species identified in in this addendum, an operator is eligible for Construction General Permit coverage based upon this **Criterion A**.

If adverse effects are determined to be unlikely, then the operator is eligible for permit coverage

If listed species are found in proximity to a facility, operators must indicate the location and nature of this presence in the storm water pollution prevention plan (SWPPP) and follow Step 3.

**STEP 3: DETERMINE IF SPECIES OR CRITICAL HABITAT COULD BE ADVERSELY AFFECTED BY THE CONSTRUCTION ACTIVITY'S STORM WATER DISCHARGES OR BY BMPs TO CONTROL THOSE DISCHARGES.**

**Scope of Adverse Effects:** Potential adverse effects from storm water include:

- Hydrological. Storm water may cause siltation, sedimentation or induce other changes in the receiving waters such as temperature, salinity or pH. These effects will vary with the amount of storm water discharged and the volume and condition of the receiving water. Where a storm water discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely.
- Habitat. Storm water may drain or inundate listed species habitat.
- Toxicity. In some cases, pollutants in storm water may have toxic effects on listed species.

The scope of effects to consider will vary with each site. Operators must also consider the likelihood of adverse effects on species from any BMPs to control storm water. Most adverse impacts from BMPs are likely to occur from the construction activities. However, it is possible that the operation of some BMPs (for example, larger storm water retention ponds) may affect endangered and threatened species.

If adverse effects are determined to be unlikely, then the operator is eligible for permit coverage

If adverse effects are likely, operators shall follow step 4 below.

**STEP 4: DETERMINE IF MEASURES CAN BE IMPLEMENTED TO AVOID ANY ADVERSE EFFECTS:**

If it is determined that adverse effects cannot be ruled out or are likely, the operator can receive coverage if appropriate measures are undertaken to avoid or eliminate any actual or potential adverse effects prior to applying for permit coverage. These measures may involve relatively simple changes to construction activities such as re-routing a storm water discharge to bypass an area where species are located, relocating BMPs, or limiting the size of construction activity that will be subject to storm water discharge controls.

At this stage, operators must contact the FWS [or the National Marine Fisheries Service (NMFS) if referred to that Service by the FWS] to see what appropriate measures might be suitable to avoid or eliminate adverse impacts to listed species and/or critical habitat. This can entail the initiation of informal coordination with the FWS (and/or NMFS, if appropriate) which is described in more detail in Step 5.

If operators adopt measures to avoid or eliminate adverse effects they must continue to abide by them during the course of permit coverage. These measures must be described in the SWPPP and may be enforceable as permit conditions.

If appropriate measures to avoid the likelihood of adverse effects are not available, then the operator must follow Step 5.

## **STEP 5: CONSULTATION WITH FWS TO DETERMINE IF THE ELIGIBILITY REQUIREMENTS CAN BE MET**

Where adverse effects are likely, the operator must contact the FWS. The operator may still be eligible for permit coverage if any likelihood of adverse effects is addressed by meeting at least one of the following criteria, as required by Part I.A.4.e if:

- **Criterion B.** The operator's activity has received previous authorization through an earlier Section 7 consultation or issuance of a ESA Section 10 permit (incidental taking permit) and that authorization addressed storm water discharges and/or BMPs to control storm water runoff (e.g., developer included impact of entire project in consultation over a wetlands dredge and fill permit under Section 7 of the ESA).

OR

- **Criterion C.** The operator's activity was previously considered part of a larger, more comprehensive assessment of impacts on endangered and threatened species and/or critical habitat, under Section 7 or Section 10 of the ESA, which accounts for storm water discharges and BMPs to control storm water runoff (e.g., where an area-wide habitat conservation plan and the ESA's Section 10 permit is issued which addresses impacts from construction activities, including those from storm water, or a NEPA review is conducted which incorporates the ESA Section 7 procedures).

OR

**Criterion D.** Consultation with the USFWS (or NMFS, if appropriate) for the operator's storm water discharges and BMPs to control storm water runoff results in either: 1) FWS/NMFS written concurrence with a finding of no likelihood of adverse effects (see 50 CFR 402.13) or 2) issuance of a biological opinion in which USFWS (or NMFS) finds that the action is not likely to jeopardize the continued existence of listed endangered or threatened species or result in the adverse modification or destruction of critical habitat [see 50 CFR 403.14(h)].

Any terms and conditions developed through consultations to protect listed species and critical habitat must be incorporated into the SWPPP. As noted above, operators must initiate consultation during Step 4 (upon becoming aware that endangered and threatened species are in proximity to the facility).

OR

**Criterion E.** The operator's activity was considered part of a larger, more comprehensive site-specific assessment of impacts on endangered and threatened species by the owner or other operator of the site when it developed a SWPPP and that permittee met the eligibility requirements stated in Criterion A, B, C, or D [e.g., owner was able to determine there would be no adverse impacts for the project as a whole under Criterion A, so contractor meets the eligibility requirements stated Criterion D]. Utility companies applying for area-wide permit coverage meet the eligibility requirements stated in Criterion D since authorization to discharge is contingent on a principal operator of a

construction project having been granted coverage under this or an alternative LPDES permit for the areas of the site where utilities installation activities will occur.

The determination of eligibility of Criteria B - D shall be documented in the facility's SWPPP, and copies of all applicable documents, such as the FWS approval letters, shall be retained with the SWPPP. The operator must comply with any terms and conditions imposed under the all eligibility criteria requirements to ensure that storm water discharges or BMPs used to control storm water runoff are protective of listed endangered and threatened species and/or critical habitat. Such terms and conditions must be incorporated in the operator's SWPPP.

**If the eligibility requirements of Criteria A - D cannot be met, then the operator may not receive coverage under this permit** and should consider applying to the LDEQ for an individual permit.

This permit does not authorize any "taking" (as defined under Section 9 of the ESA) of endangered or threatened species unless such takes are authorized under Section 7 or 10 the ESA. Operators who believe their construction activities may result in takes of listed endangered and threatened species should be sure to get the necessary coverage for such takes through an individual consultation or Section 10 permit of the ESA.

This permit does not authorize any storm water discharges or BMPs to control storm water runoff that are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the ESA or result in the adverse modification or destruction of designated critical habitat.

## **II. ENDANGERED SPECIES PARISH LIST**

See: <http://deq.louisiana.gov/page/lpdes>. Click on **Water**, then **Permits**, then **LPDES Permit Information**, then the "U.S. Fish and Wildlife Service [Endangered Species Act \(ESA\) and Migratory Bird Treaty Act \(MBTA\) Project Review](#)" under **LPDES Support Documents**.

ADDENDUM B

HISTORIC PRESERVATION

## HISTORIC PROPERTIES GUIDANCE

Operators must determine whether their site's storm water discharge or the construction of best management practices (BMPs) to control such discharges, have potential to affect a property that is either listed or eligible for listing on the National Register of Historic Places (NRHP).

For existing operators who do not need to construct BMPs for permit coverage, a simple visual inspection may be sufficient to determine whether historic properties are affected. However, for sites that are new storm water dischargers, and for existing sites that are planning to construct BMPs for permit eligibility, operators shall conduct further inquiry to determine whether historic properties may be affected by the storm water discharge or BMPs to control the discharge. In such instances, operators shall first determine whether there are any historic properties or places in the vicinity that are listed on the National Register, or if any are eligible for listing on the register (e.g., they are "eligible for listing").

Due to the large number of entities seeking coverage under this permit and the limited number of personnel available to the State Historic Preservation Officer (SHPO) to respond to inquiries concerning the location of historic properties, it is suggested that operators first access the "NRHP" information listed on the National Park Service's web page at the address listed in this Guidance. The address for the Louisiana State Historic Preservation Officer (LSHPO) is also listed in this Guidance. For projects that will result in permanent discharges that will need a separate LPDES permit (i.e. individual or sanitary), the LDEQ requires the applicant/operator to submit formal site plans to the SHPO for review. Operators may also contact city, parish or other local historical societies for assistance, especially when determining if a place or property is eligible for listing on the register.

As referenced in I.A.4.f of the permit, operators must meet one of the following the permit eligibility criteria for protection of historic properties under this permit:

(1) If historic properties are **not identified** in the path of a site's industrial storm water discharge, or where construction activities are planned to install BMPs to control such discharges (e.g., diversion channels or retention ponds), or

if historic properties **are identified**, but it is determined that they will **not be affected** by the discharge, or construction of BMPs to control the discharge,

**then** the operator has met the permit eligibility criteria under Part I.A.4.f.

(2) If historic properties **are identified** in the path of a site's industrial storm water discharge, or where construction activities are planned for the installation of BMPs to control such discharges, and it is determined that **there is the potential** to adversely affect the property, the operator can still meet the permit eligibility criteria if he/she obtains and complies with a written agreement with the State Historic Preservation Officer, which outlines measures that the operator will follow to mitigate or prevent those adverse effects. The contents of such a written agreement must be included in the site's storm water pollution prevention plan.

In situations where an agreement cannot be reached between an operator and the State Historic Preservation Officer, applicants shall contact the Advisory Council on Historic Preservation listed below in this addendum for assistance.

The term "adverse effects" includes, but is not limited to, damage, deterioration, alteration, or destruction of the historic property or place. The LDEQ encourages operators to contact the appropriate State or Tribal Historic Preservation Officer as soon as possible in the event of a potential adverse effect to a historic property.

Operators are reminded that they must comply with all applicable State and local laws concerning the protection of historic properties and places.

### **I. Internet Information on the National Register of Historic Places**

An electronic listing of the "National Register of Historic Places," as maintained by the National Park Service on its National Register of Historic Places (NRHP), can be accessed on the Internet at <https://www.nps.gov/subjects/nationalregister/index.htm>.

### **II. Louisiana State Historic Preservation Officer (LSHPO)**

Louisiana, SHPO, Office of Cultural Development, P.O. Box 44247, Baton Rouge, LA 70804-4247. For questions, contact the Section 106 Review Coordinator, Telephone: (225) 342-8200.

### **III. Advisory Council on Historic Preservation**

Advisory Council on Historic Preservation, 401 F Street NW, Suite 308, Washington, DC 20001-2637, Telephone: (202) 517-0200, E-mail: [achp@achp.gov](mailto:achp@achp.gov); Web site: <https://www.achp.gov/>.

The LDEQ does not have the authority to issue LPDES permits for activities on federal Native American lands.

## ADDENDUM C

### LIST OF ADDRESSES FOR LDEQ OFFICES

## CURRENT ADDRESSES

Enforcement Division  
Office of Environmental Compliance  
Department of Environmental Quality  
P. O. Box 4312  
Baton Rouge, Louisiana 70821-4312  
Telephone: (225) 219-3715

### Mailing Addresses For Regional Offices

**Acadiana Regional Office**  
Surveillance Division  
Office of Environmental Compliance  
111 New Center Drive  
Lafayette, Louisiana 70508  
(337) 262-5584

**Capital Regional Office**  
Surveillance Division  
Office of Environmental Compliance  
P.O. Box 4312  
Baton Rouge, Louisiana 70821-4312  
(225) 219-3600

**Northeast Regional Office**  
Surveillance Division  
Office of Environmental Compliance  
508 Downing Pines Road  
West Monroe, Louisiana 71292  
(318) 362-5439

**Northwest Regional Office**  
Surveillance Division  
Office of Environmental Compliance  
1525 Fairfield Avenue, Room 520  
Shreveport, Louisiana 71130  
(318) 676-7476

**Southeast Regional Office**  
Surveillance Division  
Office of Environmental Compliance  
201 Evans Road, Bldg. 4, Suite 420  
New Orleans, LA 70123-5230  
(504) 736-7701

**Southwest Regional Office**  
Surveillance Division  
Office of Environmental Compliance  
1301 Gadwall Street  
Lake Charles, Louisiana 70615-5176  
(337) 491-2667

### Jurisdictional Parishes For Each Regional Office

Acadia, Avoyelles, Catahoula, Concordia,  
Evangeline, Grant, Iberia, Lafayette, LaSalle,  
Rapides, St. Landry, St. Mary, Vermilion

Ascension, Assumption, East Baton Rouge, East  
Feliciana, Iberville, Livingston, Pointe Coupee,  
St. Helena, St. James, St. Martin, Tangipahoa,  
West Baton Rouge, West Feliciana

Caldwell, East Carroll, Franklin, Jackson,  
Lincoln, Madison, Morehouse, Ouachita, ,  
Richland, Tensas, Union, West Carroll, Winn

Bienville, Bossier, Caddo, Claiborne, De Soto,  
Natchitoches, Red River, Sabine, Webster

Jefferson, Lafourche, Orleans, Plaquemines,  
St. Bernard, St. Charles, St. John the Baptist,  
St. Tammany, Terrebonne, Washington

Allen, Beauregard, Calcasieu, Cameron, Jefferson  
Davis, Vernon



## ADDENDUM D

### LIST OF OUTSTANDING NATURAL RESOURCE WATERS AND SCENIC STREAMS

## **OUTSTANDING NATURAL RESOURCE WATERS AND SCENIC STREAMS**

**ATCHAFALAYA RIVER BASIN:** None

**BARATARIA BASIN:**

Bayou Des Allemands – from Lac Des Allemands to old US Highway 90

Bayou Des Allemands – from Highway 90 to Lake Salvador

**CALCASIEU RIVER BASIN:**

Barnes Creek – from headwaters to Little Barnes Creek (Scenic Stream only)

Barnes Creek – from Little Barnes Creek to Calcasieu River (Scenic Stream only)

Beckwith Creek – from headwaters to West Fork Calcasieu River (Scenic Stream only)

Bundicks Creek – from headwaters to Bundicks Lake (Scenic Stream only)

Bundicks Creek – from Bundicks Lake to Whiskey Chitto Creek (Scenic Stream only)

Calcasieu River – from LA Highway 8 to the Rapides/Allen Parish line

Calcasieu River – from Rapides-Allen Parish line to Marsh Bayou

Calcasieu River – from Marsh Bayou to saltwater barrier

Hickory Branch – from headwaters to West Fork Calcasieu River (Scenic Stream only)

Whiskey Chitto Creek – from the southern boundary of Fort Polk Military Reservation to the Calcasieu River

Six Mile Creek – East and West Forks from the southern boundary of Fort Polk Military Reservation to Whiskey Chitto Creek

Ten Mile Creek – from headwaters to Whiskey Chitto Creek

**LAKE PONTCHARTRAIN BASIN:**

Abita River (St. Tammany Parish) – from its headwaters to its entrance into the Bogue Falaya River (Scenic Stream only)

Comite River – from Wilson-Clinton Highway to entrance of White Bayou

Amite River – from Mississippi State Line to LA Highway 37

Blind River – from the Amite River Diversion Canal to the mouth at Lake Maurepas

Blind River – from headwaters to Amite River Diversion Canal

Tickfaw River – from the Mississippi State Line to LA Highway 42

Tangipahoa River – from the Mississippi State Line to I-12

Chappepeela Creek – from Louisiana Highway 1062 to Tangipahoa River

Tchefuncte River – from headwaters to U.S. Highway 190; includes tributaries

Tchefuncte River – from U.S. Highway 190 to Bogue Falaya River, includes tributaries

Tchefuncte River – from Bogue Falaya River to LA Highway 22

Bogue Falaya River – from headwaters to Tchefuncte River

Bayou Lacombe – from headwaters to Interstate Highway 12

Bayou Lacombe – from CDM Ecoregion boundary to Lake Pontchartrain

Bayou Lacombe – from Interstate Highway 12 to U.S. Highway 190

Bayou Lacombe – from US Highway 190 to CDM Ecoregion boundary

Bayou Cane – from the headwaters to U.S. Highway 190

Bayou Cane – from CDM Ecoregion boundary to Lake Pontchartrain

Bayou Labranche – from headwaters to Lake Pontchartrain

Bayou Trepagnier – from Norco to Bayou Labranche

Bayou St. John  
Bayou Chaperon  
Bashman Bayou – from headwaters to Bayou Dupre  
Bayou Dupre – from Lake Borgne Canal to Terre Beau Bayou  
Lake Borgne Canal – from the Mississippi River siphon at Violet to Bayou Dupre; also called Violet Canal  
Pirogue Bayou – from Bayou Dupre to New Canal  
Terre Beau Bayou – from Bayou Dupre to New Canal  
Bayou Bienvenue – from Bayou Villere to Lake Borgne

**MERMENTAU RIVER BASIN:** None

**VERMILION-TECHE RIVER BASIN:**

Spring Creek – from headwaters to Cocodrie Lake  
Bayou Cocodrie – from U.S. Highway 167 to the Bayou Boeuf-Cocodrie Diversion Canal

**MISSISSIPPI RIVER BASIN:** None

**OUACHITA RIVER BASIN:**

Bayou Bartholomew – from Arkansas State Line to Ouachita River; also known as Bayou Desiard and Lake Bartholomew  
Bayou de L’Outre – from the Arkansas State Line to the Ouachita River  
Bayou D’Arbonne – from Bayou D’Arbonne Lake to the Ouachita River  
Corney Bayou – from the Arkansas State Line to Corney Lake  
Corney Bayou – from Corney Lake to Bayou D’Arbonne Lake  
Middle Fork of Bayou D’Arbonne – from headwaters to Bayou D’Arbonne Lake  
Little River – From Castor Creek-Dugdemonia River confluence to Bear Creek  
Little River – from Bear Creek to Catahoula Lake  
Fish Creek – from headwaters to Little River  
Trout Creek – from headwaters to Little River  
Big Creek – from the headwaters to Little River  
Georgetown Reservoir

**PEARL RIVER BASIN:**

Holmes Bayou – from Pearl River to West Pearl River  
West Pearl River – from headwaters to Holmes Bayou  
West Pearl River – from Holmes Bayou to The Rigolets (includes the east and west mouths)  
Morgan River – from Porters River to West Pearl River  
Wilson Slough and Bradley Slough – from Pearl River to West Pearl River  
Pushepatapa Creek – from headwaters and tributaries at Mississippi State Line to Pearl River flood plain  
Bogue Chitto River – from Mississippi State Line to Pearl River Navigation Canal

**RED RIVER BASIN:**

Bayou Dorcheat – from Arkansas State Line to Lake Bistineau  
Black Lake Bayou – from one mile north of Leatherman Creek to Black Lake  
Saline Bayou – from headwaters near Arcadia to Saline Lake  
Kisatchie Bayou – from its Kisatchie National Forest to Old River  
Saline Bayou – from Larto Lake to Saline Lake  
Bayou Cocodrie – from Little Cross Bayou to Wild Cow Bayou

**SABINE RIVER BASIN:**

Pearl Creek – from headwaters to Sabine River

**TERREBONNE BASIN:**

Bayou Penchant – from Bayou Chene to Lake Penchant

**ARMY CORPS OF ENGINEERS****Storm Water Pollution Prevention Plan****Construction General Permit  
Inspection and Maintenance Report Form**

To be completed every 14 days and within 24 hours of a rainfall event of 13 mm (0.5 inch) or more

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

Inspected By: \_\_\_\_\_ Date: \_\_\_\_\_

Inspectors Qualifications: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Days Since Last Rainfall: \_\_\_\_\_ Amount of Last Rainfall \_\_\_\_\_ mm (Inches)

**Structural Controls**

| AREA | DATE SINCE<br>LAST<br>DISTURBED | DATE OF<br>NEXT<br>DISTURBANCE | STABILIZED<br>(yes/no) | STABILIZED<br>WITH | CONDITION |
|------|---------------------------------|--------------------------------|------------------------|--------------------|-----------|
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |

STABILIZATION REQUIRED:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

TO BE PERFORMED BY: \_\_\_\_\_ ON OR BEFORE: \_\_\_\_\_

**ARMY CORPS OF ENGINEERS****Storm Water Pollution Prevention Plan****Construction General Permit  
Inspection and Maintenance Report Form**

To be completed every 14 days and within 24 hours of a rainfall event of 13 mm (0.5 inch) or more

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

Inspected By: \_\_\_\_\_ Date: \_\_\_\_\_

Inspectors Qualifications: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Days Since Last Rainfall: \_\_\_\_\_ Amount of Last Rainfall \_\_\_\_\_ mm (Inches)

**Vegetative Controls**

| AREA | DATE SINCE<br>LAST<br>DISTURBED | DATE OF<br>NEXT<br>DISTURBANCE | STABILIZED<br>(yes/no) | STABILIZED<br>WITH | CONDITION |
|------|---------------------------------|--------------------------------|------------------------|--------------------|-----------|
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |

STABILIZATION REQUIRED:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

TO BE PERFORMED BY: \_\_\_\_\_ ON OR BEFORE: \_\_\_\_\_

**ARMY CORPS OF ENGINEERS****Storm Water Pollution Prevention Plan****Construction General Permit  
Inspection and Maintenance Report Form**

To be completed every 14 days and within 24 hours of a rainfall event of 13 mm (0.5 inch) or more

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

Inspected By: \_\_\_\_\_ Date: \_\_\_\_\_

Inspectors Qualifications: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Days Since Last Rainfall: \_\_\_\_\_ Amount of Last Rainfall \_\_\_\_\_ mm (Inches)

**Management Controls**

| AREA | ACTIVITY<br>DESCRIPTION | MAINTENACE<br>REQUIRED | STABILIZED<br>(yes/no) | STABILIZED<br>WITH | CONDITION |
|------|-------------------------|------------------------|------------------------|--------------------|-----------|
|      |                         |                        |                        |                    |           |
|      |                         |                        |                        |                    |           |
|      |                         |                        |                        |                    |           |
|      |                         |                        |                        |                    |           |
|      |                         |                        |                        |                    |           |
|      |                         |                        |                        |                    |           |
|      |                         |                        |                        |                    |           |

STABILIZATION REQUIRED:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

TO BE PERFORMED BY: \_\_\_\_\_ ON OR BEFORE: \_\_\_\_\_

Table D-5

## EQUIPMENT MAINTENANCE AND INSPECTION

[illegible]





**To: Prospective Applicants for a Storm Water  
General Permit Associated with Construction  
Activity of 5 Acres or More**

Attached is a **Storm Water General Permit Associated with Construction Activity of 5 Acres or More Notice of Intent (NOI) CSW-G**, for a Louisiana Pollutant Discharge Elimination System (LPDES) permit, authorized under the EPA's delegated NPDES program under the Clean Water Act.

Projects do not qualify for coverage under the general permit unless the NOI is accurate and complete. To be considered complete, EVERY ITEM on the form must be addressed, and the last page must be signed by an authorized company agent. If an item does not apply, please enter "NA" (for not applicable) to show that the question was considered.

Payment of the Annual Maintenance and Surveillance Fee(s) MUST be received with the NOI. Attach a check or money order to the NOI or go to <http://business.deq.louisiana.gov/> to create an online account.

**NOIS WITHOUT PAYMENT ARE CONSIDERED INCOMPLETE**

Two copies (one original and one copy) of your **completed and signed** NOI shall be submitted to:

**Mailing Address:**

Department of Environmental Quality  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, LA 70821-4313  
Attention: Water Permits Division

**Physical Address:**

Department of Environmental Quality  
Office of Environmental Services  
602 North Fifth Street  
Baton Rouge, LA 70802  
Attention: Water Permits Division

**NOIs delivered to the Physical Address above MUST be placed in the drop box specifically for in-person deliveries. A LDEQ date stamp is provided at the drop box location if an additional copy/receipt is needed for your records.** Please be advised that completion of this NOI may not fulfill all state, federal, or local requirements for sites of this size and type.

According to L. R. S. 48:385, any discharge to a state highway ditch, cross ditch, or right-of-way shall require approval from:

Louisiana DOTD  
Office of Highways  
Post Office Box 94245  
Baton Rouge, LA 70804-9245  
(225) 379-1927

AND

Louisiana Department of Health  
Office of Public Health  
Post Office Box 4489  
Baton Rouge, LA 70821-4489  
(225) 342-7499

A copy of the LPDES regulations may be obtained from the Department's website at <http://deq.louisiana.gov/resources/category/regulations-lac-title-33>.

After the review of the NOI, this Office will issue written notification to those applicants who are accepted for coverage under this general permit.

For questions regarding this NOI please contact the Water Permits Division at (225) 219-3590. For help regarding completion of this NOI please contact DEQ, Small Business/Small Community Assistance at 1-800-259-2890.

**STATE OF LOUISIANA**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Office of Environmental Services, Permits Division**  
**Post Office Box 4313**  
**Baton Rouge, LA 70821-4313**  
**PHONE#: (225) 219-3590**

**LPDES NOTICE OF INTENT (NOI) TO DISCHARGE STORM WATER ASSOCIATED  
WITH CONSTRUCTION ACTIVITY OF 5 ACRES OR MORE**  
(Attach additional pages if needed.)

Submission of this Notice of Intent (NOI) constitutes notice that the party identified in Section I of this form requests authorization by the LDEQ's Storm Water General Permit for storm water discharges associated with large construction activity in Louisiana. In order to be automatically authorized under General Permit LAR100000 you must submit a complete and accurate NOI to the LDEQ.

|                                      |
|--------------------------------------|
| <b>EVERY ITEM MUST BE COMPLETED.</b> |
|--------------------------------------|

Submission of this NOI also constitutes that implementation of the Storm Water Pollution Prevention Plan required under the general permit will begin at the time the permittee commences work on the construction project identified in Section II below.

**SECTION I - SITE INFORMATION**

- A. Permit is to be issued to the following:** (a party having operational control over construction plans and specifications and/or a party having day-to-day operational control over those activities at a project site which are necessary to ensure compliance with the storm water pollution prevention plan or other permit conditions LAC 33:IX.2501.B and LAC 33:IX.2503.A and B).

1. Legal Name of Applicant  
(Company, Partnership, Corporation, etc.) \_\_\_\_\_

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

(NOTE: Only one NOI needs to be submitted to cover all of the permittee's activities on the common plan of development or sale (e.g., you do not need to submit a separate NOI for each separate lot in a **residential subdivision** or for two separate buildings being constructed on the same property, provided your SWPPP covers each area for which you are the operator.)

Mailing Address \_\_\_\_\_

\_\_\_\_\_ Email: \_\_\_\_\_ Zip Code: \_\_\_\_\_

If the applicant named above is not also the owner, state owner name, phone number, and address.

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

Check status: ☐ Federal ☐ Parish ☐ Municipal  
☐ State ☐ Public ☐ Private ☐ Other: \_\_\_\_\_

## SECTION I - SITE INFORMATION

2. Location of Project. Provide a specific address, street, road, highway, interstate, and/or River Mile/Bank location of the project for which the NOI is being submitted.

City \_\_\_\_\_ Zip Code \_\_\_\_\_ Parish \_\_\_\_\_

Front Gate Coordinates:

Latitude \_\_\_\_ deg. \_\_\_\_ min. \_\_\_\_ sec. Longitude \_\_\_\_ deg. \_\_\_\_ min. \_\_\_\_ sec.

Method of Coordinate Determination:

\_\_\_\_\_  
(e.g., Google Earth, Previous Permit, website, GPS)

Is the site located on Tribal Lands?

☐

Yes

☐

No

### B. Storm Water Pollution Prevention Plan Information

1. Has the Storm Water Pollution Prevention Plan (SWPPP) been prepared? (NOTE: **The SWPPP must be prepared prior to submittal of the NOI. Do not submit the SWPPP with this NOI.**)

☐

Yes

☐

No

2. Indicate address of location of SWPPP if different from Project Location. (N/A if SWPPP is located at the construction site.)

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

### C. Location Information

1. Estimated Construction Start Date: (month/day/year) \_\_\_\_\_

2. Select how long the permit is needed:

☐

0 months - 1 year

☐

2 years

☐

3 years

☐

4 years

☐

5 years

3. Estimate of area to be disturbed (to nearest acre) \_\_\_\_\_

4. Describe the project or facility being constructed, such as a subdivision, single home, business, road project, or retail development (be specific, if clearing land please indicate if there are future plans to build a facility, subdivision, or retail development):

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

5. Is the project part of a larger development or subdivision? (5 acres or greater)

☐

Yes

☐

No

If yes, provide the name of the development or subdivision.

## SECTION I - SITE INFORMATION

6. Does this site have a previous land use?

☐

Yes

☐

No

If yes, does this site have a conveyance notification?

☐

Yes

☐

No

Please provide a history of any investigation for environmental site assessments and/or corrective action of contaminated soil, groundwater, and/or surface water and reference any associated Agency Interest Numbers and/or site identification numbers.

---

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### D. Discharge Information

1. Indicate how the storm water run-off reaches state waters (named water bodies). This will usually be either *directly*, by *open ditch* (if it is a highway ditch, indicate the highway), or by *pipe*. Please provide the specific names (Ex. Bayou Sam, Evans Creek, Old River, etc.) of all the minor water bodies that your discharge will travel through on the way to a major water body. This information can be obtained from U.S.G.S. quadrangle maps, which are available via map websites (<http://deq.louisiana.gov/resources/category/make-a-map>, [www.mytopo.com](http://www.mytopo.com), etc.), private map companies, and local government agencies such as the Louisiana Department of Transportation and Development (LDOTD). (See LDOTD's contact information on NOI's page 1.)

By \_\_\_\_\_ (effluent pipe, ditch, etc.);

thence into \_\_\_\_\_ (effluent pipe, ditch, etc.);

thence into \_\_\_\_\_ (Parish drainage ditch, canal, etc.);

thence into \_\_\_\_\_ (named bayou, creek, stream, etc.).

2. Based on Appendix C, the Outstanding Natural Resource Water (ONRW) list, does your storm water run-off flow directly into a waterbody listed as an ONRW?

☐

Yes

☐

No

3. Based on Appendix A, Endangered Species Guidance, are there any listed endangered or threatened species in the project area?

☐

Yes

☐

No

NOTE: Use the Endangered Species Guidance in Appendix A to determine if there are listed endangered or threatened species in the project area. Applicants shall contact the U. S. Fish and Wildlife Service (address is in Appendix A) for guidance if they need assistance in making a determination.

4. Based on Appendix B, Historic Properties Guidance, are any historic properties listed or eligible for listing on the National Register of Historic Places located on the site or in proximity to the discharge?

☐

Yes

☐

No

5. Was the State Historic Preservation Office (see Part I.A.3.f of the permit) involved in your determination of eligibility? If yes, please attach the determination to the NOI. (NOTE: This is required if post-construction discharges will occur, which requires a separate LPDES permit (i.e. industrial or sanitary).

☐

Yes

☐

No

## E. Additional Discharge Information

1. Will the finished project result in a discharge that will require a wastewater discharge permit such as treated sanitary wastewater from a subdivision, apartment complex, or business; industrial storm water; or process wastewater?

☐ Yes

☐ No (i.e., directly to a municipal sewage system)

2. If yes, does the subdivision, complex, or site currently have an LPDES water discharge permit?

☐ Yes

☐ No

**If yes, what is the LPDES permit number?** \_\_\_\_\_

3. If the site has an LPDES water discharge permit, are additional homes being added to a subdivision?

☐ Yes

☐ No

If yes, please explain: \_\_\_\_\_

4. If the site **does not** have an LPDES permit or if the construction will result in an **increased discharge**, the party or developer responsible for construction plans and specifications must provide a Request for Preliminary Determination (RPD), NOI, or a request for permit modification within **14 days** of submittal of the Construction NOI to: DEQ, OES, Post Office Box 4313, Baton Rouge, LA 70821-4313, Attn: Water Permits Division. Failure to submit this information may result in denial of this and/or any future applications for discharge of wastewater to waters of the state. The "Request for Preliminary Determination of LPDES Permit Issuance Form" requests the information referenced above and can be accessed on our web page at <http://deq.louisiana.gov/page/lpdes-water-permits>.

## SECTION II - LAC 33.I.1701 REQUIREMENTS

- A. Does the company or owner have federal or state environmental permits in other states that are identical to, or of a similar nature to, the permit for which you are applying? (This requirement applies to all individuals, partnerships, corporations, or other entities who own a controlling interest of 50% or more in your company, or who participate in the environmental management of the site for an entity applying for the permit or an ownership interest in the permit.)

☐ Permits in Louisiana. List Permit Numbers: \_\_\_\_\_

☐ Permits in other states (list states): \_\_\_\_\_

☐ No environmental permits.

- B. Do you owe any outstanding fees or final penalties to the Department? ☐ Yes ☐ No  
If yes, please explain.

\_\_\_\_\_

- C. Is your company a corporation or limited liability company? ☐ Yes ☐ No

If yes, is the corporation or LLC registered with the Secretary of State? ☐ Yes ☐ No

## SECTION III - SIGNATURE

According to the Louisiana Water Quality Regulations, LAC 33:IX.2503, the following requirements shall apply to the signatory page in this application:

### Chapter 25. Permit Application and Special LPDES Program Requirements

#### 2503. Signatories to permit applications and reports

- A. All permit applications shall be signed as follows:
1. For a corporation - by a responsible corporate officer. For the purpose of this Section responsible corporate officer means:
    - (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or
    - (b) The manager of one or more manufacturing, production, or operating sites provided: the manager is authorized to make management decisions that govern the operation of the regulated site, including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken together complete and accurate information for permit application requirements; and the authority to sign documents has been assigned or delegated to the manager in accordance with corporation procedures.
  2. For a partnership or sole proprietorship - by a general partner or the proprietor, respectively; or
  3. For a municipality, state, federal or other public agency – by either a principal executive officer or ranking elected official. For the purposes of this section a principal executive officer of a federal agency includes:
    - (a) The chief executive officer of the agency, or
    - (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

**NOTE:** LDEQ does not require specific assignments or delegations of authority to responsible corporate officers identified in the Permit **Standard Permit Conditions, Part VI.G.1.a(1)**. The agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the state administrative authority to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under Permit **Standard Permit Conditions, Part VI.G.1a.(2)** rather than to specific individuals.

## CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I also certify that a storm water pollution prevention plan, including both construction and post construction controls, has been prepared for the site in accordance with the permit and that such plan complies with approved State, Tribal and/or local sediment and erosion plans or permits and/or storm water management plans or permits. I am aware that signature and submittal of the NOI is deemed to constitute my determination of eligibility under one or more of the requirements of Permit Part I.A.3.e(1) related to the Endangered Species Act requirements. To the best of my knowledge, I further certify that such discharges and discharge related activities will not have an effect on properties listed or eligible for listing on the National Register of Historic Places under the National Historic Preservation Act, or are otherwise eligible for coverage under Part I.A.3.f of the permit. I am also aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**NOTE: SIGNATURE MUST COMPLY WITH REQUIREMENTS STATED ABOVE IN SECTION III, AND COMPANY NAME BELOW MUST MATCH LEGAL NAME OF APPLICANT (PARTY TO WHOM PERMIT IS TO BE ISSUED) LISTED IN SECTION I.A.1.**

**Signature** \_\_\_\_\_

**Printed Name** \_\_\_\_\_

**Title** \_\_\_\_\_

**Company** \_\_\_\_\_

**Email** \_\_\_\_\_

**Date** \_\_\_\_\_

**Telephone** \_\_\_\_\_

**Federal Tax ID** \_\_\_\_\_  
(if applicable)

**\*\*\*ANY NOI THAT DOES NOT CONTAIN ALL OF THE REQUESTED INFORMATION WILL BE CONSIDERED INCOMPLETE. NOI PROCESSING WILL NOT PROCEED UNTIL ALL REQUIRED INFORMATION HAS BEEN SUBMITTED.**



## FEES AND TERMINATION OF PERMIT

### Permit Annual Fee:

All payments made by check, draft, or money order shall be made payable to the “Louisiana Department of Environmental Quality.” We **DO NOT** accept cash payments. For online payments, see <http://business.deq.louisiana.gov/>.

**Perm LAG 33:IX.1309.E and 1309.N, you must submit the annual permit fee(s) as follows:**

0 months – 1 year: **\$291.00**  
2 year: **\$582.00**  
3 years: **\$873.00**  
4 years: **\$1164.00**  
5 years: **\$1455.00**

- Check / Money Order NO. \_\_\_\_\_
- Amount of Check / Money Order \_\_\_\_\_
- Date of Check or Money Order \_\_\_\_\_
- Name on Check or Money Order \_\_\_\_\_
- Attach a copy of the e-receipt as proof of payment, if paid online.

## TERMINATION OF PERMIT COVERAGE

Termination of coverage under the LAR100000 is automatic. The termination date, which is determined by the number of years selected by the applicant and the date the NOI was received by the Water Permits Division, will be specified in the permit authorization letter that this office will send to the permittee. To clarify, a NOI that is received and processed on February 1, 2025, and where the applicant selected one year of coverage shall automatically terminate on January 31, 2026. **The permittee is not required to submit the Notice of Termination (NOT) [Form CSW-T] to the LDEQ except when another owner and/or operator assumes control over all areas of the site prior to the permittee’s pre-determined termination date. Coverage under the LAR100000 is not transferable.**

All storm water discharges associated with construction activity from the portion of the site or area identified on this NOI must cease by the termination date, and the owner/operator must comply with all stabilization requirements contained in the general permit. If continuation of this permit is needed beyond the termination date, you must submit two copies (one original and one copy) of a **completed and signed Notice of Extension (NOE) [(Form NOE-G) 30 days before the termination and expiration date of your permit authorization.**

## APPENDIX A

### ENDANGERED SPECIES GUIDANCE

#### I. INSTRUCTIONS

A list of endangered and threatened species that the US Fish and Wildlife Service (FWS) has determined may be affected by the activities covered by the Construction General Permit is available in the Fish and Wildlife Service Memorandum of Understanding (MOU) letter at <http://deq.louisiana.gov/page/lpdes>.

The species listing by parish is found using the link labeled [https://www.fws.gov/sites/default/files/documents/louisiana-ecological-services-field-office-t-and-e-species\\_0.pdf](https://www.fws.gov/sites/default/files/documents/louisiana-ecological-services-field-office-t-and-e-species_0.pdf). In order to be eligible for coverage under this permit, operators must:

- Determine whether any species listed in this Guidance or critical habitat are in proximity to the site,
- Pursuant to Permit Part I.A.3.e follow the procedures found in this Guidance to protect listed endangered and/or threatened species and designated critical habitat and determine that the storm water discharges and BMPs to control storm water runoff covered under this permit meet one or more of the eligibility requirements of Part I.A.3.e.(1) of this permit. Signature and submittal of the Notice of Intent (NOI) form is deemed to constitute the Operator's compliance with eligibility requirements for permit coverage.

To determine permit eligibility and to avoid unauthorized impacts upon listed threatened or endangered species or on the critical habitat for those species, the operator must follow this Guidance's Steps 1 through 4 (and 5 if applicable) when developing the SWPPP.

NOTE: At any step in the determination, operators may contact the FWS for guidance. That request should be in writing and should include a description of the facility and a topographic map depicting the locations of the facility, the proposed construction activities, and the associated storm water discharges.

U.S. Fish and Wildlife Service  
Louisiana Ecological Services  
200 Dulles Drive  
Lafayette, LA 70506  
(337) 291-3100  
[lafayette@fws.gov](mailto:lafayette@fws.gov)

#### **STEP 1: DETERMINE IF THE CONSTRUCTION SITE OR ASSOCIATED STORM WATER DISCHARGES ARE WITHIN THE VICINITY OF FEDERALLY LISTED THREATENED OR ENDANGERED SPECIES, OR THEIR DESIGNATED CRITICAL HABITAT.**

If either the proposed site or the path of storm water from the site to the receiving stream is in a parish included on the Endangered Species List, the applicant shall proceed to Step 2 below. If, however, neither is located in a listed parish, then the applicant shall enter "no" in Section I.D.3 of the NOI, and move on to the next item.

If no species are listed in the site's parish or if a site's parish is not found on the list, the applicant is eligible for permit coverage and may indicate in the NOI that no species are found in the project area and certify that it is eligible for permit coverage by marking "No" on the NOI. Where a project

is located in more than one parish, the lists for all parishes shall be reviewed.

**STEP 2: DETERMINE IF ANY SPECIES MAY BE FOUND "IN PROXIMITY" TO THE CONSTRUCTION ACTIVITY'S STORM WATER DISCHARGES:**

A species is in proximity to a construction activity's storm water discharge when the species is:

- Located in the path or immediate area through which or over which contaminated point source storm water flows from construction activities to the point of discharge into the receiving water; or
- Located in the immediate vicinity of, or nearby, the point of discharge into receiving waters; or
- Located in the area of a site where storm water BMPs are planned or are to be constructed.

The area in proximity to be searched/surveyed for listed species will vary with the size and structure of the construction activity, the nature and quantity of the storm water discharges, and the type of receiving waters. Given the number of construction activities potentially covered by the permit, no specific method to determine whether species are in proximity is required for permit coverage. Instead, operators should use the method or methods which best allow them to determine to the best of their knowledge whether species are in proximity to their particular construction activities. These methods may include:

- Conducting visual inspections: This method may be particularly suitable for construction sites that are smaller in size or located in non-natural settings such as highly urbanized areas or industrial parks where there is little or no natural habitat, or for construction activities that discharge directly into municipal storm water collection systems.
- Contacting the nearest State or Tribal Wildlife Agency or U.S. Fish and Wildlife Service (FWS) offices. Many endangered and threatened species are found in well-defined areas or habitats. That information is frequently known to State, Tribal, or Federal wildlife agencies.
- Contacting local/regional conservation groups. These groups inventory species and their locations and maintain lists of sightings and habitats.
- Conducting a formal biological survey. Larger construction sites with extensive storm water discharges may choose to conduct biological surveys as the most effective way to assess whether species are located in proximity and whether there are likely adverse effects.
- Conducting an Environmental Assessment Under the National Environmental Policy Act (NEPA). Some construction activities may require environmental assessments under the NEPA. Such assessments may indicate if listed species are in proximity. (Construction General Permit coverage does not trigger the NEPA because it does not regulate any dischargers subject to New Source Performance Standards under Section 306 of the Clean Water Act. See CWA 511(c). However, some construction activities might require review under the NEPA because of federal funding or other federal nexus.)
- Using the ESA and MBTA project review application at the FWS Louisiana Ecological Services website (<https://www.fws.gov/office/louisiana-ecological-services>).

If no species are in proximity and there is no likelihood of any BMPs to control storm water causing adverse effects on species identified in in this addendum, an operator is eligible for Construction General Permit coverage based upon this **Criterion A**.

If adverse effects are determined to be unlikely, then the operator is eligible for permit coverage.

If listed species are found in proximity to a facility, operators must indicate the location and nature of this presence in the storm water pollution prevention plan (SWPPP) and follow Step 3.

**STEP 3: DETERMINE IF SPECIES OR CRITICAL HABITAT COULD BE ADVERSELY AFFECTED BY THE CONSTRUCTION ACTIVITY'S STORM WATER DISCHARGES OR BY BMPs TO CONTROL THOSE DISCHARGES.**

**Scope of Adverse Effects:** Potential adverse effects from storm water include:

- Hydrological. Storm water may cause siltation, sedimentation or induce other changes in the receiving waters such as temperature, salinity or pH. These effects will vary with the amount of storm water discharged and the volume and condition of the receiving water. Where a storm water discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely.
- Habitat. Storm water may drain or inundate listed species habitat.
- Toxicity. In some cases, pollutants in storm water may have toxic effects on listed species.

The scope of effects to consider will vary with each site. Operators must also consider the likelihood of adverse effects on species from any BMPs to control storm water. Most adverse impacts from BMPs are likely to occur from the construction activities. However, it is possible that the operation of some BMPs (for example, larger storm water retention ponds) may affect endangered and threatened species.

If adverse effects are determined to be unlikely, then the operator is eligible for permit coverage

If adverse effects are likely, operators shall follow step 4 below.

**STEP 4: DETERMINE IF MEASURES CAN BE IMPLEMENTED TO AVOID ANY ADVERSE EFFECTS:**

If it is determined that adverse effects cannot be ruled out or are likely, the operator can receive coverage if appropriate measures are undertaken to avoid or eliminate any actual or potential adverse effects prior to applying for permit coverage. These measures may involve relatively simple changes to construction activities such as re-routing a storm water discharge to bypass an area where species are located, relocating BMPs, or limiting the size of construction activity that will be subject to storm water discharge controls.

At this stage, operators must contact the FWS [or the National Marine Fisheries Service (NMFS) if referred to that Service by the FWS] to see what appropriate measures might be suitable to avoid or eliminate adverse impacts to listed species and/or critical habitat. This can entail the initiation of informal coordination with the FWS (and/or NMFS, if appropriate) which is described in more detail in Step 5.

If operators adopt measures to avoid or eliminate adverse effects they must continue to abide by them during the course of permit coverage. These measures must be described in the SWPPP and may be enforceable as permit conditions.

If appropriate measures to avoid the likelihood of adverse effects are not available, then the operator must follow Step 5.

## **STEP 5: CONSULTATION WITH FWS TO DETERMINE IF THE ELIGIBILITY REQUIREMENTS CAN BE MET**

Where adverse effects are likely, the operator must contact the FWS. The operator may still be eligible for permit coverage if any likelihood of adverse effects is addressed by meeting at least one of the following criteria, as required by Part I.A.3.e.(1)(b)-(e), if:

- **Criterion B.** The operator's activity has received previous authorization through an earlier Section 7 consultation or issuance of a ESA Section 10 permit (incidental taking permit) and that authorization addressed storm water discharges and/or BMPs to control storm water runoff (e.g., developer included impact of entire project in consultation over a wetlands dredge and fill permit under Section 7 of the ESA).

OR

- **Criterion C.** The operator's activity was previously considered part of a larger, more comprehensive assessment of impacts on endangered and threatened species and/or critical habitat, under Section 7 or Section 10 of the ESA, which accounts for storm water discharges and BMPs to control storm water runoff (e.g., where an area-wide habitat conservation plan and the ESA's Section 10 permit is issued which addresses impacts from construction activities, including those from storm water, or a NEPA review is conducted which incorporates the ESA Section 7 procedures).

OR

- **Criterion D.** Consultation with the USFWS (or NMFS, if appropriate) for the operator's storm water discharges and BMPs to control storm water runoff results in either: 1) FWS/NMFS written concurrence with a finding of no likelihood of adverse effects (see 50 CFR 402.13) or 2) issuance of a biological opinion in which USFWS (or NMFS) finds that the action is not likely to jeopardize the continued existence of listed endangered or threatened species or result in the adverse modification or destruction of critical habitat [see 50 CFR 403.14(h)].

Any terms and conditions developed through consultations to protect listed species and critical habitat must be incorporated into the SWPPP. As noted above, operators must initiate consultation during Step 4 (upon becoming aware that endangered and threatened species are in proximity to the facility).

OR

- **Criterion E.** The operator's activity was considered part of a larger, more comprehensive site-specific assessment of impacts on endangered and threatened species by the owner or other operator of the site when it developed a SWPPP and that permittee met the eligibility requirements stated in Criterion A, B, C, or D [e.g., owner was able to determine there would be no adverse impacts for the project as a whole under Criterion A, so contractor meets the eligibility requirements stated Criterion D]. Utility companies applying for area-wide permit coverage meet the eligibility requirements stated in Criterion D since authorization to discharge is contingent on a principal operator of a construction project having been granted coverage under this or an alternative LPDES permit for the areas of the site where utilities installation activities will occur.

The determination of eligibility of Criteria B - D shall be documented in the facility's SWPPP, and copies of all applicable documents, such as the FWS approval letters, shall be retained with the SWPPP. The operator must comply with any terms and conditions imposed under the all eligibility criteria requirements to ensure that storm water discharges or BMPs used to control storm water runoff are

protective of listed endangered and threatened species and/or critical habitat. Such terms and conditions must be incorporated in the operator's SWPPP.

**If the eligibility requirements of Criteria A - D cannot be met, then the operator may not receive coverage under this permit** and should consider applying to the LDEQ for an individual permit.

This permit does not authorize any "taking" (as defined under Section 9 of the ESA) of endangered or threatened species unless such takes are authorized under Section 7 or 10 the ESA. Operators who believe their construction activities may result in takes of listed endangered and threatened species should be sure to get the necessary coverage for such takes through an individual consultation or Section 10 permit of the ESA.

This permit does not authorize any storm water discharges or BMPs to control storm water runoff that are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the ESA or result in the adverse modification or destruction of designated critical habitat.

## **II. ENDANGERED SPECIES PARISH LIST**

**See:** <https://www.fws.gov/project/louisiana-ecological-services-endangered-species>. Click on "Download a List of Threatened and Endangered Species by Parish in Louisiana", then click on the PDF of "louisiana-ecological-services-field-office-t-and-e-species\_0.pdf". Additionally for a list of migratory bird species protected by the Migratory Bird Treaty Act (MBTA), see: <https://www.fws.gov/media/list-birds-protected-migratory-bird-treaty-act-2023>.

## APPENDIX B

### HISTORIC PROPERTIES GUIDANCE

Operators must determine whether their site's storm water discharge or the construction of best management practices (BMPs) to control such discharges, have potential to affect a property that is either listed or eligible for listing on the National Register of Historic Places.

For existing operators who do not need to construct BMPs for permit coverage, a simple visual inspection may be sufficient to determine whether historic properties are affected. However, for sites which are new storm water dischargers, and for existing sites which are planning to construct BMPs for permit eligibility, operators shall conduct further inquiry to determine whether historic properties may be affected by the storm water discharge or BMPs to control the discharge. In such instances, operators shall first determine whether there are any historic properties or places in the vicinity that are listed on the National Register, or if any are eligible for listing on the register (e.g., they are "eligible for listing").

Due to the large number of entities seeking coverage under this permit and the limited number of personnel available to the State Historic Preservation Officer to respond to inquiries concerning the location of historic properties, it is suggested that operators first access the "National Register of Historic Places" information listed on the National Park Service's web page at the address listed in this Guidance. For projects that will result in permanent discharges that will need a separate LPDES permit (i.e. individual or sanitary), the LDEQ requires the applicant/operator to submit formal site plans to the SHPO for review. The address for the Louisiana State Historic Preservation Officer is also listed below. Operators may also contact city, parish or other local historical societies for assistance, especially when determining if a place or property is eligible for listing on the register.

The following scenarios describe how operators can meet the permit eligibility criteria for protection of historic properties under this permit:

(1) If historic properties are **not identified** in the path of a site's industrial storm water discharge, or where construction activities are planned to install BMPs to control such discharges (e.g., diversion channels or retention ponds), or

if historic properties **are identified**, but it is determined that they will **not be affected** by the discharge, or construction of BMPs to control the discharge,

**then** the operator has met the permit eligibility criteria under Part I.A.3.f.

(2) If historic properties **are identified** in the path of a site's industrial storm water discharge, or where construction activities are planned for the installation of BMPs to control such discharges, and it is determined that **there is the potential** to adversely affect the property, the operator can still meet the permit eligibility criteria if he/she obtains and complies with a written agreement with the State Historic Preservation Officer, which outlines measures that the operator will follow to mitigate or prevent those adverse effects. The contents of such a written agreement must be included in the site's storm water pollution prevention plan.

In situations where an agreement cannot be reached between an applicant and the State Historic Preservation Officer, applicants shall contact the Advisory Council on Historic Preservation listed below in this addendum for assistance.

The term "adverse effects" includes, but is not limited to, damage, deterioration, alteration, or destruction of the historic property or place. LDEQ encourages operators to contact the appropriate State or Tribal Historic Preservation Officer as soon as possible in the event of a potential adverse effect to a historic property.

Operators are reminded that they must comply with all applicable State and local laws concerning the protection of historic properties and places.

### **I. Internet Information on the National Register of Historic Places**

An electronic listing of the "National Register of Historic Places," as maintained by the National Park Service on its National Register Information System (NRIS), can be accessed on the Internet at <https://www.nps.gov/subjects/nationalregister/index.htm>.

### **II. Louisiana State Historic Preservation Officer (LSHPO)**

Louisiana, SHPO, Office of Cultural Development, Post Office Box 44247, Baton Rouge, LA 70804-4247. For questions, contact the Section 106 Review Coordinator, Telephone: (225) 342-8200.

### **III. Louisiana Tribes and Their Historic Preservation Officers**

For questions related to identifying and protecting tribal cultural resources, operators shall contact tribal leaders. A list of Louisiana Tribes and Their Historic Preservation Officers can be found at <https://www.crt.state.la.us/Assets/OCD/archaeology/nativeamericancontacts/NatAmContacts.pdf>.

LDEQ does not have the authority to issue LPDES permits for activities on federal Native American lands.



## **APPENDIX C**

### **OUTSTANDING NATURAL RESOURCE WATERS AND SCENIC STREAMS**

#### **ATCHAFALAYA RIVER BASIN:**

None

#### **BARATARIA BASIN:**

Bayou Des Allemands – from Lac Des Allemands to old US Highway 90

Bayou Des Allemands – from Highway 90 to Lake Salvador

#### **CALCASIEU RIVER BASIN:**

Barnes Creek – from headwaters to Little Barnes Creek (Scenic Stream only)

Barnes Creek – from Little Barnes Creek to Calcasieu River (Scenic Stream only)

Beckwith Creek – from headwaters to West Fork Calcasieu River (Scenic Stream only)

Bundicks Creek – from headwaters to Bundicks Lake (Scenic Stream only)

Bundicks Creek – from Bundicks Lake to Whiskey Chitto Creek (Scenic Stream only)

Calcasieu River – from LA Highway 8 to the Rapides/Allen Parish line

Calcasieu River – from Rapides-Allen Parish line to Marsh Bayou

Calcasieu River – from Marsh Bayou to saltwater barrier

Hickory Branch – from headwaters to West Fork Calcasieu River (Scenic Stream only)

Whiskey Chitto Creek – from the southern boundary of Fort Polk Military Reservation to the Calcasieu River

Six Mile Creek – East and West Forks from the southern boundary of Fort Polk Military Reservation to Whiskey Chitto Creek

Ten Mile Creek – from headwaters to Whiskey Chitto Creek

#### **LAKE PONTCHARTRAIN BASIN:**

Abita River (St. Tammany Parish) – from its headwaters to its entrance into the Bogue Falaya River (Scenic Stream only)

Comite River – from Wilson-Clinton Highway to entrance of White Bayou

Amite River – from Mississippi State Line to LA Highway 37

Blind River – from the Amite River Diversion Canal to the mouth at Lake Maurepas

Blind River – from headwaters to Amite River Diversion Canal

Tickfaw River – from the Mississippi State Line to LA Highway 42

Tangipahoa River – from the Mississippi State Line to I-12

Chappeeela Creek – from Louisiana Highway 1062 to Tangipahoa River

Tchefuncte River – from headwaters to U.S. Highway 190; includes tributaries

Tchefuncte River – from U.S. Highway 190 to Bogue Falaya River, includes tributaries

Tchefuncte River – from Bogue Falaya River to LA Highway 22

Bogue Falaya River – from headwaters to Tchefuncte River

Bayou Lacombe – from headwaters to Interstate Highway 12

Bayou Lacombe – from CDM Ecoregion boundary to Lake Pontchartrain

Bayou Lacombe – from Interstate Highway 12 to US Highway 190

Bayou Lacombe – from US Highway 190 to CDM Ecoregion boundary

Bayou Cane – from the headwaters to U.S. Highway 190

Bayou Cane – from CDM Ecoregion boundary to Lake Pontchartrain

Bayou Labranche – from headwaters to Lake Pontchartrain

Bayou Trepagnier – from Norco to Bayou Labranche

Bayou St. John

Bayou Chaperon

Bashman Bayou – from headwaters to Bayou Dupre

Bayou Dupre – from Lake Borgne Canal to Terre Beau Bayou

Lake Borgne Canal – from the Mississippi River siphon at Violet to Bayou Dupre; also called Violet Canal

Pirogue Bayou – from Bayou Dupre to New Canal

Terre Beau Bayou – from Bayou Dupre to New Canal

Bayou Bienvenue – from Bayou Villere to Lake Borgne

#### **MERMENTAU RIVER BASIN:**

None

#### **VERMILION-TECHE RIVER BASIN:**

Spring Creek – from headwaters to Cocodrie Lake

Bayou Cocodrie – from U.S. Highway 167 to the Bayou Boeuf-Cocodrie Diversion Canal

#### **MISSISSIPPI RIVER BASIN:**

None

#### **OUACHITA RIVER BASIN:**

Bayou Bartholomew – from Arkansas State Line to Ouachita River; also known as Bayou Desiard and Lake Bartholomew

Bayou de L’Outre – from the Arkansas State Line to the Ouachita River

Bayou D’Arbonne – from Bayou D’Arbonne Lake to the Ouachita River

Corney Bayou – from the Arkansas State Line to Corney Lake

Corney Bayou – from Corney Lake to Bayou D’Arbonne Lake

Middle Fork of Bayou D’Arbonne – from headwaters to Bayou D’Arbonne Lake

Little River – From Castor Creek-Dugdemonia River confluence to Bear Creek

Little River – from Bear Creek to Catahoula Lake

Fish Creek – from headwaters to Little River

Trout Creek – from headwaters to Little River

Big Creek – from the headwaters to Little River

Georgetown Reservoir

#### **PEARL RIVER BASIN:**

Holmes Bayou – from Pearl River to West Pearl River

West Pearl River – from headwaters to Holmes Bayou

West Pearl River – from Holmes Bayou to The Rigolets (includes the east and west mouths)

Morgan River – from Porters River to West Pearl River

Wilson Slough and Bradley Slough – from Pearl River to West Pearl River

Pushepatapa Creek – from headwaters and tributaries at Mississippi State Line to Pearl River flood plain

Bogue Chitto River – from Mississippi State Line to Pearl River Navigation Canal

#### **RED RIVER BASIN:**

Bayou Dorcheat – from Arkansas State Line to Lake Bistineau

Black Lake Bayou – from one mile north of Leatherman Creek to Black Lake

Saline Bayou – from headwaters near Arcadia to Saline Lake

Kisatchie Bayou – from its Kisatchie National Forest to Old River

Saline Bayou – from Larto Lake to Saline Lake

Bayou Cocodrie – from Little Cross Bayou to Wild Cow Bayou

#### **SABINE RIVER BASIN:**

Pearl Creek – from headwaters to Sabine River

#### **TERREBONNE BASIN:**

Bayou Penchant – from Bayou Chene to Lake Penchant



**STATE OF LOUISIANA**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
*Office of Environmental Services, Water Permits Division*  
*Post Office Box 4313*  
*Baton Rouge, La 70821-4313*  
*Phone#: (225) 219-9371*

**LPDES NOTICE OF TERMINATION (NOT) OF COVERAGE UNDER  
LPDES GENERAL PERMIT FOR STORMWATER DISCHARGES  
ASSOCIATED WITH CONSTRUCTION ACTIVITY GREATER THAN 5 ACRES**

**SECTION I –PERMIT INFORMATION**

Facility's Storm Water General Permit Authorization  
Number

LAR10 \_\_\_\_\_

Check here if you are no longer the Operator of the  
Facility OR if the facility has been sold

☐

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

Check here if the Storm water discharge associated with  
the construction activity is Being Terminated

☐

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

**SECTION II – FACILITY OPERATOR INFORMATION**

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_

**SECTION III – FACILITY/SITE LOCATION INFORMATION**

Name of Project \_\_\_\_\_

Location of Project \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Parish \_\_\_\_\_

**SECTION IV – CERTIFICATION**

I certify under penalty of law that all storm water discharges associated with construction activity from the portion of the identified facility where I was an operator have ceased or have been eliminated or that I am no longer an operator at the construction site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge storm water associated with construction activity under this general permit, and that discharging pollutants in storm water associated with construction activity to waters of the State is unlawful under the Clean Water Act where the discharge is not authorized by a LPDES permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violation of this permit or the Clean Water Act.

Print Name \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_

**ARMY CORPS OF ENGINEERS****Storm Water Pollution Prevention Plan****Construction General Permit  
Inspection and Maintenance Report Form**

To be completed every 14 days and within 24 hours of a rainfall event of 13 mm (0.5 inch) or more

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

Inspected By: \_\_\_\_\_ Date: \_\_\_\_\_

Inspectors Qualifications: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Days Since Last Rainfall: \_\_\_\_\_ Amount of Last Rainfall \_\_\_\_\_ mm (Inches)

**Structural Controls**

| AREA | DATE SINCE<br>LAST<br>DISTURBED | DATE OF<br>NEXT<br>DISTURBANCE | STABILIZED<br>(yes/no) | STABILIZED<br>WITH | CONDITION |
|------|---------------------------------|--------------------------------|------------------------|--------------------|-----------|
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |

STABILIZATION REQUIRED:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

TO BE PERFORMED BY: \_\_\_\_\_ ON OR BEFORE: \_\_\_\_\_

**ARMY CORPS OF ENGINEERS****Storm Water Pollution Prevention Plan****Construction General Permit  
Inspection and Maintenance Report Form**

To be completed every 14 days and within 24 hours of a rainfall event of 13 mm (0.5 inch) or more

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

Inspected By: \_\_\_\_\_ Date: \_\_\_\_\_

Inspectors Qualifications: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Days Since Last Rainfall: \_\_\_\_\_ Amount of Last Rainfall \_\_\_\_\_ mm (Inches)

**Vegetative Controls**

| AREA | DATE SINCE<br>LAST<br>DISTURBED | DATE OF<br>NEXT<br>DISTURBANCE | STABILIZED<br>(yes/no) | STABILIZED<br>WITH | CONDITION |
|------|---------------------------------|--------------------------------|------------------------|--------------------|-----------|
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |
|      |                                 |                                |                        |                    |           |

STABILIZATION REQUIRED:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

TO BE PERFORMED BY: \_\_\_\_\_ ON OR BEFORE: \_\_\_\_\_

**ARMY CORPS OF ENGINEERS****Storm Water Pollution Prevention Plan****Construction General Permit  
Inspection and Maintenance Report Form**

To be completed every 14 days and within 24 hours of a rainfall event of 13 mm (0.5 inch) or more

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

Inspected By: \_\_\_\_\_ Date: \_\_\_\_\_

Inspectors Qualifications: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Days Since Last Rainfall: \_\_\_\_\_ Amount of Last Rainfall \_\_\_\_\_ mm (Inches)

**Management Controls**

| AREA | ACTIVITY<br>DESCRIPTION | MAINTENACE<br>REQUIRED | STABILIZED<br>(yes/no) | STABILIZED<br>WITH | CONDITION |
|------|-------------------------|------------------------|------------------------|--------------------|-----------|
|      |                         |                        |                        |                    |           |
|      |                         |                        |                        |                    |           |
|      |                         |                        |                        |                    |           |
|      |                         |                        |                        |                    |           |
|      |                         |                        |                        |                    |           |
|      |                         |                        |                        |                    |           |
|      |                         |                        |                        |                    |           |

STABILIZATION REQUIRED:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

TO BE PERFORMED BY: \_\_\_\_\_ ON OR BEFORE: \_\_\_\_\_

Table D-5

## EQUIPMENT MAINTENANCE AND INSPECTION

[illegible]

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 57 23.01 12

TRUCK WASH-DOWN RACKS

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 MEASUREMENT AND PAYMENT
- 1.3 REFERENCES
- 1.4 SUBMITTALS

PART 2 PRODUCTS

- 2.1 SURFACING

PART 3 EXECUTION

- 3.1 TRUCK WASH-DOWN RACK DESIGNS

-- End of Section Table of Contents --



SECTION 01 57 23.01 12

TRUCK WASH-DOWN RACKS

PART 1 GENERAL

1.1 SCOPE

The work specified in this section consists of the Contractor designing, implementing and maintaining approved truck wash-down racks at the construction site and Government furnished stockpile site.

1.2 MEASUREMENT AND PAYMENT

No measurement will be made for temporary truck wash-down racks. Payment for temporary truck wash-down racks will be made at the contract job price for "Truck Wash-Down Racks". Price and payment shall constitute full compensation for furnishing the design, all plant, labor, equipment, mechanical street sweeper(s), and material to complete the setup, maintenance and removal of all truck wash-down racks once project is completed, as specified herein and as shown on drawings.

1.3 REFERENCES

ASTM INTERNATIONAL (ASTM)

|                 |                                                                                                                                            |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| ASTM C88        | (2018) Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate                                      |
| ASTM C117       | (2023) Standard Test Method for Materials Finer than 75-um (No. 200) Sieve in Mineral Aggregates by Washing                                |
| ASTM C131/C131M | (2020) Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine |
| ASTM C136/C136M | (2025) Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates                                                               |
| ASTM D4318      | (2017; E 2018) Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils                                        |

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

Truck Wash-down Rack design; G, EDC

Prior to the commencement of construction operations the Contractor shall submit the truck wash-down rack designs for approval.

PART 2 PRODUCTS

2.1 SURFACING

Surfacing material shall consist of crushed stone in accordance with the following requirements:

Crushed stone from the sources listed in Section 01 10 00 GENERAL PROVISIONS, paragraph entitled STONE SOURCES shall consist of 100 percent stone and shall meet the following requirements when tested in accordance with ASTM C136/C136M and ASTM C117, Procedure B:

| <u>U.S. Sieve</u> | <u>Percent Passing</u> |
|-------------------|------------------------|
| 1-1/2-inch        | 100                    |
| 3/4-inch          | 50 - 100               |
| No. 4             | 35 - 65                |
| No. 40            | 10 - 32                |
| No. 200           | 3 - 15                 |

The fraction of material passing the No. 40 sieve shall conform to the following requirements when tested in accordance with ASTM D4318:

|                         |    |
|-------------------------|----|
| Liquid Limit (Max.)     | 25 |
| Plasticity Index (Max.) | 4  |

Crushed stone shall show an abrasion loss of not more than 40 percent when tested in accordance with ASTM C131/C131M and a soundness loss of not more than 15 percent when subjected to 5 cycles of the magnesium sulfate soundness test in accordance with ASTM C88.

PART 3 EXECUTION

3.1 TRUCK WASH-DOWN RACK DESIGNS

The Contractor shall design, submit to the Contracting Officer for approval, and provide a hard-surfaced truck wash-down rack to be located at the points of egress from the construction sites onto the approved access routes and Highway 61 during hauling and construction operations to eliminate mud and debris transported onto public roads. All trucks utilized for hauling shall be pressure washed on the wash-down rack prior to departing the construction site. The truck wash-down rack shall be sized and located within the rights-of-way for the access road per the Contractor's proposed equipment and construction site layout.

1. The hard surfaced truck wash-down racks shall consist of a Contractor designed steel grated structure, wooden timber crane mats, or an equivalent method.

2. Surfacing meeting the requirements of paragraph SURFACING shall be located as needed between the truck wash-down racks and the access roads during hauling operations to the project fill

area and between the truck wash-down rack(s) and the hard surfaced road(s) leading from the Government furnished stockpile.

3. All truck wash-down rack waste water and sediment shall be intercepted before draining offsite. The water shall be returned to Lake Pontchartrain or the drainage ditch paralleling the access road to the Highway 61 stockpile and the sediment removed and disposed of within the nearest wave berm repair limits or the Highway 61 stockpile area.

4. Mechanical street sweeper shall be onsite at all times to clean the streets. Failure of the Contractor to comply with these requirements shall result in the Contractor stopping all hauling operations until the streets are cleaned of debris.

5. Upon completion of the hauling operation, the Contractor shall remove the truck wash-down racks and all appurtenances from the construction sites.

6. The area where the truck wash-down rack was located shall be restored to the condition or better than prior to construction activities. All aggregate placed between the wash-down rack and the roadway shall remain .

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 78 02.00 10

CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.1 MEASUREMENT AND PAYMENT

1.2 SUBMITTALS

1.3 PROJECT RECORD DOCUMENTS

1.3.1 "As-Built" Drawings

1.3.1.1 Working "As-Built" and Final "As-Built" Drawings

1.3.1.2 Drawing Preparation

1.3.1.3 Final "As-Built" Drawings

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section Table of Contents --

SECTION 01 78 02.00 10

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 must be included in the applicable contract unit or job prices contained in the Bidding Schedule.

1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following must be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

"As-Built" Drawings; G, DO

The Contractor must submit full-scale drawings showing final "As-Built" conditions of the project. The final (red-lined) "As-Built" drawings must consist of 3 sets (an original and two color copies) and 3 electronic (.PDF) copies on CD-R of the approved working as-built's.

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 Working "As-Built" and Final "As-Built" Drawings

The Contractor must revise 4 full size 22"x34" 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 must be kept current on a weekly basis and at least one set must 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 must 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 must show, but must 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. Total quantity (in tons) of stone placed, broken out by spur and jetty construction, and distinguished by dates of placement.

c. Color coded plan view, depicting final alignment and reaches of construction accomplishment.

d. Final cross sections of completed stone placement overlayed with mandatory construction template.

e. Geotextile Fabric Placement: total yardage separator placed.

f. Vertical control utilized including any applicable conversions.

g. Changes or modifications which result from the final inspection.

h. Modifications will be shown in accordance with the following procedures.

(1) Directions in the modification for posting descriptive changes must be followed.

(2) A Modification Triangle must be placed at the location of each deletion.

(3) For new details or sections which are added to a drawing, a Modification Triangle must be placed by the detail or section title.

(4) For minor changes, a Modification Triangle must be placed by the area changed on the drawing (each location).

(5) For major changes to a drawing, a Modification Triangle must be placed by the title of the affected plan, section, or detail at each location.

(6) For changes to schedules or drawings, a Modification Triangle must be placed either by the schedule heading or by the change in the schedule.

(7) The Modification Triangle size must be 1/2 inch on a side unless the area where the triangle is to be placed is crowded. Smaller size triangle must be used for crowded areas.

#### 1.3.1.2 Drawing Preparation

The "As-Built" drawings must 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. These working

"As-Built" marked prints must be neat, legible and accurate. These drawings are part of the permanent records of this project and must be returned to the Contracting Officer after approval by the Government. Any drawings damaged or lost by the Contractor must be satisfactorily replaced by the Contractor at no expense to the Government.

#### 1.3.1.3 Final "As-Built" Drawings

When final revisions have been completed, the cover sheet drawing must show the wording in red print "RECORD DRAWING AS-BUILT" followed by the name of the Contractor and the contract number in letters at least 1/2 inch high. All other contract drawings must be marked in red print either "AS-Built" drawing denoting no revisions on the sheet or "Revised As-Built" denoting one or more revisions. Original contract drawings must be dated in the revision block. Within 20 days after Government approval of all of the working as-built drawings, the Contractor must prepare the final "As-Built" drawings for that phase of work and submit to the Government for review and approval. The Government will promptly return one set of prints annotated with any necessary corrections. Within 10 days the Contractor must revise the "As-Built" drawings accordingly at no additional cost and submit one set of final "As-Built" prints, two color copies, and three PDF files on CD-R for the completed phase of work to the Government. Within 10 day of substantial completion of all phases of work, the Contractor must submit the final "As-Built" drawing package for the entire project. The submittal must consist of three sets of the approved working "As-Built" drawings (one original and two color copies) and three electronic (.PDF) copies on CD-R. Paper prints 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 must be cause for withholding any payment due the Contractor under this contract. Approval and acceptance of final "As-Built" drawings must be accomplished before final payment is made to the Contractor.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 02 - EXISTING CONDITIONS

SECTION 02 21 10.00 12

SURVEYS

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 MEASUREMENT AND PAYMENT
- 1.3 SUBMITTALS
- 1.4 QUALITY CONTROL
- 1.5 PROFESSIONAL CERTIFICATION

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

- 3.1 COMMENCEMENT, PROSECUTION, AND COMPLETION
  - 3.1.1 General
  - 3.1.2 Datums & Benchmarks
  - 3.1.3 Survey Data
- 3.2 PRE-CONSTRUCTION STONE DIKE CAP CROSS SECTION SURVEYS
- 3.3 POST-CONSTRUCTION STONE DIKE CAP SURVEYS
- 3.4 PRE-CONSTRUCTION WAVE BERM REPAIR CROSS SECTION SURVEYS
- 3.5 POST-CONSTRUCTION WAVE BERM REPAIR SURVEYS

-- End of Section Table of Contents --



SECTION 02 21 10.00 12

SURVEYS

PART 1 GENERAL

1.1 SCOPE

The work provided for herein consists of furnishing all plant, labor, equipment, and materials, and performing all operations necessary for surveying as specified herein and as indicated on the contract drawings.

1.2 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for surveys as specified herein. Payment for pre-construction and post-construction surveys for the stone dike cap will be included in the contract unit price per ton for "Graded Stone - Dike Cap" or "Graded Stone - Cap OW1", if Option Work 1 (OW1) is exercised. Payment for pre-construction and post-construction surveys for wave berm repairs will be included in the contract unit price per cubic yard for "Embankment-Commercial"; "Embankment-Stockpile"; or "Embankment-Commercial-OW1", if Option Work 1 (OW1) is exercised.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following must be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Pre-Construction Stone Dike Cap Cross Section Surveys; G, ED

Post-Construction Stone Dike Cap Surveys; G, ED

Pre-Construction Wave Berm Repair Cross Section Surveys; G, ED

Post-Construction Wave Berm Repair Surveys; G, ED

SD-05 Design Data

Survey Data; G, ED

1.4 QUALITY CONTROL

The Contractor must 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 provision in Section 00 72 00 GENERAL CONDITIONS entitled LAYOUT OF WORK.

(2) Reporting. The original and two (2) copies of these reports and tests as well as the records of corrective action taken must be furnished the Government daily. The report must 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 must be as prescribed in Section 01 45 04.00 10 CONTRACTOR QUALITY CONTROL.

#### 1.5 PROFESSIONAL CERTIFICATION

All surveys, taken by the Contractor must be performed in the presence of the Contracting Officer's Representative. All surveys must be performed under the direction of and certified by a Professional Land Surveyor currently licensed by a state of the Louisiana. In addition, the surveyor must prove that he/she has at least three (3) years of experience.

#### PART 2 PRODUCTS (Not Used)

#### PART 3 EXECUTION

##### 3.1 COMMENCEMENT, PROSECUTION, AND COMPLETION

###### 3.1.1 General

All surveys submitted by the Contractor, as specified herein, must meet the minimum requirements of the USACE document "USACE New Orleans District Guide for Minimum Survey Standards". The primary, secondary, and temporary benchmarks used must be listed on each submitted survey. The survey information that the Contractor uploads to the Safe File Exchange (SAFE) website must be in the ".EM" format as specified in the USACE document "Engineering Manual File Format Specification Version: EM09".

###### 3.1.2 Datums & Benchmarks

The project benchmarks, vertical datum, and horizontal datum are provided in the contract drawings (see SHEET IDENTIFICATION Nos.G-002 and G-003). The project benchmarks, vertical datum, and horizontal datum must be used for all Contractor provided surveys.

###### 3.1.3 Survey Data

The Contractor must submit all survey data and plotted cross sections on a compact disk (CD) with each required survey submittal as stated in this section.

##### 3.2 PRE-CONSTRUCTION STONE DIKE CAP CROSS SECTION SURVEYS

Prior to placement of graded stone for the stone dike cap, the Contractor must perform "Pre-Construction Stone Dike Cap Cross Section Surveys" for all four (4) reaches of work. "Pre-Construction Stone Dike Cap Cross Sections Surveys" must be taken along the stone dike centerline alignment(s) shown on the drawings for each reach. Cross sections must be taken perpendicular to the stone dike centerline alignment(s) and must extend 20 foot in the positive direction (right/land side) and 40 foot in the negative direction (left/lake side) of the stone dike centerline alignment(s). The plotted cross sections shall indicate the stone dike alignment stationing, starting at Station 0+00, with cross sections taken at 100 foot intervals and at each P.I's. Survey shots must be taken every 5 feet, at a minimum, and at all abrupt grade changes.

### 3.3 POST-CONSTRUCTION STONE DIKE CAP SURVEYS

(1) The Contractor must perform "Post-Construction Stone Dike Cap Surveys" once construction of the stone dike cap is complete. Cross sections must be taken at intervals and stationing and requirements corresponding to the Contractor provided "Pre-Construction Stone Dike Cap Cross Section Surveys". Compliance surveys must include a stone dike centerline profile with shots taken at a maximum of 10 foot intervals for each Reach. Surveyed cross sections must be plotted to include the theoretical stone dike template and allowable grade tolerances superimposed thereon. At no additional cost to the Government, the Contractor Officer's Representative can require the Contractor to provide, plot, and submit additional dike compliance surveys at any location/stationing in the event upon visual inspection, or review of the centerline profile, it is not in compliance with the required lines and grades in accordance with the theoretical stone dike cap template shown in the drawings.

(2) The Government will conduct compliance surveys in accordance with Section 00 70 00 CONDITIONS OF THE CONTRACT paragraph QUANTITY SURVEYS - ALT 1, to confirm the Contractor's submitted "Post-Construction Stone Dike Cap Surveys".

### 3.4 PRE-CONSTRUCTION WAVE BERM REPAIR CROSS SECTION SURVEYS

Prior to the construction of any wave berm repairs, the Contractor must perform "Pre-Construction Wave Berm Repair Cross Section Surveys" for all repair sections required for each Reach. "Pre-Construction Wave Berm Repair Cross Sections Surveys" must be taken along the stone dike centerline alignment(s) shown on the contract drawings for each Reach's repair sections indicated on the drawings. Cross sections must be taken perpendicular to the stone dike centerline alignment(s) and must extend 80 foot in the positive direction (right/land side) and 40 foot in the negative direction (left/lake side) of the stone dike centerline alignment(s). The plotted cross sections will indicate the respective stone dike alignment stationing, starting Station, ending Station, with cross sections taken at 25 foot intervals, and at each P.I's. Survey shots must be taken every 10 feet, at a minimum, and at all abrupt grade changes.

### 3.5 POST-CONSTRUCTION WAVE BERM REPAIR SURVEYS

(1) The Contractor must perform "Post-Construction Wave Berm Repair Surveys" once construction of a wave berm repair section is complete. Cross sections will be taken at intervals and stationing and requirements corresponding to the Contractor provided "Pre-Construction Wave Berm Repair Cross Section Surveys". Surveyed cross sections must be plotted to include the theoretical berm repair typical section(s) and allowable grade tolerances superimposed thereon. At no additional cost to the Government, the Contractor Officer's Representative can require the Contractor to provide, plot, and submit additional dike compliance surveys at any location/stationing in the event upon visual inspection the repair is not in compliance with the required lines and grades in accordance with the theoretical wave berm typical sections shown in the contract drawings.

(2) The Government will conduct compliance surveys in accordance with Section 00 70 00 CONDITIONS OF THE CONTRACT paragraph QUANTITY SURVEYS - ALT 1, to confirm the Contractor's submitted "Post-Construction Stone Dike Cap Surveys".

LPV Risk Reduction Repairs Reach - 1, 2, 3 and 4  
ED 24-006

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 02 - EXISTING CONDITIONS

SECTION 02 41 00

DEMOLITION

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 MEASUREMENT AND PAYMENT
- 1.3 REFERENCES
- 1.4 SUBMITTALS
- 1.5 REGULATORY AND SAFETY REQUIREMENTS
  - 1.5.1 Notifications
    - 1.5.1.1 General Requirements
- 1.6 EXISTING CONDITIONS DOCUMENTATION
- 1.7 REQUIRED DATA
  - 1.7.1 Plan and Procedures
- 1.8 EXISTING CONSTRUCTION
- 1.9 ENVIRONMENTAL PROTECTION
- 1.10 USE OF EXPLOSIVES

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

- 3.1 EXISTING STRUCTURE TO BE DEMOLISHED

-- End of Section Table of Contents --

SECTION 02 41 00

DEMOLITION

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all equipment, material and labor required to perform all operations necessary for demolition of existing armor protection at the location shown on the contract drawings and as specified herein.

1.2 MEASUREMENT AND PAYMENT

No measurement will be made for demolition. Payment will be made at the contract job price for "Demolition". Price and payment will constitute full compensation for furnishing of all plant, labor, equipment and materials for completion of demolition; as specified herein and as shown on the drawings.

1.3 REFERENCES

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

AMERICAN SOCIETY OF SAFETY PROFESSIONALS (ASSP)

ANSI A10.6 (2006; R 2016) Safety Requirements for  
Demolition Operations

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2024) Safety -- Safety and Occupational  
Health (SOH) Requirements

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 must be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Demolition Plan; G, EDC

Proposed demolition, and removal procedures for approval before work is started.

Notifications; G

Existing Conditions Documentation

## 1.5 REGULATORY AND SAFETY REQUIREMENTS

Comply with federal, state, and local hauling and disposal regulations. In addition to the requirements of the "Contract Clauses," conform to the safety requirements contained in ANSI A10.6.

### 1.5.1 Notifications

#### 1.5.1.1 General Requirements

Furnish timely notification of demolition work 14 days before conduction demolition activities.

## 1.6 EXISTING CONDITIONS DOCUMENTATION

Before beginning any demolition work, survey the site and examine the drawings and specifications to determine the extent of the work. Record existing conditions in the presence of the Contracting Officer showing the condition. Photographs sized 4 inch will be acceptable as a record of existing conditions.

## 1.7 REQUIRED DATA

Prepare and submit a detailed Demolition Plan 30 days prior to commencing demolition work. Include in the plan: tools, equipment, and procedures necessary for careful removal and disposition of materials specified to be demolished while protecting existing property which is to remain undisturbed. The submittal must include general layout drawings, equipment specifications, and all work platforms necessary for safe demolition and removal of materials. Contractor must provide a schedule showing coordination with other work in progress. Provide procedures for safe conduct of the work in accordance with EM 385-1-1. Demolition Plan must be approved by Contracting Officer prior commencement of work.

### 1.7.1 Plan and Procedures

The Contractor must submit his/her plan to the Contracting Officer for approval. The plan must include procedures to accomplish the following:

- 1) Schedule for completion of all demolition work specified herein, and shown on the drawings.
- 2) Plans for dismantling, removing and disposing of the existing structures including procedures and methods.
- 3) Methods of disposal.
- 4) Proposals for control of environmental pollution.
- 5) Safety precautions to protect personnel and property.
- 6) All other associated work.

## 1.8 EXISTING CONSTRUCTION

Do not disturb existing construction beyond the extent indicated or necessary for installation of new construction.

LPV Risk Reduction Repairs Reach - 1, 2, 3 and 4  
ED 24-006

#### 1.9 ENVIRONMENTAL PROTECTION

Environmental compliance must be in accordance with Section 01 57 20.01 12  
ENVIRONMENTAL PROTECTION.

#### 1.10 USE OF EXPLOSIVES

Use of explosives will not be permitted.

#### PART 2 PRODUCTS (Not Used)

#### PART 3 EXECUTION

#### 3.1 EXISTING STRUCTURE TO BE DEMOLISHED

Demolish the existing articulated concrete blocks (ACB) between Reach-1  
stone dike centerline station 79+00 to 80+00. The ACB is approximately 100  
foot in length and 36 foot in width and 3 to 4 inches thick. Demolished  
materials must be disposed at the disposal location in accordance with  
Section 31 11 00.00 12 CLEARING AND GRUBBING.

-- End of Section --



SECTION TABLE OF CONTENTS

DIVISION 31 - EARTHWORK

SECTION 31 05 19.04 12

SEPARATOR GEOTEXTILE

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 MEASUREMENT AND PAYMENT
- 1.3 REFERENCES
- 1.4 SUBMITTALS
- 1.5 QUALITY CONTROL
  - 1.5.1 General
  - 1.5.2 Reporting
- 1.6 SHIPMENT AND STORAGE

PART 2 PRODUCTS

- 2.1 GEOTEXTILE

PART 3 EXECUTION

- 3.1 GEOTEXTILE INSTALLATION
  - 3.1.1 Key-In
- 3.2 SEAMS AND LAPS
  - 3.2.1 Seams
  - 3.2.2 Laps

-- End of Section Table of Contents --

SECTION 31 05 19.04 12

SEPARATOR GEOTEXTILE

PART 1 GENERAL

1.1 SCOPE

The work provided for herein consists of furnishing all plant, labor, material, equipment; performing all operations required for furnishing, hauling, placing the separator geotextile including geotextile key-in, and maintaining the geotextiles until placement of the graded stone splash pad is completed and accepted.

1.2 MEASUREMENT AND PAYMENT

Geotextile will be measured in place to the nearest square yard as delineated on the drawings. Overlaps will be measured as a single layer. Payment will be made at the contract unit price per square yard for "Separator Geotextile" or "Separator Geotextile - OW1", if Option Work 1 (OW1) is exercised. Price and payment will include full compensation for providing all plant, equipment, labor and materials for placement of the geotextile including geotextile key-in, cutting, sewing, testing, maintenance, taking corrective measures to fix deficiencies, and other work incidental thereto, as specified herein and as shown on the drawings. No payment will be made for geotextile that is rejected or damaged due to Contractor fault or negligence.

1.3 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.

ASTM INTERNATIONAL (ASTM)

|                   |                                                                                    |
|-------------------|------------------------------------------------------------------------------------|
| ASTM D883         | (2020a) Standard Terminology Relating to Plastics                                  |
| ASTM D4491/D4491M | (2017) Standard Test Methods for Water Permeability of Geotextiles by Permittivity |
| ASTM D4632/D4632M | (2015a) Grab Breaking Load and Elongation of Geotextiles                           |
| ASTM D4751        | (2020) Standard Test Method for Determining Apparent Opening Size of a Geotextile  |
| ASTM D4884/D4884M | (2014a) Strength of Sewn or Thermally Bonded Seams of Geotextiles                  |

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. The

following must be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Work Plan

The Contractor must submit a Work Plan to the Contracting Officer. The plan must include the following information:

- a. The dimensions of the geotextile panels, whether the geotextile will be seamed, lapped, or both. Distance between laps, if applicable.
- b. A detailed description of how the geotextile will be placed and stretched.

SD-04 Samples

Geotextile

A 5-foot by 5-foot sample of each geotextile that the Contractor plans to use must accompany the certificate. If seams are to be used, then an additional 5-foot by 5-foot sample of each geotextile containing a sample seam in the center of the geotextile sample must be submitted with the certificate. Geotextiles must not be delivered to the project site until the Contracting Officer approves their certificates.

SD-07 Certificates

Geotextile; G

Contractor must submit the geotextile manufacturer's certification of compliance. All brands of geotextile and all seams that are used in construction must be accepted on the following basis. At least 30 days prior to installation, the Contractor must furnish to the Contracting Officer, in duplicate, a mill certificate or affidavit signed by a legally authorized official from the company manufacturing the geotextile. The certificate must contain the signer's title, name and address of the Contractor, contract number, and project name and location. The mill certificate or affidavit must attest that the geotextile meets the chemical, physical, and manufacturing requirements stated in this specification and that the seams used meet the seam requirements.

1.5 QUALITY CONTROL

1.5.1 General

The Contractor must establish and maintain quality control for the geotextile and placement to assure compliance with contract requirements, and maintain records of his quality control for all construction operations including but not limited to the following:

- (1) Installation Equipment. Type, size and suitability for construction of the prescribed work.

(2) Geotextile Submittals. Geotextile samples, manufacturer's certification of compliance, and Work Plan.

(3) Construction. Lay-out, geotextile inspection, and stone placement above the geotextile.

#### 1.5.2 Reporting

The original and two copies of these records, as well as the records of corrective action taken, must be furnished the Government daily. Format of report must be as prescribed in the Section 01 45 04.00 12 CONTRACTOR QUALITY CONTROL.

#### 1.6 SHIPMENT AND STORAGE

Geotextile must be shipped and maintained in a heavy-duty protective cover until it is placed. During all periods of shipment and storage, the geotextile must be protected from direct sunlight, ultra-violet rays, temperatures greater than 140 degrees Fahrenheit, mud, dirt, and other contaminants. Geotextiles delivered to the project site must be clearly marked to show the brand name, type of geotextile, tensile strength, location and date of manufacture, and its length (machine direction) and width.

### PART 2 PRODUCTS

#### 2.1 GEOTEXTILE

The geotextile must be a woven pervious sheet made with plastic yarn as defined by ASTM D883. The geotextiles must meet the requirements listed in Table 1. Geotextile fibers must consist of a long-chain synthetic polymer composed of at least 85 percent by weight of propylene, ethylene, ester, amide, or vinylidene-chloride, and must contain stabilizers and/or inhibitors added to the base plastic, if necessary, to make the filaments resistant to deterioration due to ultra-violet exposure. The edges of the geotextile must be selvaged.

TABLE 1  
REQUIREMENTS\* FOR SEPARATOR GEOTEXTILE

| <u>PROPERTY</u>             | <u>TEST PROCEDURE</u> | <u>ACCEPTABLE VALUES</u>                                                                        |
|-----------------------------|-----------------------|-------------------------------------------------------------------------------------------------|
| Grab Breaking Load          | ASTM D4632/D4632M     | 300 pounds minimum in any principal direction                                                   |
| Seam Strength (**)          | ASTM D4884/D4884M     | 270 pounds per inch minimum                                                                     |
| Elongation at Break         | ASTM D4632/D4632M     | 15 percent maximum in any principle direction                                                   |
| Apparent Opening Size (AOS) | ASTM D4751            | No finer than the U.S. Standard Sieve No. 70 and no coarser than the U.S. Standard Sieve No. 30 |
| Permittivity                | ASTM D4491/D4491M     | 0.35 per second minimum                                                                         |

TABLE 1  
REQUIREMENTS\* FOR SEPARATOR GEOTEXTILE

(\*) Value represents minimum average roll value of new geotextile received from the manufacturer or distributor

(\*\*) All of the samples must yield test values that are greater than the minimum value that is specified.

### PART 3 EXECUTION

#### 3.1 GEOTEXTILE INSTALLATION

The geotextile must be placed in the manner and at the locations shown on the drawings. The Contractor must prepare the surface to receive the geotextile to insure that the surface is relatively smooth and free of obstructions, depressions, debris, soft or low density pockets of material, or stone which could damage the geotextile during placement. Prior to placement of any geotextile, the footprint to receive geotextile must be cleared and grubbed in accordance with Section 31 11 00.00 12 CLEARING AND GRUBBING. At the time of installation, the geotextile must be rejected if it has defects, rips, holes, flaws, deterioration or damage incurred during manufacture, transportation or storage. The geotextile must be protected at all times during construction to insure that the geotextile's original chemical and physical properties are not changed. The work must be scheduled so that all of the geotextile that is placed is covered with a layer of the specified material by the end of each workday. Failure to comply must require replacement of geotextile. All wrinkles and sags must be stretched out immediately before stone is placed on the geotextile. The geotextile must be protected from damage during placement of stone. This must be accomplished by limiting the height of drop to less than 1 foot, or the water surface, whichever is greater. In the event that this damages the geotextile, the stone must be placed directly on the geotextile with zero height of drop. Before placement of stone, the Contractor must demonstrate that the placement technique will not damage the geotextile. The Contractor at no additional cost to the Government must replace any geotextile that is rejected or damaged.

##### 3.1.1 Key-In

Geotextile must be key-in on the land side in accordance with the detail provided as shown on the drawings.

#### 3.2 SEAMS AND LAPS

Seams or laps may be utilized to produce panels of geotextile large enough to cover the area shown on the drawings. Seams or laps must be perpendicular to the centerline of the structure. Seams or laps must not run parallel with the direction of the centerline.

##### 3.2.1 Seams

All seams must be sewn using thread meeting the requirements for plastic yarn specified in paragraph GEOTEXTILE. The sheets of geotextile must be sewn at the factory or other approved location. Seam strengths must meet the requirements of Table 1.

LPV Risk Reduction Repairs Reach - 1, 2, 3 and 4  
ED 24-006

### 3.2.2 Laps

Geotextile panels placed along the dike centerline must be overlapped a minimum of 2 feet with the upstream panel on top of the downstream panel.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 31 - EARTHWORK

SECTION 31 11 00.00 12

CLEARING AND GRUBBING

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 MEASUREMENT AND PAYMENT
- 1.3 SUBMITTALS
- 1.4 QUALITY CONTROL
- 1.5 CLEARING AND GRUBBING PLAN

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

- 3.1 GENERAL REQUIREMENTS
- 3.2 CLEARING AND GRUBBING LIMITS
- 3.3 CLEARING
- 3.4 GRUBBING
- 3.5 DISPOSAL OF CLEARED AND GRUBBED MATERIALS

-- End of Section Table of Contents --

SECTION 31 11 00.00 12

CLEARING AND GRUBBING

PART 1 GENERAL

1.1 SCOPE

Work covered by this section consists of the clearing and grubbing requirements for the preparation of the wave berm repair sections to receive embankment.

1.2 MEASUREMENT AND PAYMENT

Measurement for clearing and grubbing will be made by the acre. Acreage will be determined from surface areas computed from the theoretical gross cross section of embankment cleared and grubbed. Payment for clearing and grubbing will be made at the contract unit price for "Clearing and Grubbing" or "Clearing and Grubbing - OW1", if Option Work 1 (OW1) is exercised. Price and payment will constitute full compensation for furnishing all plant, labor, material, equipment for clearing and grubbing including disposal of resulting materials, and all work incidental thereto, as specified herein and as shown on the drawings.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following must be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Clearing and Grubbing Plan; G, CD

Disposal Location; G, CD

1.4 QUALITY CONTROL

The Contractor must establish and maintain quality control for clearing and grubbing operations to assure compliance with contract requirements, and maintain records of his/her quality control for all construction operations including but not limited to the following:

(1) Clearing. Station to station limits transverse clearing limits from applicable centerline; percentages of area complete; type of material.

(2) Grubbing. Station to station limits, transverse grubbing limits from applicable centerline; percentage of area complete; type of material.

(3) Disposition of Cleared and Grubbed Materials. Method and location of disposition; damage to timber or improvements which are not to be cleared.



The original and two copies of these records of inspections and tests, as well as the records of corrective action taken, must be furnished the Government daily. Format of the report must be as prescribed in Section 01 45 04.00 10 CONTRACTOR QUALITY CONTROL.

#### 1.5 CLEARING AND GRUBBING PLAN

The Contractor must submit his/her Clearing and Grubbing Plan showing the proposed methods of construction. Methods of construction must include the methods for clearing, grubbing, disposal, and the protection of existing utilities to be used to perform the work. The plan must be submitted for approval by the Contracting Officer, allowing 30 days for review. Clearing and grubbing operations must not begin until the Clearing and Grubbing Plan is approved. The plan must include but not be limited to:

- (1) A complete listing of equipment to be used at the site; materials handling and transportation; and hauling of all work related materials
- (2) The Contractor's proposed sequence of clearing and grubbing operations.
- (3) Temporary stockpiling plan.
- (4) Plans for transportation and/or haul to each Marine Access Points.
- (5) Proposals for implementing Section 01 57 20.00 12 ENVIRONMENTAL PROTECTION.
- (6) Provisions for compliance with permits and regulations.

The Clearing and Grubbing Plan must include a detailed explanation of the methods of construction planned for use in specific areas as applicable or as required by the Contracting Officer. The Contractor must revise and resubmit his/her Clearing and Grubbing Plan when the Contractor's construction operation changes from the originally submitted plan or as required by the Contracting Officer

#### PART 2 PRODUCTS (Not Used)

#### PART 3 EXECUTION

##### 3.1 GENERAL REQUIREMENTS

Clearing and grubbing work must be completed in advance of placement of embankment for wave berm repairs and placement of geotextile for splash pad construction. If regrowth of vegetation occurs after clearing and grubbing, but before the placement of embankment, the Contractor must clear and grub the area again at no additional cost to the Government.

##### 3.2 CLEARING AND GRUBBING LIMITS

The Contractor must clear and grub the areas/sections that are indicated to receive wave berm repairs on the contract drawings and areas where the geotextile is to be placed for the splash pad.

##### 3.3 CLEARING

Clearing consist of the complete removal of all above the ground surface

vegetation, trash, drift wood, down timber snags, small stones/rocks, and similar debris that impacts the placement of embankment.

### 3.4 GRUBBING

Grubbing consist of the removal of vegetation roots to a depth of four (4) inches below the existing grade.

### 3.5 DISPOSAL OF CLEARED AND GRUBBED MATERIALS

The Contractor must remove all the debris from the site of the work at a Contractor provided off site disposal location. The Contractor must submit for Government approval the Contractor's intend location for disposal. Such disposal must comply with all applicable Federal, State, and Local laws. The Contractor must, at his/her option, either retain for his/her own use or dispose of by sale or otherwise, such materials of value. The Government is not responsible for the protection and safekeeping of any materials retained by the Contractor. Such materials must be removed from the site of the work before the date of completion of the work. If debris from clearing operations is placed on adjacent property, the Contractor must obtain, without cost to the Government, additional right-of-way for such purposes. Such material must be so placed as not to interfere with roads, drainage or other improvements and in such a manner as to eliminate the possibility of its entering into channels, ditches, or streams. The Contractor must submit written evidence to the Contracting Officer that he/she has obtained from the property owner permission for disposal of material on the owner's property. The written evidence must consist of an authenticated copy of the conveyance under which the Contractor acquired the property rights and access thereto, prepared and executed in accordance with the laws of the State of Louisiana. If temporary rights are obtained by the Contractor, then the period of time must coincide with the requirements in the Contract provision in Section 00 73 00 SUPPLEMENTARY CONDITIONS entitled COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK, plus any extension authorized under the Contract provision in Section 00 72 00 GENERAL CONDITIONS entitled DEFAULT (FIXED-PRICE CONSTRUCTION), subparagraph (b) (1).

Pre-approved disposal sites in the vicinity are as follows:

River Birch Landfill  
2000 Hwy. 90  
Avondale, LA 70094

Jefferson Parish Landfill  
5800 Hwy. 90  
Avondale, LA 70094

Industrial Pipe-Plaquemines Parish  
11266 Highway 23  
Belle Chasse, LA 70037

Superior Concrete Crushing, Orleans Parish  
11005 Almonaster Ave.  
New Orleans, LA

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 31 - EARTHWORK

SECTION 31 23 00.00 12

EXCAVATION

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 MEASUREMENT AND PAYMENT
- 1.3 REFERENCES
- 1.4 QUALITY CONTROL

PART 2 PRODUCTS

PART 3 EXECUTION

- 3.1 EXCAVATION IN BORROW AREAS
  - 3.1.1 General
  - 3.1.2 Government Furnished Stockpile
    - 3.1.2.1 Criteria
  - 3.1.3 Borrow Areas with High Salinity Content Soils
- 3.2 EXCAVATION IN OTHER AREAS
  - 3.2.1 General
  - 3.2.2 Time Extensions
  - 3.2.3 Approval
  - 3.2.4 Submittal Package Requirements
  - 3.2.5 Submittal Package Requirements in Detail
    - 3.2.5.1 Right of Entry
    - 3.2.5.2 Maps
    - 3.2.5.3 Wetlands Determination
    - 3.2.5.4 Coastal Zone Management (CZM)
    - 3.2.5.5 Threatened & Endangered Species (T&E)
    - 3.2.5.6 Cultural Resource Report
    - 3.2.5.7 Environmental Site Assessment
    - 3.2.5.8 Soil Boring Analysis
    - 3.2.5.9 Laboratory Tests
    - 3.2.5.10 Test Procedures for Borings
    - 3.2.5.11 Borrow Area Agronomy Report
    - 3.2.5.12 Borrow Area Management Plan
    - 3.2.5.13 Mitigation Requirements
    - 3.2.5.14 Zoning Classification
    - 3.2.5.15 Environmental Protection Plan
  - 3.2.6 Government Performed Environmental Assessment
- 3.3 TRUCK HAULING
- 3.4 BARGING
- 3.5 DISPOSITION OF MATERIALS

-- End of Section Table of Contents --

SECTION 31 23 00.00 12

EXCAVATION

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all plant, labor, equipment, and materials, and all other excavation incidental to the construction of embankments as specified herein or as shown on the drawings.

1.2 MEASUREMENT AND PAYMENT

No separate measurement or payment will be made for excavation; as specified herein and as shown on the drawings. Payment will be included in the contract price for "Embankment-Commercial"; "Embankment-Stockpile"; or "Embankment-Commercial-OW1", if Option Work 1 (OW1) is exercised.

1.3 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.

ASTM INTERNATIONAL (ASTM)

|            |                                                                                                                                             |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| ASTM D1140 | (2017) Standard Test Methods for Determining the Amount of Material Finer than 75-µm (No. 200) Sieve in Soils by Washing                    |
| ASTM D2487 | (2017; R 2025) Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)                  |
| ASTM D2974 | (2020; E 2020) Moisture, Ash, and Organic Matter of Peat and Other Organic Soils                                                            |
| ASTM D4318 | (2017; E 2018) Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils                                         |
| ASTM E1527 | Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process                                         |
| ASTM E2247 | (2005) Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property |

#### 1.4 QUALITY CONTROL

The Contractor shall establish and maintain quality control for excavation operations to assure compliance with contract requirements, and maintain records of its quality control for all construction operations including but not limited to the following:

- (1) Disposition of Materials. Testing Program, Location of tested materials (station and lift), Applicable Compaction Curves.
- (2) Soil Total Salinity Limits. Salinity testing as determined by USACE MVN Soil Electronic Conductivity (EC) and Total Soluble Salt Analysis, specified in the "New Orleans Construction Control Manual.
- (3) Quantity Surveys. Accuracy and timeliness.

The original and two (2) copies of these records of inspections and tests, as well as the records of corrective action taken, shall be furnished the Government daily. Format of the report shall be as prescribed in Section 01 45 04.00 10 CONTRACTOR QUALITY CONTROL.

#### PART 2 PRODUCTS

Not Used.

#### PART 3 EXECUTION

##### 3.1 EXCAVATION IN BORROW AREAS

###### 3.1.1 General

The Contractor shall submit a written statement to the Government within fifteen (10) days after contract award on their intention to provide a commercial borrow source after the Government furnished stockpile area is depleted. The statement shall include the proposed site name, a description of the location, and a vicinity map. The Contractor shall ensure that any commercial borrow area submitted has all applicable environmental documentation acquired, current and up-to-date, as described in paragraph "Submittal Package Requirements In Detail". All costs arising or growing out of the use of commercial borrow areas shall be borne by the Contractor. The Contractor shall submit the information described in the paragraph "Submittal Package Requirements in Detail" to the Contracting Officer for review and approval. The Contractor shall comply with the requirements of Section 01 10 00 GENERAL PROVISIONS, provision "Rights of Way", subparagraph b.

###### 3.1.2 Government Furnished Stockpile

The rights-of-way for constructing the work have been furnished, without cost, to the Contractor at locations specified herein and/or shown on the drawings. Stockpile investigations were performed using industry standard techniques. The results are shown on the drawings in the form of plotted logs and maps indicating the location of the investigations.

###### 3.1.2.1 Criteria

Borrow areas shall conform to the requirements prescribed herein and as shown on the drawings. The borrow areas used for compacted fill under this contract shall be drained and kept dry during excavation. Excavation for

compacted fill will not be permitted in water nor shall excavated material be scraped, dragged or otherwise moved through water. Drainage of borrow areas shall be accomplished by ditching, sump pumping or other approved methods.

### 3.1.3 Borrow Areas with High Salinity Content Soils

For borrow areas having a portion of the material classified as being high in salinity content, greater than 1,500 ppm, the Contractor shall use the high salinity content soil as core material which shall be encapsulated with a minimum of 12 inches (loose measure) of suitable material with total salts content less than 1,500 ppm reserved from the borrow area prior to compaction and fertilizing, seeding and mulching. For borrow areas which contain all high salinity content soils, the Contractor shall obtain the encapsulating material from another borrow source.

## 3.2 EXCAVATION IN OTHER AREAS

### 3.2.1 General

Excavation from other areas shall consist of removal of material in preparing the embankment foundations to the lines and grades shown on the drawings, removal of materials from ditches, to allow for drainage and placement of the geotextile. Care shall be exercised by the Contractor in excavating to the lines and grades shown and in removing waste materials so as not to excavate below the grades specified or depth indicated. Excavation below the lines and grades specified or the depth indicated shall be backfilled by the Contractor at its expense. Such backfill shall be brought to grade with material with each layer placed and compacted as specified in Section 31 24 00.00 12 EMBANKMENT, paragraph "Foundation Preparation". Excavated materials shall be disposed of as specified in paragraph DISPOSITION OF MATERIALS.

### 3.2.2 Time Extensions

No time extension to the contract completion date will be granted to the Contractor for delays incurred in obtaining commercial borrow. The Contractor shall be solely responsible for any and all damages, claims for damages, and liability of any nature whatsoever arising from or growing out of the use of borrow areas other than the Government furnished stockpile.

### 3.2.3 Approval

Approval of the location and dimensions of the commercial borrow area shall neither relieve the Contractor from its obligation to furnish satisfactory material to the project nor commit the Government to the acceptance of the responsibility for the character, quantity, or availability of material in commercial borrow areas.

### 3.2.4 Submittal Package Requirements

The Contractor in a single, complete package shall submit the following information for its proposed commercial borrow area. All documentation presented for the proposed borrow source shall be current and up-to-date. The submittal of incomplete, out of date, or insufficient documentation may result in the Contractor being denied the use of the proposed borrow source.

The Contractor shall allow a minimum of one hundred eighty (180) days after the receipt of the package for the Government's review, processing, and approval of a new proposed borrow source that has not been previously

investigated.

- (1) Right of Entry.
- (2) Maps as follows:
  - (a) Location and Direction map.
  - (b) Topographic map(s) with scale of 1:24,000.
  - (c) Layout map with dimensions and property boundary defined by latitude and longitude.
  - (d) Soil boring location map.
- (3) Jurisdictional Wetlands Determination from the USACE.
- (4) Coastal Zone Management (CZM) Coastal Use Permit (CUP).
- (5) Threatened & Endangered Species (T&E) concurrence from the U.S. Fish and Wildlife Service.
- (6) Phase I Cultural Resources Survey
- (7) Phase I Environmental Site Assessment.
- (8) Geotechnical report.
- (9) Borrow Area Agronomy Report.
- (10) Borrow Area Management Plan
- (11) Mitigation Protection Plan
- (12) Zoning classification
- (13) Environmental Protection Plan
- (14) Louisiana Department of Transportation and Development (LADOTD) permits or approvals

### 3.2.5 Submittal Package Requirements in Detail

#### 3.2.5.1 Right of Entry

A Right of Entry form signed by the landowner(s) that covers the contract duration shall be included in the package. If the proposed clay source Point-of-Contact (POC) is not the landowner, then the commercial package should include a document signed by the landowner(s) stating that the POC is acting as an agent of the landowner(s) and has the right to represent the landowner(s) in all commercial efforts. In the event the POC is unable to obtain the signature of each landowner, then the POC must submit a letter stating the name, address, and phone number of each landowner and that the POC has the authority of the landowner(s) to represent the landowner(s) in all commercial efforts.

#### 3.2.5.2 Maps

The following maps shall be provided:

- (1) A map of the general area giving detailed instructions on how to get to the commercial borrow area from the nearest major highway.
- (2) A topographic map(s) (quadrangle) with a scale of 1:24,000 with the location of the borrow area superimposed. The map should be zoomed out enough to show the nearest city or town.
- (3) A layout map of the borrow area showing the dimensions of the proposed excavation, locations of soil borings, and latitude/longitude points to reference property boundaries. The map shall show the location and dimensions of any haul road that exists or is to be constructed to help the Contractor in its hauling operation. The map shall also show the location and dimensions of any protection dikes which will help the Contractor drain and keep the borrow area dry.

#### 3.2.5.3 Wetlands Determination

Package must include U.S. Army Corps of Engineers (USACE) Jurisdictional Wetland Determination (JD) letter and map. The Contractor shall avoid jurisdictional wetlands, with an adequate buffer. The Corps is currently avoiding impacts to jurisdictional wetlands, as such Contractors are advised that sites with jurisdictional wetlands present that would be impacted by the Contractors borrow actions are to be avoided. If the Contractors plan includes impacts to jurisdictional wetlands due to an unrelated construction activity, a USACE Section 404 permit and/or Section 10 permit will be required. The landowner must submit all other required environmental documentation, as detailed in paragraph "Submittal Package Requirements in Detail", to be considered for approval for any borrow related activities including, but not limited to, excavation, transportation, staging, stockpiling and processing. A JD is valid, and considered current for five (5) years from the date of issuance.

#### 3.2.5.4 Coastal Zone Management (CZM)

Package must include a Coastal Use Permit (CUP) Application, and a Letter of No Objection (LNO) or CUP from the Louisiana Department of Natural Resources for borrow areas in Louisiana, or the respective state agency for other states. A CUP Application, and CUP or LNO from the local agency must be provided when the state decides that it is a matter of local concern. A CUP is valid and is considered current usually for two (2) years from the date of issuance.

#### 3.2.5.5 Threatened & Endangered Species (T&E)

Package must include a consultant's report and a concurrence letter of "No Effect on T&E Species" from the U.S. Fish & Wildlife Service. The consultant's report must include a map of the studied area with the study area boundary defined by x-y coordinate system. T&E concurrence is valid and considered current for one (1) year from the date of issuance.

#### 3.2.5.6 Cultural Resource Report

Package must include seven (7) bound copies of a Phase I Cultural Resource Survey prepared by a professional cultural resource management (CRM) company that has staff who meet the Secretary of the Interior's Professional Qualifications Standards

<https://www.nps.gov/subjects/historicpreservation/upload/standards-guidelines-archeology>  
The report must include a map of the studied area with the study area



boundary defined by x-y coordinate system.

#### 3.2.5.7 Environmental Site Assessment

Package must include an Environmental Site Assessment (ESA) that shows a low risk of encountering Recognized Environmental Conditions (REC). The ESA must conform to ASTM E1527 or ASTM E2247 (if applicable) standards. The ESA must include a map of the studied area with the study area boundary defined by x-y coordinate system. An ESA is valid and considered current for six (6) months from the date of the report.

#### 3.2.5.8 Soil Boring Analysis

Package must include a Geotechnical Report stamped and signed by a licensed civil engineer with a specialization in geotechnical engineering certifying that the proposed source contains suitable material meeting the specifications outlined below.

(1) The Geotechnical Report must consist of a summary and conclusion section in the main body of the report with any supporting data attached separately. The licensed engineer shall determine the sub-surface investigations required. These investigations should include but are not limited to continuous soil borings and test pits. Cone Penetrometer tests may also be included to supplement the physical samples and lab testing provided.

(2) Investigations shall be spaced according to the geotechnical engineer's sub-surface evaluation and be representative of the entire proposed source. The licensed engineer's test plan must provide a comprehensive sampling to at least five (5) feet below the bottom of the proposed excavation.

(3) All soil samples must be classified in accordance with the Unified Soil Classification system. See below for required soil testing. The supporting data attached to the geotechnical report shall be comprehensive and include as a minimum all field logs, soil sampling and testing results, and a detailed investigation location map with the location of the potential borrow source and all investigation locations superimposed. The soil investigation locations must include latitudes and longitudes for plotting purposes.

#### 3.2.5.9 Laboratory Tests

The following laboratory tests must be performed:

(1) Soil classification shall be performed in accordance with the Unified Soil Classification System and ASTM D2487.

(2) Atterberg Limits Test shall be performed in accordance with ASTM D 4318.

(3) Determination of organic content shall be performed in accordance with ASTM D2974, Method C.

(4) Sand Content shall be determined by (#200 sieve) wash in

accordance with ASTM D1140.

#### 3.2.5.10 Test Procedures for Borings

The testing procedure for borings shall be as follows:

- (1) A moisture content determination shall be made and recorded on all samples classified as (CH), (CL), and (ML) at no less than 2-foot intervals.
- (2) For (CH), (CL), and (ML) soils, Atterberg Limits and Organic Content Testing (ASTM D2974, Method C), are required every 5 feet (minimum).
- (3) Samples with moisture contents at 70% or higher or having a Liquid Limit of 70 or higher must be tested for organic content for that sample as well as for a sample 2 feet above and 2 feet below that sample.
- (4) Sand content tests will be required for samples that classify as CL (with a PI greater than 10) and for all clay samples (CH and CL) with greater than 10% coarse grain materials estimated by visual classification for 2 or more consecutive feet.
- (5) Sand content tests shall be limited to one test every 5 feet of sampling and shall conform to ASTM D1140 (#200 sieve required).
- (6) Sand content tests will be required for samples that classify as a ML but limited to one test every 5 feet of sampling.

If a borrow site is within 1,500 feet of the Mississippi River Levee (MRL) or within 300 feet of a Hurricane Protection Levee (HPL), a permit from the local sponsor MUST be included. For additional information regarding this permit, please contact Amy Powell, [Amy.E.Powell@usace.army.mil](mailto:Amy.E.Powell@usace.army.mil), (504) 862-2241 or Karen Clement, [Karen.L.Clement@usace.army.mil](mailto:Karen.L.Clement@usace.army.mil), (504) 862-2313.

#### 3.2.5.11 Borrow Area Agronomy Report

The commercial borrow area material shall be tested for levels of salinity content which could impede the satisfactory establishment of grass. For each soil boring drilled for geotechnical analysis, a representative soil sample, taken at each 2.5 feet of depth of the boring or change in strata shall be tested for salinity content. Two standardized tests shall be performed by a soil testing lab including a pH test and a Storm (or Flood) Test which includes, at a minimum: Calcium, Magnesium, Sodium, Sulfur, Chlorides, Conductivity, Total Soluble Salts, and Sodium Absorption Ratio. All costs associated with the testing at a commercial borrow area shall be borne by the Contractor.

#### 3.2.5.12 Borrow Area Management Plan

The Contractor shall provide the Contracting Officer a plan for clearing, stripping, and excavating materials from the proposed commercial borrow area. In its plan, the Contractor shall show work areas, stockpile areas, etc., all within its leased or owned property boundaries. The Contractor shall not work or move material outside the boundaries of the approved limits of its borrow area. The Contractor shall indicate in writing and show on its layout plans details of the following:

- (1) A stockpile plan for cleared and stripped material and debris to include disposal areas.
- (2) The locations for disposal of wasted material discovered in the borrow area. Location of any haul roads constructed to help the Contractor in its hauling operations.
- (3) A plan for stockpiling embankment material before it is transported to the project site to include locations, stockpile heights, slopes, and limits.
- (4) The method and route for transporting the excavated material from the commercial borrow area to the project site.
- (5) The proposed methods for draining and keeping dry during excavation the borrow area excavated under this contract, including any protection dikes constructed to alleviate drainage problems.
- (6) A complete list of excavation and transportation equipment planned for use in its operations.
- (7) The Contractor's proposed sequence of excavating the borrow area showing starting and ending work locations.
- (8) A list of permits required and the issuing office.

#### 3.2.5.13 Mitigation Requirements

The package must include a written plan and map that describes and shows any areas subject to laws or regulations (Clean Water Act Section 404, Rivers and Harbors Act Section 10, National Historical Preservation Act, Section 906 of WRDA 1986, HTRW, etc.) that hold jurisdiction within the proposed borrow area. Borrow area is defined to include access routes, loading and unloading facilities, staging areas, etc. Plan and maps must clearly show areas/resources being avoided, areas where any impacts were minimized, and areas where it has been determined that impacts are unavoidable. Resources include but are not limited to areas of cultural interest, bottomland hardwood forest, wetlands subject Section 404 of the Clean Water Act, Threatened and Endangered species including any habitat deemed critical by the U.S. Fish and Wildlife Service, and areas found to be hazardous, toxic, or to contain radioactive waste. The U.S. Army Corps of Engineers New Orleans District (CEMVN) Environmental Team Coordinator will determine the consequences of a proposed action on any resources identified on the property in question. Plan and maps will be reviewed as outlined in paragraph "Government Performed Environmental Assessment" below, including any mitigation deemed necessary. For mitigation related to unavoidable impacts to wetlands or forested area as written proof shall constitute a letter from a mitigation bank showing compensatory mitigation has been completed as "in-kind" in the hydraulic basin.

#### 3.2.5.14 Zoning Classification

Written evidence that the property intended for use as a commercial borrow area contains the proper zoning classification that will allow the Contractor to excavate the property and use it as a borrow area. This evidence shall consist of a letter from the local land zoning office stating the zoning classification of the proposed commercial borrow area.

### 3.2.5.15 Environmental Protection Plan

A proposal for implementing Section 01 57 20.01 12 ENVIRONMENTAL PROTECTION of this contract insofar as that section applies to borrow areas , when applicable. Environmental Protection provisions exclusive to the borrow area are discussed in paragraph "Submittal Package Requirements in Detail" and shall be adhered to by the Contractor.

### 3.2.6 Government Performed Environmental Assessment

The Government is required to perform a National Environmental Policy Act (NEPA) assessment on all new proposed borrow areas without regard to the source. Production and approval of a NEPA assessment could require a minimum of one hundred and eighty (180) days for review, processing, and approval time by the Government once all materials required from the Contractor have been provided. Before the Government will commence the NEPA analysis of a proposed commercial borrow site, the Contractor must submit all of the above items as a single, complete package. The reviewing CEMVN staff reserves the right to disapprove the use of potential commercial borrow areas located in wetlands and/or other significant habitat, such as non-jurisdictional Bottomland Hardwood habitats, and those sites that have significant outstanding cultural resource or hazardous waste concerns or other avoidable impacts. The Government shall be reimbursed by the Contractor for actual costs incurred for assistance in completing or attempting to complete additional environmental coordination and documentation.

### 3.3 TRUCK HAULING

All excavated material to be hauled from the borrow source, or to be removed from the site, including debris, shall be hauled in watertight trucks with secured binders on tailgates to the place of destination. The route for trucks carrying material to and from the job site, and to and from the borrow area shall avoid residential streets, and shall be approved by the Contracting Officer. If the Contractor decides to modify or construct any new roads, they must be submitted to the Contracting Officer for approval. Trucks shall not spill or track mud on public roads. The Contractor shall take immediate action to clean up any material spilled on the roads without notification from the Contracting Officer. Failure by the Contractor to satisfactorily clean public roads used for the hauling operation shall result in the suspension of hauling operations until such roads are cleaned to the satisfaction of the Contracting Officer.

### 3.4 BARGING

Contractor shall maintain barge and rake to ensure the retention of embankment material in transit.

### 3.5 DISPOSITION OF MATERIALS

Material from the borrow pit that is not satisfactory for use as embankment must be wasted. Materials wasted shall be disposed of by placing in the stockpile area and used for grading.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 31 - EARTHWORK

SECTION 31 24 00.00 12

EMBANKMENT

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 MEASUREMENT
  - 1.2.1 Embankment
  - 1.2.2 Embankment Materials Testing
- 1.3 PAYMENT
  - 1.3.1 Embankment
    - 1.3.1.1 Acceptance Reaches for Embankment
- 1.4 REFERENCES
- 1.5 SUBMITTALS
- 1.6 QUALITY CONTROL
  - 1.6.1 QC-General
  - 1.6.2 Reporting
- 1.7 EQUIPMENT
  - 1.7.1 Compaction Equipment
  - 1.7.2 Miscellaneous Equipment
  - 1.7.3 Sprinkling Equipment
  - 1.7.4 Dressing

PART 2 PRODUCTS

- 2.1 EMBANKMENT MATERIALS
  - 2.1.1 Suitability of Material
    - 2.1.1.1 Isolated Masses
    - 2.1.1.2 Investigation and Testing of Objectionable Materials

PART 3 EXECUTION

- 3.1 GENERAL CONSTRUCTION
  - 3.1.1 Lines and Grades
  - 3.1.2 Grade Tolerances
  - 3.1.3 Conduct of Work
- 3.2 EMBANKMENT FOUNDATION PREPARATION
  - 3.2.1 Clearing and Grubbing
  - 3.2.2 Pre-Construction Wave Berm Repair Cross Section Surveys
  - 3.2.3 Foundation Preparation
- 3.3 EMBANKMENT CONSTRUCTION
  - 3.3.1 General
  - 3.3.2 Placement, Spreading, and Compaction
  - 3.3.3 Post-Construction Wave Berm Repair Surveys
- 3.4 SPLASH PAD

-- End of Section Table of Contents --

SECTION 31 24 00.00 12

EMBANKMENT

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all plant, labor, equipment, materials, foundation preparation, and all other incidental work necessary to construct embankments for wave berm repairs; as shown on the drawings and as specified herein.

1.2 MEASUREMENT

1.2.1 Embankment

Embankment construction will be measured for payment by the cubic yard, and quantities will be determined by the average end area method. The basis for the measurement will be the plotted cross sections of the existing grade overlaid with the theoretical wave berm section(s) in accordance with Contract provision in Section 00 70 00 CONDITIONS OF THE CONTRACT paragraph entitled QUANTITY SURVEYS - ALT. Embankment quantities for payment will be determined by the Government. The Contractor must perform an additional "Post-Construction Wave Berm Repair Survey" upon final placement of the government furnished stockpile material before commercial material is allowed to be placed at the site. Embankment not constructed to the theoretical dike section(s), including allowable tolerance(s) as indicated on the Governments dike compliance survey will not be accepted. No measurement or payment will be made for tolerances.

1.2.2 Embankment Materials Testing

No separate measurement will be made for testing regardless of the location (i.e., in the borrow area, stockpile area, or in-place) of the material.

1.3 PAYMENT

1.3.1 Embankment

Payment for all material placed and compacted as required in embankments will be made at the contract unit price per cubic yard for "Embankment -Commercial"; "Embankment-Stockpile"; or "Embankment-Commercial-OW1", if Option Work 1 (OW1) is exercised. Price and payment will constitute full compensation for furnishing all plant, labor, materials and equipment for performing all operations necessary for embankment construction; including employment of professional engineering services, excavation, control testing, hauling, foundation preparation, material processing, placing, compaction, surveys; and other incidental work required to complete the embankment or fill placement; all as specified herein and as shown on the drawings.

1.3.1.1 Acceptance Reaches for Embankment

Acceptance and payment for completed embankment placement for wave berm repair sections, to the full theoretical section(s) as shown on the

contract drawings, must be approved by the Contracting Officer. Acceptance of a wave berm repair section must be to the entire length of the repair section limits, unless otherwise agreed upon by the Contracting Officer.

#### 1.4 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.

##### ASTM INTERNATIONAL (ASTM)

|            |                                                                                                                                |
|------------|--------------------------------------------------------------------------------------------------------------------------------|
| ASTM D1140 | (2017) Standard Test Methods for Determining the Amount of Material Finer than 75- $\mu$ m (No. 200) Sieve in Soils by Washing |
| ASTM D2487 | (2006) Soils for Engineering Purposes (Unified Soil Classification System)                                                     |
| ASTM D2974 | (2020; E 2020) Moisture, Ash, and Organic Matter of Peat and Other Organic Soils                                               |
| ASTM D4318 | (2017; E 2018) Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils                            |

#### 1.5 SUBMITTALS

Government approval is required for submittals with a "G" designation. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following must be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

##### SD-01 Preconstruction Submittals

Embankment Plan; G, CD

Compaction Equipment; G, ED

#### 1.6 QUALITY CONTROL

##### 1.6.1 QC-General

The Contractor must establish and maintain quality control for embankment construction operations to assure compliance with contract requirements, and maintain records of its quality control for all construction operations including but not limited to the following:

(1) Equipment: Type, size, and suitability for construction of the prescribed work.

(2) Foundation Preparation: Leveling or breaking the surface in advance of embankment construction, and drainage of the foundation during fill placement when necessary.

(3) Construction: Layout, maintaining existing drainage, thickness of layers, spreading and compacting.

- (4) Grade and Cross Section: slopes and grades.
- (5) Grade Tolerances: Check fills to determine if placement conforms to prescribed grade and cross section.
- (6) Slides: Location and limits; methods and equipment used where remedial work has been directed.
- (7) Control Testing:

Testing must be performed by a Government approved testing agency. No additional payment will be made for control testing required in this paragraph. All costs in connection therewith must be included in the applicable contract unit price for which control testing is incidental thereto. Documentation of sampling locations for the following tests must be clearly defined by dike station and offset and also by lift number or elevation. As a minimum, the following tests are required:

1. Soil Classification Tests. Determination of soil classification must be in accordance with ASTM D2487. Atterberg Limits Test required for soil classification must be performed in accordance with ASTM D4318. In addition, classification tests must be performed on uncompacted fill at a minimum frequency of one test per 1,000 linear feet per lift placed in the levee section.

2. In-Place Organic Content Tests. In addition, organic content tests must be performed on uncompacted fill at the same locations as the soil classification tests as specified in QUALITY CONTROL, subparagraph "QC-General", sub item (7)1. Limits of organic content are specified in paragraph EMBANKMENT MATERIALS. Determination of organic content must be performed in accordance with ASTM D2974, Method C.

3. Sand Content Tests. In addition, sand content tests must be performed on uncompacted fill at the same locations as the soil classification tests specified in QUALITY CONTROL, subparagraph "QC-General", sub-item (7)1. Limits of sand content are specified in paragraph EMBANKMENT MATERIALS. Determination of sand content must be in accordance with ASTM D1140.

4. Additional Test: In addition to the above frequency of tests, additional test are required when the Contracting Officer's Representative has reason to doubt the adequacy of moisture control.

5. Additional Test. In addition to the above frequency of tests, additional test are required as follows:

a. Where the Contracting Officer's Representative has reason to doubt the adequacy of the compaction, organic content.

b. Where the Contractor is concentrating fill operations over a relatively small area.

c. When, in the opinion of the Contracting Officer, embankment materials change substantially, the Contracting Office may direct additional testing.



d. Where non-traditional compaction procedures/equipment are being used.

e. When areas are found not meeting the specified in-place density, Atterberg Limits, sand content, and/or in-place organic content requirements, the Contractor shall retest at no additional cost to the Government after corrective measures have been applied.

(8) Compliance Surveys. The Contractor shall submit plotted cross sections at intervals and locations corresponding to the Government's original survey. The primary, secondary, and temporary benchmarks used shall be listed on each compliance survey. Upon completion of suitable reaches of embankment, the Contractor shall perform, plot, and submit compliance cross section surveys at a maximum of 100-foot intervals and all P.I. 's, curve P.C.'s, P.T.'s, levee transitions, and breakpoints. All compliance surveys of levees that are adjacent to other structures (ex. floodwall, sheetpile) shall include the transitions to those structures in the surveys, whether the Contractor is responsible for the transition or not. The limit of the transitions shall be the end of any armoring protection on the structure side, and in the case where there is no armoring, 50 feet on the structure side. All sections shall be taken at locations corresponding to the Government original survey. They shall be plotted by the Contractor on a minimum scale of 1 inch equal to 10 feet horizontally, and 1 inch equal to 5 feet vertically, with the theoretical design cross section and allowable grade tolerances superimposed thereon. Additionally, the Contractor shall perform, plot, and submit a levee centerline profile with shots taken at a maximum of 20-foot intervals. The plotted cross sections and profile shall be submitted to the Contracting Officer's Representative for review. Electronic survey data shall be submitted to the Contracting Officer's Representative within 48 hours of completion of surveys. Survey notes shall be provided with the plotted sections for each survey taken by station, with offset and elevation. After the Contracting Officer's Representative accepts and verifies the survey, the Contractor shall email the electronic survey data to mvn-cd-q-testresults@usace.army.mil. All surveys shall meet the minimum requirements of the USACE document "USACE New Orleans District Minimum Survey Standards" dated June 2022. The survey information that the Contractor emails shall be in the ".EM" format as specified in the USACE document "Engineering Manual File Format Specification Version: EM15"

[https://www.mvn.usace.army.mil/portals/56/docs/engineering/Geospatial/EM Format15.pdf](https://www.mvn.usace.army.mil/portals/56/docs/engineering/Geospatial/EM%20Format15.pdf) dated December 3, 2015. An example .EM format is provided at the end of Section 01 10 00 GENERAL PROVISIONS. All compliance surveys shall be performed, signed, and sealed by a Licensed Surveyor. The safe file exchange (SAFE) website is located at

<https://safe.arl.army.mil>

#### 1.6.2 Reporting

The original and two (2) copies of these records of inspections and tests, as well as the records of corrective action taken, must be furnished the Government daily. Format of the report must be as prescribed in Section 01 45 04.00 10 CONTRACTOR QUALITY CONTROL.

## 1.7 EQUIPMENT

### 1.7.1 Compaction Equipment

Compaction equipment must be capable of properly compacting the soil so that no planes of weakness or laminations are formed in the fill. Equipment must be capable of compacting a layer of soil not less than 12 inches thick to the requirements specified herein and must be operated at speeds not to exceed 3.5 miles per hour. Compaction equipment must be a vibrating sheep-foot compaction roller, with a minimum weight of 16 tons. The Contractor must submit the manufacturer's specifications, to include equipment weight, for the compaction equipment for Government approval. Smaller compaction equipment may be used in the locations, such as P.I. locations, where heavy equipment is not feasible for use. In this case, compaction equipment weighing less than 16 tons must also be submitted and must include the intended locations of use, and manufacturer's equipment specifications for Government approval.

### 1.7.2 Miscellaneous Equipment

Scarifiers, disks, spring-tooth or spike-tooth harrows, spreaders, power tampers, and other equipment must be types suitable for construction of embankment.

### 1.7.3 Sprinkling Equipment

Sprinkling equipment, if used, must be designed to apply water uniformly and in controlled quantities to variable widths of surface.

### 1.7.4 Dressing

The entire embankment, including topsoil where specified, shall be brought to not less than the prescribed design cross section, within allowable tolerance, at all points. Unreasonable roughness of the surface shall be dressed out to permit fertilizing, seeding operations.

## PART 2 PRODUCTS

### 2.1 EMBANKMENT MATERIALS

The embankment must be constructed of naturally occurring earth materials. Materials that are classified in accordance with ASTM D2487 as CL or CH with less than 35 percent sand content by weight, as determined by ASTM D1140 are suitable for use as embankment fill. Materials classified as ML are suitable if blended to produce a material that classifies as CH or CL according to ASTM D2487. Intentional blending of granular or organic soils will not be allowed. The Contractor must notify the Contracting Officer whenever the In-Place Plasticity Index of the material is between 15 and 10. "In-Place" refers to the borrow pit. Materials placed in the section must be at or below an organic content of 9 percent by weight, as determined by ASTM D2974, Method C. The selected clay source must be submitted with the "Embankment Plan".

#### 2.1.1 Suitability of Material

All fill materials must be free from concentrated masses of unsuitable materials (excludes organic matter content as defined in ASTM D2974, Method C) and other non-soil materials including, but not limited to, sticks, branches and roots. The size of a mass is defined as a 1/3 of a cubic foot

of continuous unsuitable material. For purposes of suitability, a mass will be unacceptable if it consists of less than 50% suitable soil.

#### 2.1.1.1 Isolated Masses

The presence of an isolated mass must not be used to invalidate an entire lift layer if, in the opinion of the Contracting Officer's representative, that the surrounding soils and subsequent suitable cover is sufficient. Fill from natural borrow pits will likely contain wood, branches, sticks, and roots in varying degrees, but the fill is acceptable if it meets the requirements defined in this section. Pieces of wood will not be considered objectionable provided their length does not exceed 1 foot, their cross-sectional area is less than 4 square inches (on average for any 1-foot portion of wood), and they are distributed throughout the fill. Measurements of wood length must not include any portion of the wood with a cross sectional area less than 1 square inch, but pieces of wood having a 2 foot or greater length and an average cross-sectional area of at least 1 square inches must be considered objectionable. For the top foot of suitable material placed on the berm section, no unsuitable and non-soil material with a cross-sectional area greater than 1.5 square inches is allowed.

#### 2.1.1.2 Investigation and Testing of Objectionable Materials

The Contractor must expose and remove objectionable materials within the fill layer prior to compaction. Not more than 1 percent (by volume) of total unsuitable and non-soil materials must be contained in the earthen material placed in each tested lift of the levee section. The tested lift is defined as the same dimensions as the lift for compaction testing. If, in the opinion of the Contracting Officer's Representative, amounts of wood in the fill brought to the site are in excess of the embankment material requirements herein, the borrow area will be investigated by the Contracting Officer's Representative along with the New Orleans District's engineering representatives. A determination will be made as to the appropriate action that may be necessary to eliminate the unacceptable materials being delivered to the site of the placement. Inspections of subsequent lifts prior to compaction must be performed by the Contractor in the presence of QA personnel and documented in the QC/QA reports. Organic matter within the soils must not be considered a non-soil material.

### 2.2 UNSUITABLE AND NON-SOIL MATERIAL TESTING

If, in the opinion of the Contracting Officer's Representative, unsuitable and non-soil material is above the specified limits of 1 percent total, volume testing shall then be performed by the Contractor to determine embankment material compliance. The testing shall be performed in accordance with the test procedure FIELD AND LABORATORY DETERMINATION OF NON-SOIL VOLUME FOR LEVEE FILL, attached at the end of this section. If the testing confirms that the embankment material is out of compliance with these specified requirements, the Contractor shall either 1) completely remove the lift in question and replace it with clean, acceptable fill, or 2) submit for review and approval a corrective action that presents a plan for bringing the embankment material into compliance. Any delays and/or expenses, including interruption of embankment operations or replacement of embankment material, incurred as a result of correction of compliance issues revealed by this testing, shall be borne by the Contractor and shall in no way be at an additional expense to the Government. If testing indicates that the material is in compliance with the specified requirements, and not requiring any corrective action, then the following

will apply.

(1) The Contractor shall bear the cost of any expenses and delays of a maximum of three (3) tests for unsuitable and non-soil material, which indicate no corrective action.

(2) Additional tests directed by the Contracting Officer for unsuitable and non-soil material beyond the third test, which indicates no corrective action is required, will be subject to the Contract provision in Section 00 72 00 GENERAL CONDITIONS entitled INSPECTION OF CONSTRUCTION (52.246-12).

### PART 3 EXECUTION

#### 3.1 GENERAL CONSTRUCTION

The Contractor must submit an "Embankment Plan" for Government approval. The embankment plan must indicate the Contractors intended order of operations and methods for placement of embankment. The embankment plan must include, but not limited to, the following:

- a. The intended locations/areas to be cleared and grubbed prior to placement of embankment, if the required clearing and grubbing is not completed in full prior to placement of embankment.
- b. The intended location(s) along the stone dike alignment where placement of embankment will begin.
- c. Acceptance Reaches: The intended acceptance sections of placed embankment to the full theoretical section(s), for acceptance and payment by the Government.

##### 3.1.1 Lines and Grades

Embankment must be constructed to the lines, grades, and dimensions in accordance with the applicable feature of work theoretical berm repair typical sections as shown in the contract drawings.

##### 3.1.2 Grade Tolerances

A tolerance of 3/10 of 1 foot above the prescribed theoretical berm repair section(s) shown on the contract drawings. No separate measurement or payment will be made for grade tolerances.

##### 3.1.3 Conduct of Work

The Contractor must maintain and protect the embankment in a satisfactory condition at all times until final completion and acceptance of all work under the Contract. If, in the opinion of the Contracting Officer, the hauling equipment causes horizontal shear planes or slicken sides, rutting, quaking, heaving, cracking, or excessive deformation of the embankment, limit the type, load, or travel speed of the hauling equipment on the embankment or backfill. The Contractor may be required to remove, at no additional payment, any embankment material placed outside of prescribed slope lines.

### 3.2 EMBANKMENT FOUNDATION PREPARATION

#### 3.2.1 Clearing and Grubbing

Prior to placement of any embankment, the footprint to receive embankment must be cleared and grubbed in accordance with Section 31 11 00.00 12 CLEARING AND GRUBBING and the contract drawings. Segments of the foreshore dike include existing stone splash pad. Existing stone splash pad not commingled with embankment due to wave action can remain in place. Contractor shall use best practices for placement of embankment over existing stone splash pad. Segments of existing stone splash pad to remain shall be identified and approved by the Contracting Officer.

#### 3.2.2 Pre-Construction Wave Berm Repair Cross Section Surveys

After clearing and grubbing and prior to embankment placement, the Contractor must perform the "Pre-Construction Wave Berm Repair Cross Section Surveys" in accordance with Section 02 21 10.00 12 SURVEYS.

#### 3.2.3 Foundation Preparation

After "Pre-Construction Wave Berm Repair Cross Section Surveys" are completed, the Contractor must conduct foundation preparations to receive embankment fill. Foundation preparation must consist of the following: Fill in all depressions and/or uneven surfaces within the wave berm repair section to provide a uniform surface. All depressions and/or uneven surfaces must be brought up to the surrounding grade by placing fill in layers of no more than 12 inches of uncompacted fill thickness. Each layer of fill placed must be compacted by a minimum of four (4) passes with specified compaction equipment prior to placing or spreading the next layer of fill. All compaction equipment must be in accordance with paragraph "Compaction Equipment".

### 3.3 EMBANKMENT CONSTRUCTION

#### 3.3.1 General

Prior to placing embankment fill on the prepared dike foundation the Contractor must notify the Contracting Officer's Representative that the foundation is ready to receive fill. No fill must be placed on any part of the foundation until such areas have been inspected and given final approval by the Contracting Officer.

#### 3.3.2 Placement, Spreading, and Compaction

The location and extent of the fill must be in accordance with the requirements shown in the contract drawings and as specified. The Contractor must deplete the government furnished stockpile and seek approval from the COR before utilizing a commercial pit. Fill material must be placed and spread in successive layers not more than 12 inches in uncompacted thickness. Each layer placed must be compacted by a minimum of four (4) passes with the approved compaction equipment prior to placement of the next layer. All Compaction equipment must be in accordance with paragraph "Compaction Equipment".

#### 3.3.3 Post-Construction Wave Berm Repair Surveys

After embankment placement for an entire berm repair section, the Contractor must perform the "Post-Construction Wave Berm Repair Surveys" in

LPV Risk Reduction Repairs Reach - 1, 2, 3 and 4  
ED 24-006

accordance with Section 02 21 10.00 12 SURVEYS. The Contractor must perform an additional "Post-Construction Wave Berm Repair Survey" upon final placement of the government furnished stockpile material before commercial material is allowed to be placed at the site.

#### 3.4 SPLASH PAD

After acceptance of a repair berm section, the Contractor must construct the splash pad in accordance with the contract drawings and Section 35 31 19 GRADED STONE.

-- End of Section --

## **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.

SECTION TABLE OF CONTENTS

DIVISION 32 - EXTERIOR IMPROVEMENTS

SECTION 32 92 19.04 12

TURF ESTABLISHMENT AND MAINTENANCE

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 MEASUREMENT
  - 1.2.1 Seeding and Mulching
  - 1.2.2 Fertilizer
  - 1.2.3 Lime or Sulfur Soil Amendment
- 1.3 PAYMENT
  - 1.3.1 Seeding and Mulching
  - 1.3.2 Fertilizer
  - 1.3.3 Lime Soil Amendment
  - 1.3.4 Sulfur Soil Amendment
- 1.4 REFERENCE
- 1.5 SUBMITTALS
- 1.6 QUALITY CONTROL
  - 1.6.1 General
  - 1.6.2 Reporting
- 1.7 AREAS TO BE TREATED
- 1.8 COMMENCEMENT, PROSECUTION, AND COMPLETION
  - 1.8.1 General
  - 1.8.2 Sequence of Work
- 1.9 TURF ESTABLISHMENT PLAN
  - 1.9.1 Certified Agronomy Testing Laboratory
  - 1.9.2 Certified Water Analysis

PART 2 PRODUCTS

- 2.1 MATERIALS
  - 2.1.1 Fertilizer and Soil Amendments
  - 2.1.2 Seed
  - 2.1.3 Mulch
  - 2.1.4 Water Source
  - 2.1.5 Soil for Repairs

PART 3 EXECUTION

- 3.1 SOIL AND WATER ANALYSIS
  - 3.1.1 Soil Analysis
  - 3.1.2 Water Source Analysis (Not Municipal Water Source)
- 3.2 PREPARATION OF GROUND SURFACE
  - 3.2.1 General
  - 3.2.2 Vegetative and Debris Removal
  - 3.2.3 Grading
  - 3.2.4 Soil Preparation
- 3.3 APPLICATION OF FERTILIZER AND SOIL AMENDMENTS
  - 3.3.1 Fertilizer
  - 3.3.2 Soil pH
    - 3.3.2.1 Increasing Soil pH
    - 3.3.2.2 Reduce Soil pH
- 3.4 SEEDING

- 3.4.1 General
- 3.4.2 Broadcast Seeding
- 3.4.3 Damage to Established Seeding Area
- 3.5 APPLYING AND ANCHORING MULCH
- 3.6 WATER APPLICATION DURING TURF ESTABLISHMENT
- 3.7 MOWING
  - 3.7.1 New Turf Establishment Areas
  - 3.7.2 Existing Turf Maintenance
- 3.8 INSPECTIONS AND REPORTS
- 3.9 REPLANTING
- 3.10 POST-PLANTING FERTILIZER APPLICATION
- 3.11 ESTABLISHMENT
- 3.12 INSPECTION AND ACCEPTANCE
- 3.13 INITIAL SEEDING AND FERTILIZING ACCEPTANCE

-- End of Section Table of Contents --

SECTION 32 92 19.04 12

TURF ESTABLISHMENT AND MAINTENANCE

PART 1 GENERAL

1.1 SCOPE

The work provided herein consists of the Contractor furnishing all plant, labor, equipment, and materials, and performing all operations necessary for establishment and maintenance of turf on areas as specified herein and as indicated on the drawings. Turf establishment of the embankment must be performed upon completion of embankment construction and repair of any damaged slopes prior to turfing operations. Turf will be considered established when the areas to be turfed have produced the required grass species over a minimum of 75 percent of the entire area as determined by the Government. In addition, bare areas with diameters larger than 24 inches are considered unacceptable. Final payment will not be authorized until turf is established and accepted.

1.2 MEASUREMENT

1.2.1 Seeding and Mulching

Measurement for seeding and mulching will be made by the acre. Acreage will be determined from surface areas computed from the theoretical gross cross section of embankment seeded and mulched. Measurement will be to the nearest foot and units computed to the nearest one-hundredth of an acre. No separate measurement will be made for placement of material required for repairs as described in paragraphs "Soil for Repairs" and REPLANTING.

1.2.2 Fertilizer

Measurement for applying initial and post fertilizer to the soil as recommended by the certified agronomist after reviewing the soil testing results must be made at the contract unit price per pound. The fertilizer weights must be computed based on the available weights of nitrogen, phosphorous, or potassium required by the Turf Establishment Plan. Other inert or elemental materials typically included in the fertilizer must not be included in the weight measurement. Measurement will be computed to the nearest one-hundredth of a pound.

1.2.3 Lime or Sulfur Soil Amendment

Measurement for applying soil amendments (lime and/or sulfur) to the soil as recommended by the certified agronomist after reviewing the soil testing results must be made at the contract unit price per ton. Measurement will be computed to the nearest one-hundredth of a ton.

1.3 PAYMENT

1.3.1 Seeding and Mulching

Payment for seeding and mulching will be made at the contract unit price per acre for "Seeding and Mulching" or "Seeding and Mulching - OW1", if

Option Work 1 (OW1) is exercised. Price and payment will constitute full compensation for furnishing all plant, labor, materials and equipment, including soil testing, Turf Establishment Plan, and watering to prepare the soil and apply the seed and mulch at the applicable rates as specified herein. After seeding and mulching is completed, the Contractor may request partial payment only. Material certification and invoices must be provided to authorize the initial 60% payment when seeding is completed and 100% when turf is established and finally accepted in accordance with paragraph ESTABLISHMENT. No payment for "Soil for Repairs" and "Replanting".

#### 1.3.2 Fertilizer

Payment for initial and post fertilizer as required by the Turf Establishment Plan must be made at the contract unit price per pound for "Fertilizer" or "Fertilizer - OW1", if Option Work 1 (OW1) is exercised. Price and payment will constitute full compensation for furnishing all plant, labor, materials and equipment necessary to apply the fertilizer at the applicable rates as described in the Turf Establishment Plan.

#### 1.3.3 Lime Soil Amendment

Payment for lime application, if required, will be made at the contract unit price per ton for "Lime Soil Amendment - OW2", if Optional Work 2 (OW2) is exercised. Price and payment will constitute full compensation for furnishing all plant, labor, materials and equipment to apply the lime soil amendment at the applicable rates as described and recommended in the Turf Establishment Plan.

#### 1.3.4 Sulfur Soil Amendment

Payment for sulfur application, if required, will be made at the contract unit price per ton for "Sulfur Soil Amendment - OW 2", if Optional Work 2 (OW2) is exercised. Price and payment will constitute full compensation for furnishing all plant, labor, materials and equipment to apply the sulfur soil amendment at the applicable rates as described and recommended in the Turf Establishment Plan.

#### 1.4 REFERENCE

The publication listed below forms a part of this specification to the extent referenced. The publication is referred to within the text by the basic designation only.

##### LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

|       |                                                                   |
|-------|-------------------------------------------------------------------|
| LSSRB | (2016) Louisiana Standard Specifications<br>for Roads and Bridges |
|-------|-------------------------------------------------------------------|

#### 1.5 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-07 Certificates

Seed

The Contracting Officer's Representative must be furnished duplicate signed copies of statements certifying that each container of seed delivered is labeled in accordance with the Federal Seed Act and any Louisiana Department of Agriculture regulations and is at least equal to the requirements specified in paragraph "Soil for Repairs". This certification must be obtained from the supplier and must be furnished on or with all copies of seed invoices.

#### Turf Establishment Plan; G

The Contractor must submit a Turf Establishment Plan for approval. The plan must include recommendations for fertilizer and/or soil amendment application based upon soil testing results by a certified agronomist or soil scientist for each completed section of levee to be turfed. The Contractor must provide the name of the certified agronomy testing laboratory in addition to copies of the levee/embankment material soil analyses data sheets. Soil analyses must include soil pH, phosphorus, potassium, calcium, magnesium, sodium, sulfur, copper, zinc, chloride, total dissolved salts, conductivity, and sodium absorption ratio. In addition to the soil amendment and fertilization plan, the Turf Establishment Plan must describe procedures and specific equipment used for ground surface preparation, seeding, and mulching.

### 1.6 QUALITY CONTROL

#### 1.6.1 General

The Contractor must establish and maintain quality control for the work specified in this section to assure compliance with contract requirements and maintain records of this quality control for all construction operations including, but not be limited to, the following:

- (1) Soil and Water Analyses - Soil and water analysis reports from a certified agronomic laboratory. Water used for irrigation subsequent to establishment must be tested a minimum of once every 30 days. Soil samples will be taken in according to paragraph "Soil Analysis" and the test results used to determine weights of fertilizer and soil amendments required.
- (2) Preparation of Ground Surface - Location and quality of finished dressing, including necessary clearing, filling, or dressing out of washes, smoothness and uniformity of surfaces, and time of year.
- (3) Fertilizing - Quality of fertilizer materials used. Areas fertilized, quantity applied, and method of application. Certificate of analysis and certificate of delivery must be furnished to the Contracting Officer to verify quality and quantity as specified in paragraph TURF ESTABLISHMENT PLAN. The rate of application must be checked daily to insure conformance to soil testing laboratory recommendations.
- (4) Seeding - Seed species and cultivar, seed label, area covered, quantity of seed applied, and method of seed distribution. All bags of seed furnished must have an analysis tag showing all information required by the Louisiana Seed Law. Seed furnished must be from the

previous season's crop and the date of analysis shown on each tag must be within 5 months of time of delivery. Rate of application must be checked daily to insure that the rate confirms to the requirements of paragraph "General".

(5) Mulching - Quality and type of mulch material applied, area covered by the mulch, quantity applied, and method of mulch application. Certificate of delivery showing weight of material delivered for either vegetative or fiber mulch must be furnished to verify rate of application according to paragraph "Applying and Anchoring Mulch".

(6) Maintenance and Repair - Location and type of maintenance problems and remedial treatment performed according to paragraph "Soil for Repairs" and "Damage to Established Seeding Area".

(7) Water/Irrigation - Water analysis report, area where water was obtained, area where water was applied, purpose of water application (irrigation or used during establishment), quantity applied, and method of application.

#### 1.6.2 Reporting

The Contractor must furnish the original and two copies of the inspection and test records, as well as "corrective action taken" records, to the Contracting Officer's Representative daily. Format of the report must be as prescribed in SECTION 01 45 04.00 10, CONTRACTOR QUALITY CONTROL.

#### 1.7 AREAS TO BE TREATED

Fertilizing, soil amending, seeding, and mulching must be performed on all disturbed areas within the construction limits and on all newly constructed embankments.

#### 1.8 COMMENCEMENT, PROSECUTION, AND COMPLETION

##### 1.8.1 General

Preparation of the ground surface, fertilizing, and soil amending must be in accordance with paragraphs PREPARATION OF GROUND SURFACE and APPLICATION OF FERTILIZER AND SOIL AMENDMENTS. Seeding operations must be accomplished during the applicable growing season as specified in paragraph SEEDING.

##### 1.8.2 Sequence of Work

The sequence of operations for work prescribed in this section, except mowing, must be as follows:

- (1) Soil Analyses
- (2) Preparation of Ground Surface
- (3) Fertilization and Soil Amendments
- (4) Seeding
- (5) Mulching
- (6) Water Application



(7) Mowing

Fertilizing, seeding and mulching operations must commence upon completion of embankment construction at a length corresponding to the completed length of embankment construction in SECTION 31 24 00.00 12. At no time must such fertilizing, soil amending, seeding, and mulching operations be more than 14 days behind completed portions of embankment unless approved by the Contracting Officer.

1.9 TURF ESTABLISHMENT PLAN

At least 44 calendar days prior to initiating grass establishment, the Contractor must furnish a Turf Establishment Plan for review and approval. The plan must include recommendations for fertilizer and/or soil amendment application based upon soil testing results by a certified agronomist for each completed section of levee to be turfed. Recommendations based on soil testing results can be from a testing laboratory, state agricultural extension services, or private consultant. However, the Turf Establishment Plan must be prepared by the Contractor and approved by a certified agronomist or certified soil scientist to clearly indicate the application rates for soil amendments and fertilizer. In addition to the soil amendment and fertilization plan, the Turf Establishment Plan must describe procedures and specific equipment used for ground surface preparation, seeding, and mulching. Unless the approved Turf Establishment Plan contains a variation, the minimum requirements for ground surface preparation, seeding, and mulching contained in this specification will be controlling.

1.9.1 Certified Agronomy Testing Laboratory

The Contractor must provide the name of the certified agronomy testing laboratory in addition to copies of the levee/embankment material soil analyses as part of the turf establishment plan. Soil analyses must include soil pH, phosphorus, potassium, calcium, magnesium, sodium, sulfur, copper, zinc, chloride, total dissolved salts, conductivity, and sodium absorption ratio.

1.9.2 Certified Water Analysis

The Contractor must also provide the name of the certified water analysis laboratory as well as copies of the findings for all proposed water sources, other than municipal water sources, earmarked for grass establishment and irrigation. Water analyses must include pH, alkalinity, calcium, chloride, iron, magnesium, manganese, potassium, sodium, sulfur, total dissolved salts, conductivity, and sodium absorption ratio.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Fertilizer and Soil Amendments

Fertilizers and soil amendments in accordance with the approved Turf Establishment Plan must be of commercial grade, uniform in composition, free flowing and suitable for the Contractor's application method. Materials must be delivered in bulk or labeled containers and must conform to current Louisiana Department of Agriculture requirements for commercial fertilizers and soil amendments. Federal and state Government conforming labels that indicate producer's name, type, analysis, weight, and warranty

of producer must accompany each delivery of fertilizer. The Contractor must provide duplicate signed copies of invoices from suppliers of fertilizer and/or soil amendments showing quantity, grade, and fertilizer analysis indicating percentages of nitrogen (soluble and insoluble), phosphorus, and potassium.

#### 2.1.2 Seed

For turf establishment, the Contractor must furnish and apply certified (blue-tag) seed in accordance with regulations from the U.S. Department of Agriculture (under the Federal Seed Act) and the Louisiana Department of Agriculture. Seed must be in sealed or unopened containers prior to initiation of application. Seed that is wet, moldy or otherwise non-viable due to damage in transit or storage will not be accepted. Seed that is older than one year past label germination tests will not be accepted.

#### 2.1.3 Mulch

Mulch options include threshed straw from a cereal grain such as oats, wheat, barley, rye, or rice; bagasse; grass hay; or wood mulch fiber that must be furnished and applied by the Contractor. All mulch products must include a minimum 3% tackifier or be anchored by a method approved by the Contracting Officer. Materials that contain noxious grass or weed seeds that might be detrimental to the seed establishment or turf growth or to adjacent areas will not be acceptable. Mulch must not contain any paper fiber product.

#### 2.1.4 Water Source

Water, applied during establishment and irrigation of grass on the embankment from a water source other than municipal water supply must be analyzed by a certified water analysis laboratory. The water source must be tested every 30 days or until operations cease use of the water source for irrigation purposes. In addition to the agronomic tests to determine irrigation water suitability, the contractor should not apply water as irrigation that may contain any substance toxic to plants or that limits plant growth (e.g. oil, acid, alkali, salt, etc.).

#### 2.1.5 Soil for Repairs

Areas not suitable for turf establishment due to undulations or rills in the soil surface shall be repaired using compacted fill in accordance with Section 31 24 00.00 12 EMBANKMENT.

### PART 3 EXECUTION

#### 3.1 SOIL AND WATER ANALYSIS

##### 3.1.1 Soil Analysis

Soil samples must be collected for every 5 acres of disturbed area to be turfed. Each soil sample must be a composite sample from no less than six random areas within the 5-acre area to a depth of four inches on the levee/embankment/berm surface. Collected soil must be mixed within a clean, non-metallic container. All organic matter from existing vegetation must be removed from the soil sample prior to submission to the testing laboratory.

### 3.1.2 Water Source Analysis (Not Municipal Water Source)

Water samples from borrow canals or similar sites should be collected in duplicate in the volume of one liter (per sample) in a clean plastic container for analysis by a certified agronomic water analysis laboratory. Debris such as sediment and algae must be limited from within the sample.

## 3.2 PREPARATION OF GROUND SURFACE

### 3.2.1 General

Equipment, in good condition, must be provided for ground preparation and for handling and placing all materials. The Contracting Officer's Representative must approve equipment before work is initiated as part of the Turf Establishment Plan.

### 3.2.2 Vegetative and Debris Removal

Prior to soil preparation, existing vegetation must be removed. Vegetation removal may be accomplished through mowing (scalping) or herbicide application. Any debris or material (e.g. clippings, shell, rocks, gravel) that may hinder seed germination, limit plant growth, or interfere with mowing operations must be removed as specified in Section 31 11 00.00 12, paragraph DISPOSAL OF CLEARED AND GRUBBED MATERIALS. Prior to and during soil preparation, the Contractor must also remove any shells, rock, and other debris that are in the embankment and vegetative material from clearing that was placed back onto the levee section after completion of the embankment. The Contractor must utilize a landscape rock rake or similar equipment supplemented with hand labor to remove this debris prior to fertilizing, seeding and mulching.

### 3.2.3 Grading

Previously established levee/embankment grades and slopes must be maintained in a true and even condition on the areas to be established with turf. Repairs to previously graded areas with undulations or irregularities in the surface must be accomplished with material as described in paragraph Soil For Repairs". The material must be placed and compacted in accordance with Section 31 24 00.00 12, paragraph EMBANKMENT CONSTRUCTION. Where grades have not been established, the areas must be graded as shown, or as directed by the Contracting Officer's Representative and all surfaces must be left in a true and even condition. The Contracting Officer's Representative will conduct a Pre-Turfing inspection prior to commencement of turfing operations.

### 3.2.4 Soil Preparation

Soil must be tilled to a depth of 2 inches by plowing, disking, harrowing, or other approved methods in the Turf Establishment Plan in order to provide an acceptable seed bed. The soil preparation must be performed only during periods acceptable for turf establishment, in the opinion of the Contracting Officer's Representative. Environmental conditions that may constitute unacceptable periods for soil preparation include, but are not limited to, drought, high winds, excessive moisture, etc. The work must cease until conditions are more favorable for turf establishment. Any additional soil repair must be completed prior to turf establishment.

### 3.3 APPLICATION OF FERTILIZER AND SOIL AMENDMENTS

Adjustment of soil nutrient levels will be in accordance with the approved Turf Establishment Plan as specified in paragraph TURF ESTABLISHMENT PLAN. Unless otherwise specified in the approved plan, initial fertilizers and soil amendments applications must be incorporated into the top two inches of soil prior to seeding. The Contractor must layout the embankment sections in one acre plots, with levee crown and side slopes laid out separately from berms and other areas to be treated. The one-acre plots must be clearly marked with stakes and flagging to assure the correct amount of soil amendments, seed and mulch is applied per acre.

#### 3.3.1 Fertilizer

In accordance with the approved TURF ESTABLISHMENT PLAN, fertilizer must be incorporated to a depth of 2 inches prior to seeding.

#### 3.3.2 Soil pH

Soil pH must be between 5.4 and 8.2. If the soil pH is outside of this range, one of the following amendments must be added to adjust the soil pH.

##### 3.3.2.1 Increasing Soil pH

A pulverized or palletized agricultural lime source must be applied prior to planting and incorporated into the top 2 inches of soil. The rate of lime application must be as specified in the approved Turf Establishment Plan. Dolomitic lime may be substituted for lime if magnesium levels are insufficient in accordance with the soil test results. Materials must be hydrated lime conforming to Section 1018.03 of the 2016 edition of LDOTD Standard Specification for Roads and Bridges. The quantity of lime to be mixed with the embankment must be determined by the soil testing results, and must be sufficient in quantity to permit compaction to the specified density. The lime must be uniformly spread and uniformly mixed with the soil.

##### 3.3.2.2 Reduce Soil pH

Agricultural grade elemental sulfur must be applied, as specified in the approved Turf Establishment Plan, prior to planting. Elemental sulfur must be incorporated into the top two inches of soil.

### 3.4 SEEDING

#### 3.4.1 General

The applicable seed must be sown at the rate and time as indicated in the table below, unless otherwise specified in the approved Turf Establishment Plan. A method of sowing must be employed; using approved mechanical power-drawn seeders, mechanical hand- seeders, broadcast-seeders, or other approved methods. When delays in operations extend the work beyond the most favorable planting season for the species designated, or when conditions are such by reason of drought, high winds, excessive moisture, or other factors that satisfactory results are not likely to be obtained, work must be stopped as directed by the Contracting Officer's Representative and resumed only when conditions are favorable for turf establishment or when approved alternative or corrective measures and procedures have been completed. If inspection during or after seeding operations indicates that areas have been left unplanted or other areas

have not been adequately addressed, additional seed must be applied.

March 1 to September 1

hulled common Bermuda grass - 75 lbs (min) of PLS/acre or  
bermuda grass/seashore paspalum mix or bermuda grass/bahiagrass  
mix - 75 lbs (min) of PLS / acre

September 1 to March 1

Step 1 - annual, intermediate or perennial ryegrass-50 lbs (min)  
of PLS / acre to provide coverage during months when environmental  
conditions are not suitable for common bermuda grass establishment.

Step 2 - between September 1 to March 1 - unhulled common bermuda  
grass - 75 lbs (min) of PLS/acre or bermuda grass/seashore  
paspalum mix or bermuda grass/bahiagrass mix- 75 lbs (min) of PLS  
/ acre

Hulled Bermuda grass may be planted in the month of February if soil  
temperatures are in excess of 65 F for a minimum of 7 consecutive days.

PLS (Pure Live Seed) = (label germination rate x label purity) x  
100

Example of how to calculate PLS

PLS = (0.95 germination rate x 0.85 purity) x 100

PLS = 81 %

Therefore 1 lb PLS requires  $1/0.81 = 1.23$  lbs of seed

### 3.4.2 Broadcast Seeding

Seed must be broadcast with approved sowing equipment and distributed  
uniformly over designated areas at the appropriate seeding rates. After  
broadcast seeding, seed must be covered to an average depth of 1/4-inch  
using a brush, harrow, spike-tooth harrow, chain harrow, cultipacker, or  
other approved device. In addition, after soil amending and seeding, the  
soil must be compacted using a tractor drawn pull behind smooth drum roller  
or other approved equipment necessary to compact the soil to prevent  
erosion prior to mulching. Seed must not be broadcast during windy or  
inclement weather.

### 3.4.3 Damage to Established Seeding Area

The Contractor must be fully responsible for any damage to the  
establishment areas caused by his/her operations. Areas that become  
damaged as a result of poor workmanship or failure to meet the requirements  
of the specifications will be ordered repaired and reseeded to  
specification requirements, without any additional cost to the Government.

### 3.5 APPLYING AND ANCHORING MULCH

Application of mulch must follow these guidelines unless otherwise  
specified in the approved Turf Establishment Plan. The mulch must be  
vegetative non-asphalt mulch consisting of grain straw (oats, wheat, or  
rice) wood fiber or grass hay. Dry broadcast type mulch, as specified in  
paragraph "Mulch", must be applied uniformly on the soil surface at the  
minimum rate of 2 tons (approximately 80 bales) per acre.  
Hydrologically-placed mulch (applied at the rate specified in the turf  
establishment plan but no less than 3,500 pounds per acre on levee slopes  
and crown and 2,000 pounds per acre on berms) must be done immediately

after seeding. Hydromulching will include an improved tackifier applied at the rate recommended by the manufacturer. Dry broadcast type mulch must be tacked by spraying with emulsified tackifier at the rate of 150 gallons per ton of mulch, crimped or as recommended in the Turf Establishment Plan. The mulch and tackifier must be applied by means of approved equipment.

### 3.6 WATER APPLICATION DURING TURF ESTABLISHMENT

Unless the Contracting Officer's Representative concurs that acceptable levels from precipitation have occurred to support grass establishment, watering operations will be conducted one to two days after seeding. Water must be applied at least 2 times per week for a period of 28 days unless otherwise directed by the Contracting Officer's Representative based on natural rainfall. The application of water must sufficiently moisten at least the top 2 inches of soil with each irrigation event. The application of water in excess, so that surface runoff occurs, is prohibited. The Contractor must repair all damaged areas, including tire ruts and repairs to seeded and mulched areas, caused by watering at no additional cost to the Government. The Contractor must keep the trail road dry during the application of water during turf establishment or provide adequate caution signs noting wet/slippery surface. The Contracting Officer's Representative must approve caution signs prior to installation.

### 3.7 MOWING

#### 3.7.1 New Turf Establishment Areas

Turf areas established under this contract must be mowed with approved mowing equipment to a height of 3 to 4-inches whenever the height of the vegetation is in excess of 8 inches. Grass clippings created from mowing that will inhibit turf establishment must be removed from the site. The Contractor must perform periodic and final grass mowing within the construction easement until final inspection and acceptance.

#### 3.7.2 Existing Turf Maintenance

For the duration of the contract, the Contractor must maintain established turf within the limits of the work as shown on the drawings. Same requirements as paragraph "New Turf Establishment Areas" apply.

### 3.8 INSPECTIONS AND REPORTS

After initial planting, the Contractor must inspect newly turfed areas at least once every two weeks. For each inspection conducted, the Contractor must prepare a report summarizing the scope of the inspection, names of personnel making the inspection, inspection date, height of vegetation, observations and conclusions, maintenance performed, and corrective actions, if required. The report must be furnished to the Contracting Officer's Representative within 24 hours of the inspection as a part of the Contractor's daily QC Report.

### 3.9 REPLANTING

The Contractor must restore/repair any eroded areas or bare spots along the alignment in accordance with the requirements of this specification, all at no additional cost to the Government.

### 3.10 POST-PLANTING FERTILIZER APPLICATION

For those areas that do not require replanting, approximately one month after the initial planting, fertilizer must be applied at the minimum rate of 45 lbs per acre using a slow-release nitrogen fertilizer formula, or at a rate as recommended in the Turf Establishment Plan. The fertilizer must be applied with irrigation or rainfall occurring within 24 hours.

### 3.11 ESTABLISHMENT

Turf will be considered established and completed when the areas to be turfed have produced the required grass species, either Bermuda, Bahia or Seashore Paspalum, over a minimum of 75 percent of the entire area as determined by the Contracting Officer's Representative by random sampling. Seventy-five percent coverage must be confirmed by the use a 1 meter square constructed from PVC with 100 blocks of 100cm<sup>2</sup> (10 cm grid). Measurements must be made on both sides of the levee every 100 to 250 feet. If 25 blocks of the 1-meter square are not filled with the intended vegetative species; that section of the levee must be deemed unacceptable.

### 3.12 INSPECTION AND ACCEPTANCE

Acceptance inspections of the entire turfed area must be performed by the Contracting Officer's Representative by random sampling and supplemented by visual inspections. Bare areas with diameters larger than 24 inches are to be considered unacceptable. This measurement supersedes the first criteria for vegetative acceptance. These areas must be noted for repairs. If inspection determines that turf establishment is not complete, the Contractor must meet with the Contracting Officer's Representative at the job site to identify bare spots, eroded areas and rutting damage and to discuss the Contractor's plan of operation for completing new turf establishment. Prior to acceptance of turfed areas by the Contracting Officer's Representative, the Contractor must restore any damaged areas resulting from the Contractor's operations or by natural forces at no additional cost to the Government. Partial reaches will not be accepted unless determined by the Contracting Officer's Representative to be in the best interest of the Government.

### 3.13 INITIAL SEEDING AND FERTILIZING ACCEPTANCE

Provided all other features of work have been accepted and completed, and provided all work within the project limits have had initial seed, mulch, and fertilizer accepted, no liquidated damages will be assessed after acceptable completion of initial seeding, mulching and fertilization. The remainder of turf establishment requirements remain in force.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 35 - WATERWAY AND MARINE CONSTRUCTION

SECTION 35 20 23.01 12

MARINE ACCESS

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 MEASUREMENT AND PAYMENT
- 1.3 REFERENCES
- 1.4 SUBMITTALS
- 1.5 ENVIRONMENTAL PROTECTION REQUIREMENTS
  - 1.5.1 Turbidity Curtain
- 1.6 QUALITY CONTROL
  - 1.6.1 Report of Operations

PART 2 PRODUCTS

- 2.1 TURBIDITY CURTAINS

PART 3 EXECUTION

- 3.1 GENERAL
- 3.2 FLOTATION CHANNEL
  - 3.2.1 Mechanical Excavation
  - 3.2.2 Floating Plant Plan
  - 3.2.3 Lights
  - 3.2.4 Navigation Warnings
  - 3.2.5 Installation and Maintenance of Turbidity Curtain
  - 3.2.6 Safety of Structures
  - 3.2.7 Stockpile Plan
  - 3.2.8 Flotation Channel Closure
  - 3.2.9 Timber Ramp Plan
  - 3.2.10 Box Cut
- 3.3 SURVEYS

-- End of Section Table of Contents --



SECTION 35 20 23.01 12

MARINE ACCESS

PART 1 GENERAL

1.1 SCOPE

The work covered in this section consists of the requirements for marine access at the locations shown on the drawings.

1.2 MEASUREMENT AND PAYMENT

No measurement will be made for marine access. Payment will be made at the contract job price for "Marine Access" or "Marine Access - OW1", if Option Work 1 (OW1) is exercised. Price and payment will constitute full compensation for furnishing all equipment, plant, and labor for construction of marine access; including turbidity curtains, geotextile, environmental requirements, flotation channel if dredged; and all work incidental thereto, as specified herein and as shown on the drawings.

1.3 REFERENCES

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

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2024) Safety -- Safety and Occupational Health (SOH) Requirements

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 must be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Floating Plant Plan; G, EDC

Submit a plan showing floating plant used for dredging, anchorage when plant is not in use, and other appurtenances for approval prior to commencement of work.

Marine Access Channel Plan

Submit a plan for the marine access channel showing proposed layout with depth and elevation and all specialized materials used.

Stockpile Plan

Submit a plan for spoil stockpile showing proposed location within the access points to be used.

#### Timber Ramp Plan

Submit a plan for the timber ramp showing proposed installation and all specialized materials used.

#### SD-02 Shop Drawings

Surveys/Soundings; G, EDC

Submit drawings of surveys before any flotation dredging and surveys of final backfill of the any excavated flotation channels.

#### SD-03 Shop Drawings

Turbidity Curtain; G, EDC

#### SD-11 Closeout Submittals

Report Of Operations; G, EDC

(See paragraph "Report of Operations")

### 1.5 ENVIRONMENTAL PROTECTION REQUIREMENTS

Environmental compliance must be in accordance with Section 01 57 20.01 12, ENVIRONMENTAL PROTECTION.

#### 1.5.1 Turbidity Curtain

The Contractor must use a Type III Turbidity Curtain for tidal zones, which is anchored on two (2) sides. The turbidity curtain design must minimize turbidity outside of the construction right-of-way. Anchorage must be a interval 50 feet maximum. The turbidity curtain must also have navigation warning markers and lights located on intervals of 100 feet and at the end of marine access channel. The curtain fabric must have a minimum thickness of 45 mils, a minimum weight of 22 ounces per square yard, grab strength of at least 300 lbs, and must include UV inhibitors. Fixtures must be capable of withstanding the stresses of a salt water environment. The Contractor must be solely responsible for the quantity and location of turbidity curtain required to minimize turbidity outside of the construction easement as shown on the drawings. The turbidity curtain must be in place during all dredging, maintenance dredging, and backfill operations. The Contractor may choose to remove the turbidity curtain between operations provided that the materials are properly stored in accordance with the manufacturer's instructions when not in the water.

### 1.6 QUALITY CONTROL

#### 1.6.1 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 distribute one copy of each report to each of the following:

(a) U.S. Army Engineer District, New Orleans  
ATTN: Mr. Jeffrey Falati, CEMVN-CD-NO  
P.O. Box 60267  
New Orleans, LA 70160-0267

(b) Government Inspector

(4) One copy of each Report of Operations shall be maintained by the Contractor on the dredge(s).

(5) Further instructions on the preparation of the reports will be furnished at the Preconstruction Conference.

(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: Matthew Barbier. Submittals shall include one PDF file of all Form 4267 in chronological order with the Form 322(s) combined into one file.

## PART 2 PRODUCTS

### 2.1 TURBIDITY CURTAINS

(a) Barriers should be a bright color (yellow or "international" orange are recommended) that will attract the attention of nearby boaters.

(b) Seams in the fabric must be either vulcanized welded or sewn, and must develop the full strength of fabric.

(c) Load lines must be fabricated into the bottom of all floating turbidity curtains. Type III curtains must have load lines also fabricated into the top of the fabric. The top load line must consist of woven webbing or vinyl-sheathed steel cable and must have a break strength in excess of 4,500 kilograms (10,000 pounds). The supplemental (bottom) loadline must consist of a chain incorporated into the bottom hem of the curtain of sufficient weight to serve as a ballast to hold the curtain in a vertical position. Additional anchorage must be provided as necessary. The load lines must have suitable connecting devices which develop the full breaking strength for connecting to load lines adjacent sections.

(d) External anchors may consist of wooden or metal stakes 50 x 100 millimeters (2 x 4 inch) or 60 millimeter (2.5-inch) minimum diameter wood or 2 kilogram per linear meter steel (1.33 pounds/linear foot) when Type I installation is used; when Type II or Type III installations are used, bottom anchors should be used.

(e) Bottom anchors must be sufficient to hold the curtain in the same position relative to the bottom of the watercourse without interfering with the action of the curtain. The anchor may dig into the bottom (grappling hook, plow or fluke-type) or may be weighted (mushroom type) and should be attached to a floating anchor buoy via an anchor line. The anchor line would then run from the buoy to the top load line of the curtain. When used with Type III installations, these lines must contain enough slack to allow the buoy or to flow freely with tidal changes without pulling the buoy or curtain down and must be checked regularly to make sure they do not become entangled with debris. As previously noted, anchor spacing will vary with current velocity and potential wind and wave action; manufacturer's recommendations should be followed.

### PART 3 EXECUTION

#### 3.1 GENERAL

All materials and equipments must be barged to the jobsite using the marine access channel plan. Barges, plants, and other marine equipment will be permitted to moor within the marine access points. A timber ramp from a barge over the existing stone dike will be permitted for equipment to access the landside construction easement(s) shown on the drawings. Construction of piles or permanent structures will not be permitted.

#### 3.2 FLOTATION CHANNEL

The Contractor must use the marine access points at the locations shown on the drawings for site access. Within the marine access points, the Contractor is permitted/allowed to dredge a flotation channel. If the Contractor elects to dredge for flotation, flotation channels must be to the dimensions and limits shown on the drawings. The maximum dredge depth is elevation -7.0 NAVD88. Refer to the "Marine Access Points" as shown on the drawings for surveys spot elevations.

##### 3.2.1 Mechanical Excavation

The Contractor must supply the plant necessary to dredge the material to the dimensions and elevations allowed. Hydraulic dredging will not be permitted. Mechanical dredging operations require a turbidity curtain to reduce in the lake. The Contractor must supply all navigation warning markers and lights to comply with Coast Guard navigation rules and regulations. No hydraulic dredging of the marine access channel will be allowed. Only mechanical equipment, such as barge mounted excavators or draglines, will be allowed to excavate the access channels.

##### 3.2.2 Floating Plant Plan

The Contractor must operate and maintain all floating plants according to applicable requirements of EM 385-1-1 throughout dredging operations. Multiple floating plants may be used during construction. The Contractor must submit its Floating Plant Plan to show each plant used and the coordination of operations for the safe simultaneous use of floating plants. Floating Plant Plan submittal must include but not be limited to the requirements specified within and as shown on the drawings.

##### 3.2.3 Lights

Each night, between sunset and sunrise and during periods of restricted

visibility, provide lights for floating plants, pipelines, ranges, and markers. Also, provide lights for buoys that could endanger or obstruct navigation. When night work is in progress, maintain lights from sunset to sunrise for the observation of dredging operations. Lighting must conform to United States Coast Guard requirements for visibility and color.

#### 3.2.4 Navigation Warnings

The Contractor must comply with EM 385-1-1 and Coast Guard regulations during dredging, maintenance dredging, and backfilling operations.

#### 3.2.5 Installation and Maintenance of Turbidity Curtain

(a) For Type III installations it is important to set all the curtain anchor points. Care must be taken to ensure that anchor points are of sufficient holding power to retain the curtain under the existing current conditions, prior to putting the furled curtain into the water. Again, anchor buoys should be employed on all anchors to prevent the current from submerging the flotation at the anchor points. If the moving water into which the curtain is being installed is tidal and will subject the curtain to currents in both directions as the tide changes, it is important to provide anchors on both sides of the curtain for two reasons:

- 1) Curtain movement shall be minimized during tidal current reversals.
- 2) The curtain shall not overrun the anchors and pull them out when the tide reverses.

(b) When the anchors are secure, the furled curtain should be secured to the upstream anchor point and then sequentially attached to each next downstream anchor point until the entire curtain is in position. At this point, and before unfurling, the "lay" of the curtain shall be assessed and any necessary adjustments made to the anchors. When the location is ascertained to be as desired, the furling lines shall be cut to allow the skirt to drop.

(c) Always attach anchor lines to the flotation device, not to the bottom of the curtain. The anchoring line attached to the flotation device on the downstream side shall provide support for the curtain. Attaching the anchors to the bottom of the curtain could cause premature failure of the curtain due to the stresses imparted on the middle section of the curtain.

(d) Turbidity curtain must be installed and maintained during all dredging, maintenance dredging, and backfill operations. The Contractor may choose to remove the turbidity curtain between these operations provided that the material is properly stored in accordance with the manufacturer's instructions when not in the water.

(e) Should repairs to the geotextile fabric become necessary, there are normally repair kits available from the manufacturer; manufacturer's instructions must be followed to ensure the adequacy of the repair.

(f) When the curtain is no longer required as determined by the inspector, the curtain and related components must be removed in such a manner as to minimize turbidity. Remaining sediment must be

sufficiently settled before removing the curtain. Sediment may be removed and the original depth (or plan elevation) restored. Any spoils must be taken to upland area and be stabilized.

#### 3.2.6 Safety of Structures

The prosecution of work must ensure the stability of the existing stone dike. Repair damage resulting from dredging operations, insofar as such damage may be caused by variation in locations or depth of dredging, or both, from that indicated or permitted under the contract.

#### 3.2.7 Stockpile Plan

The dredged material must be stockpile within the construction easement of the respective marine access point as shown on the contract drawings.

#### 3.2.8 Flotation Channel Closure

Any flotation channel dredged must be backfilled with stockpiled dredge material to the original lake bottom elevations or to the extent of existing stockpile material.

#### 3.2.9 Timber Ramp Plan

A timber ramp from a barge over the existing stone dike will be permitted for equipment to access the landside construction easement(s) shown on the contract drawings.

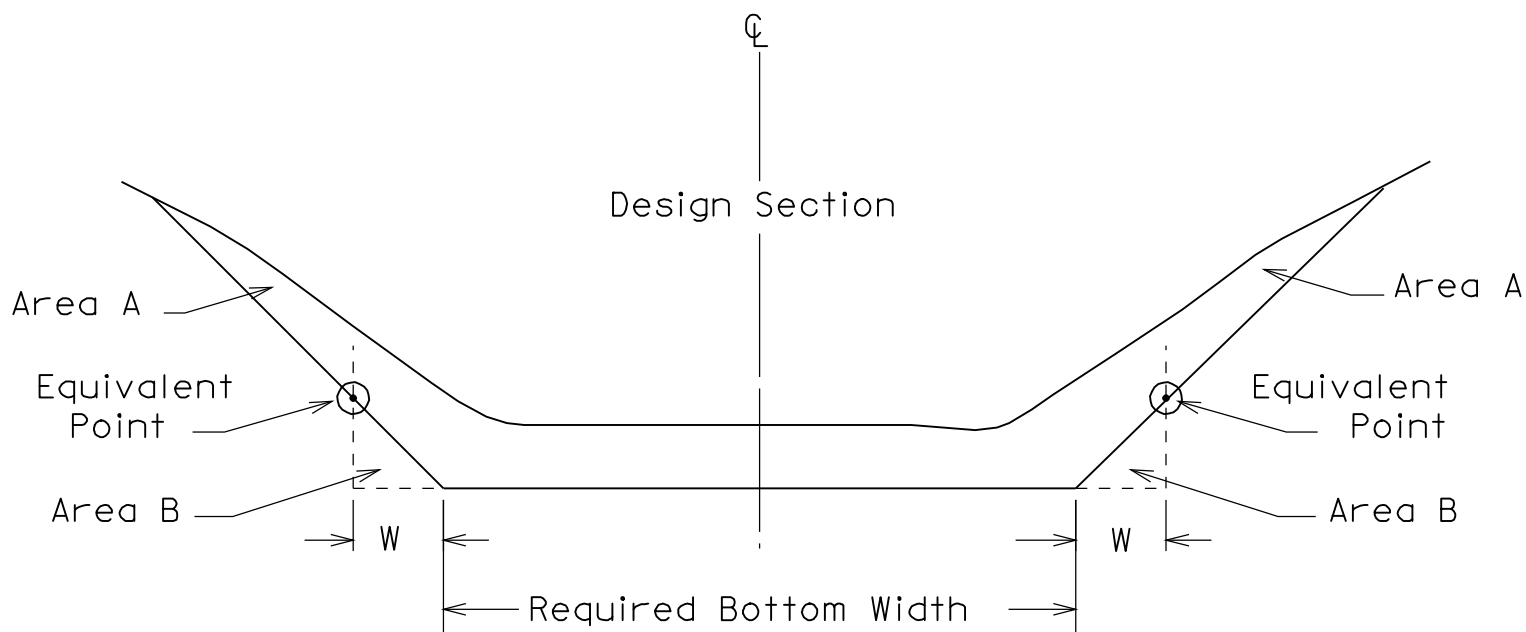
#### 3.2.10 Box Cut

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.

### 3.3 SURVEYS

Submit surveys/soundings plots before any dredging of the allowable flotation channels. Submit Surveys/Sounding plots for completed flotation channel backfilling for Government approval and acceptance. Surveys must be in accordance with Section 02 21 10.00 12 SURVEYS.

-- 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 | Cubic Yards | C.V. Hour | Pump Time | HP | HAL | CPPL | CGSH | CLPJ | MOR | SISW | WIP | LDNE | PMUT | MISC | Delay Time | Portion | Shore | Sub | Total | Tide Gauge | Discharge Lines | Fuel | Oil | Grease | Water | Pump RPM | Dredge Crew | Assignment | 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>ENG CW-0-13 |               |
|---------------------------------------------------------------------|---------------------------------------------------------------------|-----------------|-----|---------|----------------------------------|----------------------------------|------------------------------------------------------------|------------------|--------------------------------|-------------------------------------|----------------------------------------------|---------------------------------------|---------------|
| THRU:                                                               |                                                                     | TO:             |     |         |                                  | FROM:                            |                                                            |                  | DATE OR PERIOD                 |                                     | REPORT NO.                                   |                                       |               |
|                                                                     |                                                                     |                 |     |         |                                  |                                  |                                                            |                  |                                |                                     |                                              |                                       |               |
| CHARACTER OF REPORT                                                 | [ ]                                                                 | MAINTENANCE     | [ ] | DAILY   | [ ]                              | COMPLETION                       | DREDGE PUMPS OPERATING & CORRESPONDING RPM                 | [ ]              | MAIN 1                         |                                     | RPM                                          | DREDGE TYPE:                          |               |
|                                                                     | [ ]                                                                 | NEW WORK        | [ ] | ANNUAL  |                                  |                                  |                                                            | [ ]              | MAIN 2                         |                                     | RPM                                          | [ ]                                   | BUCKET        |
| DREDGE                                                              | NAME                                                                |                 |     |         | DREDGE ADVANCE MECHANISM         |                                  |                                                            | [ ]              | SUBMERGED                      |                                     | RPM                                          | [ ]                                   | CUTTERHEAD    |
|                                                                     |                                                                     |                 |     |         | TYPE (walking, carriage, wires): |                                  |                                                            | [ ]              | BOOSTER 1                      |                                     | RPM                                          | [ ]                                   | DIPPER        |
|                                                                     |                                                                     |                 |     |         | IDLER BARGE USED (Yes/No):       |                                  |                                                            | [ ]              | BOOSTER 2                      |                                     | RPM                                          | [ ]                                   | DUSTPAN       |
|                                                                     | DREDGE DISCHARGE SIZE (ID), IN                                      |                 |     |         | CUTTER, HP                       |                                  | DUSTPAN SUCTION PIPE JET, HP                               |                  | PROPULSION                     |                                     | DIPPER OR BUCKET                             |                                       | cu. yds. cap. |
|                                                                     | NUMBER OF CREWMEMBERS                                               | DREDGE          |     | SHORE   |                                  | OTHER                            | TOTAL                                                      | WORK SCHEDULE    | SHIFTS PER DAY                 |                                     | DAYS PER WEEK                                |                                       |               |
| PROJECT AND ASSIGNMENT                                              |                                                                     |                 |     |         |                                  |                                  | ASSIGNED DIMENSIONS                                        | WIDTH            |                                | DEPTH                               |                                              | OVERDEPTH                             |               |
|                                                                     |                                                                     |                 |     |         |                                  |                                  |                                                            |                  |                                |                                     |                                              |                                       |               |
|                                                                     | LOCATION (INCLUDE STATIONS NUMBERS)                                 |                 | >   |         |                                  |                                  | WIDTH OF SWING                                             |                  |                                | RANGES - RT, CL, LT                 |                                              |                                       |               |
|                                                                     | C/L STATIONS                                                        |                 | >   |         |                                  |                                  | WIDTH OF SWING                                             |                  |                                | RANGES - RT, CL, LT                 |                                              |                                       |               |
| CHARACTER OF MATERIAL<br>(leave blank if grab samples aren't taken) | ABSOLUTE DENSITY                                                    |                 |     |         | IN PLACE DENSITY                 |                                  |                                                            |                  | VOIDS RATIO                    |                                     |                                              |                                       |               |
|                                                                     | GMS/liter                                                           |                 |     |         | GMS/liter                        |                                  |                                                            |                  |                                |                                     |                                              |                                       |               |
|                                                                     | GRAIN SIZE                                                          |                 |     |         |                                  |                                  |                                                            |                  | VISUAL MATERIAL CLASSIFICATION |                                     |                                              |                                       |               |
|                                                                     | MM                                                                  |                 |     |         | MM                               |                                  |                                                            |                  | TYPE                           |                                     |                                              |                                       |               |
| CONTRACT OR ORDER NUMBER                                            | NUMBER                                                              |                 |     |         |                                  |                                  | CONTRACTOR                                                 |                  | HIRED LABOR                    |                                     | TOTAL NUMBER OF DAYS ON WHICH WORK WAS DONE: |                                       |               |
|                                                                     |                                                                     |                 |     |         |                                  |                                  |                                                            |                  |                                |                                     |                                              |                                       |               |
| CHANNEL CONDITION                                                   | AVERAGE DEPTH                                                       | BEFORE DREDGING |     |         | AFTER DREDGING                   |                                  |                                                            | MINIMUM SOUNDING |                                | BEFORE DREDGING                     |                                              | AFTER DREDGING                        |               |
|                                                                     |                                                                     |                 |     |         |                                  |                                  |                                                            |                  |                                |                                     |                                              |                                       |               |
| RIVER STAGE                                                         | MINIMUM                                                             | TIME            |     | MAXIMUM |                                  | TIME                             |                                                            | GAGE LOCATION    |                                |                                     |                                              |                                       |               |
| WEATHER CONDITION                                                   | (clear, cloudy, rain, snow, and fog)                                |                 |     |         |                                  |                                  |                                                            | VISIBILITY       |                                | WIND (maximum velocity & direction) |                                              |                                       |               |
|                                                                     |                                                                     |                 |     |         |                                  |                                  |                                                            | miles            |                                |                                     |                                              |                                       |               |
| WORK PERFORMED                                                      |                                                                     |                 |     |         |                                  |                                  | DISTRIBUTION OF TIME                                       |                  |                                |                                     |                                              |                                       |               |
| ITEM                                                                | UNIT                                                                | QUANTITY        |     |         |                                  |                                  | EFFECTIVE WORKING TIME<br>(chargeable to cost of work)     |                  |                                |                                     | AMOUNT                                       |                                       |               |
| AVERAGE WIDTH OF CUT (SWING)                                        | FEET                                                                |                 |     |         |                                  |                                  | PUMPING OR DREDGING                                        |                  |                                |                                     |                                              |                                       |               |
| TOTAL ADVANCE THIS PERIOD                                           | FEET                                                                |                 |     |         |                                  |                                  | PCT. OF EFFECTIVE TIME                                     |                  |                                |                                     |                                              |                                       |               |
| TOTAL ADVANCE PREVIOUS TO THIS PERIOD                               | FEET                                                                |                 |     |         |                                  |                                  | BOOSTER (in line):                                         |                  |                                |                                     |                                              |                                       |               |
| TOTAL ADVANCE TO DATE                                               | FEET                                                                |                 |     |         |                                  |                                  | NON-EFFECTIVE WORKING TIME<br>(chargeable to cost of work) |                  |                                |                                     | NO. OF TIMES                                 | AMOUNT                                |               |
| TOTAL LENGTH OF DISCHARGE PIPELINE: *SEE REVERSE SIDE               |                                                                     |                 |     |         |                                  |                                  | HANDLING PIPELINES                                         |                  |                                |                                     | HPL                                          |                                       |               |
| AVERAGE LIFT                                                        | FEET                                                                |                 |     |         |                                  |                                  | HANDLING ANCHOR LINES                                      |                  |                                |                                     | HAL                                          |                                       |               |
| AVERAGE PUMP SPEED                                                  | RPM                                                                 |                 |     |         |                                  |                                  | CLEARING PUMP AND PIPELINE                                 |                  |                                |                                     | CPPL                                         |                                       |               |
| AVERAGE GROSS CY'S DREDGED PER PUMP HOUR                            | CY/HR                                                               |                 |     |         |                                  |                                  | CLEARING CUTTER OR SUCTION HEAD                            |                  |                                |                                     | CCSH                                         |                                       |               |
| AVERAGE NET CY'S DREDGED PER PUMP HOUR                              | CY/HR                                                               |                 |     |         |                                  |                                  | WAITING FOR SCOWS                                          |                  |                                |                                     | WFS                                          |                                       |               |
| AVERAGE LINEAR FOOT PER HOUR                                        | LF/HR                                                               |                 |     |         |                                  |                                  | TO AND FROM WHARF OR ANCHORAGE                             |                  |                                |                                     | TFWA                                         |                                       |               |
| CUBIC YARDS REMOVED                                                 |                                                                     |                 |     |         |                                  |                                  | CHANGING LOCATION OF PLANT ON JOB                          |                  |                                |                                     | CLPJ                                         |                                       |               |
|                                                                     |                                                                     |                 |     |         |                                  |                                  | LOSS DUE TO OPPOSING NATURAL ELEMENTS                      |                  |                                |                                     | LDNE                                         |                                       |               |
| AMOUNT DREDGED THIS PERIOD:                                         |                                                                     |                 |     |         |                                  |                                  | LOSS DUE TO PASSING VESSELS                                |                  |                                |                                     | WVP                                          |                                       |               |
| (1) CREDITED (pay place)                                            |                                                                     |                 |     |         |                                  | SHORELINE AND SHORE WORK         |                                                            |                  |                                | SLSW                                |                                              |                                       |               |
| (2) GROSS (computed amount)                                         |                                                                     |                 |     |         |                                  | WAITING FOR BOOSTER              |                                                            |                  |                                | WFB                                 |                                              |                                       |               |
| AMOUNT PREVIOUSLY REPORTED:                                         |                                                                     |                 |     |         |                                  |                                  | MINOR OPER. REPAIRS (explain in remarks)                   |                  |                                |                                     | MOR                                          |                                       |               |
| (1) CREDITED (pay place)                                            |                                                                     |                 |     |         |                                  | WAITING FOR ATTENDANT PLANT      |                                                            |                  |                                | WAP                                 |                                              |                                       |               |
| (2) GROSS (computed amount)                                         |                                                                     |                 |     |         |                                  | PREPARATION AND MAKING UP TOW    |                                                            |                  |                                | PMUT                                |                                              |                                       |               |
| TOTAL AMOUNT DREDGED TO DATE:                                       |                                                                     |                 |     |         |                                  |                                  | TRANSFERRING PLANT BETWEEN WORKS                           |                  |                                |                                     | TPBW                                         |                                       |               |
| (1) CREDITED (pay place)                                            |                                                                     |                 |     |         |                                  | LAY TIME OFF SHIFT AND SATURDAYS |                                                            |                  |                                | LTOSS                               |                                              |                                       |               |
| (2) GROSS (computed amount)                                         |                                                                     |                 |     |         |                                  | SUNDAYS AND HOLIDAYS             |                                                            |                  |                                | SH                                  |                                              |                                       |               |
| ATTENDANT PLANT                                                     |                                                                     |                 |     |         |                                  |                                  | FIRE DRILL                                                 |                  |                                |                                     | FD                                           |                                       |               |
| ITEM                                                                | NAME OR NUMBER                                                      |                 |     |         |                                  | HOURS                            | MISCELLANEOUS (explain in remarks)                         |                  |                                |                                     | MISC                                         |                                       |               |
| DREDGE                                                              |                                                                     |                 |     |         |                                  |                                  | TOTAL NON-EFFECTIVE WORKING TIME                           |                  |                                |                                     |                                              |                                       |               |
| TENDER #1                                                           |                                                                     |                 |     |         |                                  |                                  | PCT. OF NON-EFFECTIVE TIME                                 |                  |                                |                                     |                                              |                                       |               |
| TENDER #2                                                           |                                                                     |                 |     |         |                                  |                                  | TOTAL EFFECTIVE AND NON-EFFECTIVE TIME                     |                  |                                |                                     |                                              |                                       |               |
| SKIFF                                                               |                                                                     |                 |     |         |                                  |                                  | (chargeable to cost of work)                               |                  |                                |                                     |                                              |                                       |               |
| CREW                                                                |                                                                     |                 |     |         |                                  |                                  | PCT. OF TOTAL TIME IN PERIOD                               |                  |                                |                                     |                                              |                                       |               |
| SURVEY                                                              |                                                                     |                 |     |         |                                  |                                  | LOST TIME                                                  |                  |                                |                                     |                                              |                                       |               |
| BARGES                                                              |                                                                     |                 |     |         |                                  |                                  | (not chargeable to cost of work)                           |                  |                                |                                     |                                              |                                       |               |
| CRANE BARGE                                                         |                                                                     |                 |     |         |                                  |                                  | MAJOR REPAIRS AND ALTERATIONS                              |                  |                                |                                     |                                              |                                       |               |
| IDLER BARGE                                                         |                                                                     |                 |     |         |                                  |                                  | CESSATION                                                  |                  |                                |                                     |                                              |                                       |               |
| CUTTER-TYPE                                                         |                                                                     |                 |     |         |                                  |                                  | COLLISIONS                                                 |                  |                                |                                     |                                              |                                       |               |
| SPUD LENGTH                                                         |                                                                     |                 |     |         |                                  |                                  | MISCELLANEOUS (explain in remarks)                         |                  |                                |                                     |                                              |                                       |               |
| NUMBER OF INSPECTIONS                                               | BY DISTRICT PERSONNEL                                               |                 |     |         | BY DIV & OCE PERSONNEL           |                                  |                                                            |                  | TOTAL LOST TIME                |                                     |                                              |                                       |               |
| CONTRACT USE ONLY                                                   | HAS ANYTHING DEVELOPED WHICH MIGHT LEAD TO A CHANGE ORDER OR CLAIM? |                 |     |         |                                  | ( )                              | NO                                                         |                  | TOTAL TIME IN PERIOD           |                                     |                                              |                                       |               |
|                                                                     | (If "YES", explain under remarks on back)                           |                 |     |         |                                  | ( )                              | YES                                                        |                  |                                |                                     |                                              |                                       |               |

## SUMMARY OF DREDGE DISCHARGE PIPELINE, DISPOSAL AREAS AND TIME BREAKDOWN

### ATTENDANT PLANT

| DREDGE DISCHARGE PIPELINE |        |           |        |                                                 |        | DISPOSAL AREA EQUIPMENT     |                     | ANCHORING SYSTEMS |                |  |
|---------------------------|--------|-----------|--------|-------------------------------------------------|--------|-----------------------------|---------------------|-------------------|----------------|--|
| FLOATING PONTOONS         | AMOUNT | SUBMERGED | AMOUNT | SHORE                                           | AMOUNT | TOTAL COMBINED DISCHARGE LF | Marsh Trackhoes-30' |                   | Skidder Barges |  |
| Metal                     |        | Metal     |        | Metal                                           |        |                             | Marsh Trackhoes-60' |                   | ANCHORS        |  |
| PVC                       |        | PVC       |        | PVC                                             |        |                             | Marsh Buggies       |                   | Breast         |  |
| Flexifloat                |        | Other     |        | Other                                           |        |                             | Dozers              |                   | Head           |  |
| TOTAL LF                  |        |           |        |                                                 |        |                             | Front End Loaders   |                   | Line           |  |
|                           |        |           |        |                                                 |        |                             | Air Boats           |                   | Other          |  |
|                           |        |           |        |                                                 |        |                             | ATV's               |                   |                |  |
|                           |        |           |        |                                                 |        |                             | Y-Valves            |                   |                |  |
|                           |        |           |        |                                                 |        |                             | Spreaders           |                   |                |  |
| ELBOWS                    |        | Stiff     |        | LEAST INSIDE DIAMETER OF DISCHARGE PIPELINE, IN |        |                             |                     |                   |                |  |
|                           |        | Swivel    |        |                                                 |        |                             |                     |                   |                |  |

## DISPOSAL AREA SUMMARY

| NAME/LOCATION<br>COORDINATE | SHORE<br>CONNECTION | DATE<br>START | DATE<br>FINISH | TOTAL<br>GROSS CYS | TOTAL<br>ACREAGE | REMARKS |
|-----------------------------|---------------------|---------------|----------------|--------------------|------------------|---------|
|-----------------------------|---------------------|---------------|----------------|--------------------|------------------|---------|

## TIME BREAKDOWN

|              |      |     |     |    |                 |       |  |
|--------------|------|-----|-----|----|-----------------|-------|--|
|              | 100% | 70% | 35% | 0% | 0% - MISC (Mob) | TOTAL |  |
| BASE HRS     |      |     |     |    |                 |       |  |
| OPTION HRS   |      |     |     |    |                 |       |  |
| PREVIOUS HRS |      |     |     |    |                 |       |  |
| TOTAL HRS    |      |     |     |    |                 |       |  |

## OPERATING SUPPLIES

|                    |      | TODAY QUANTITY | PREVIOUS QUANTITY | QUANTITY TO DATE |
|--------------------|------|----------------|-------------------|------------------|
| FUEL (diesel)      | GAL. |                |                   |                  |
| LUBRICANT (oil)    | GAL. |                |                   |                  |
| LUBRICANT (grease) | LBS. |                |                   |                  |
| WATER              | GAL. |                |                   |                  |

## REMARKS:

|  |
|--|
|  |
|--|

|                                           |  |                                             |  |                                          |  |
|-------------------------------------------|--|---------------------------------------------|--|------------------------------------------|--|
| SUBMITTED BY (Name, title, and signature) |  | RECOMMENDED BY (Name, title, and signature) |  | APPROVED BY (Name, title, and signature) |  |
|                                           |  |                                             |  |                                          |  |
| NAME:                                     |  | NAME:                                       |  | NAME:                                    |  |
| TITLE:                                    |  | TITLE:                                      |  | TITLE:                                   |  |

SECTION TABLE OF CONTENTS

DIVISION 35 - WATERWAY AND MARINE CONSTRUCTION

SECTION 35 31 19

GRADED STONE

PART 1 GENERAL

- 1.1 SCOPE
- 1.2 MEASUREMENT AND PAYMENT
  - 1.2.1 Graded Stone
    - 1.2.1.1 Measurement
    - 1.2.1.2 Payment
- 1.3 REFERENCES
- 1.4 SUBMITTALS
- 1.5 GOVERNMENT TESTING AND STUDIES
  - 1.5.1 Stone
    - 1.5.1.1 General
    - 1.5.1.2 Sources
    - 1.5.1.3 Random Sampling
- 1.6 CONSTRUCTION TOLERANCES
- 1.7 TERMINOLOGY
  - 1.7.1 Graded Stone

PART 2 PRODUCTS

- 2.1 STONE
  - 2.1.1 Gradation Test
    - 2.1.1.1 Proportional Dimension Limitations
  - 2.1.2 Graded Stone
  - 2.1.3 Evaluation Testing Of Stone

PART 3 EXECUTION

- 3.1 STONE CONSTRUCTION PLAN
- 3.2 PRE-CONSTRUCTION STONE DIKE CAP CROSS SECTION SURVEYS
- 3.3 GEOTEXTILE (SPLASH PAD)
- 3.4 PLACEMENT OF GRADED STONE
  - 3.4.1 General
  - 3.4.2 Placement
    - 3.4.2.1 Above Water
    - 3.4.2.2 Under Water
- 3.5 POST-CONSTRUCTION STONE DIKE CAP SURVEYS
- 3.6 TESTS AND INSPECTIONS
  - 3.6.1 Gradation Tests for Stone
    - 3.6.1.1 Gradation Test Method for Graded Stone
    - 3.6.1.2 Standard Test Method for Gradation of Graded Stone

-- End of Section Table of Contents --

SECTION 35 31 19

GRADED STONE

PART 1 GENERAL

1.1 SCOPE

The work covered by this section consists of furnishing all plant, labor, equipment, and materials, and performing all operations in connection with the placement of graded stone; as specified herein and shown on the drawings.

1.2 MEASUREMENT AND PAYMENT

1.2.1 Graded Stone

1.2.1.1 Measurement

Graded stone will be measured for payment by the ton as determined by barge displacement as described below:

a. Barge Load

(1) Graded stone will be measured for payment by the Contracting Officer by weight determined by barge displacement. The Contractor must furnish the Contracting Officer a barge displacement table not less than 10 work days prior to unloading the graded stone from any barge. Each table submitted must show the name and/or number of the barge owner, the name of the fabricator, and the certification and date of certification of the person or firm preparing the table. The Contractor must furnish with the barge displacement tables a drawing or sketch of each barge, dimensioned in sufficient detail to permit checking of the tables. The drawings must show, as a minimum, the length, width, depth of the barge, and dimensions of the rake or rakes. Each such table must have its accuracy certified by a person or firm, other than the Contractor, customarily performing this service. Each table submitted must contain, in parallel columns, the freeboard of the barge in feet and tenths from zero to the full depth of the barge and the corresponding gross displacement to the nearest ton. Each barge must be suitably marked with two displacement gaging locations on each side near each end of the barge and two amidships on opposite sides. Each gaging location must be marked by a line perpendicular to the edge of the barge, 4 inches wide and 1 foot long, on both the deck and side of the barge and two amid ship on opposite sides. Barges with rakes must have the displacement gaging lines placed at each corner of the box section between the rakes. If a barge has a box end or ends, the gaging locations must be placed approximately 4 feet from the box end). The freeboard will be measured at the six gaging locations and the displacement determined by the use of "STANDARD BARGE TABLES" from the average of these measurements. The displacement will be determined before and after being unloaded and the difference between these values must be the quantity delivered. The Contractor must submit the Gaging Table Data as

specified in the Submittals paragraph. Barges must be loaded so that the readings taken at the gaging locations do not vary more than 1.5 feet port to starboard fore and aft and do not vary more than 0.5 feet port to starboard. If such is not the case, the Contractor must trim the carrier by shifting the stone until this limit is reached, before the measurement will be accepted. The draft must be determined from the average of all six readings weighting the readings of the middle gage at double those of the end gages.  $(G_1 + G_2 + 2 \times G_3 + 2 \times G_4 + G_5 + G_6)$  divided by 8 = average draft. All carriers used in transporting stone must be free of leaks such as would render accurate gauging difficult. Facilities for inspecting the hold of each carrier to determine whether leakage is occurring must be provided. Each carrier must also be provided with adequate pumping facilities, and if water is found to be accumulating in the hold, the carrier must be pumped dry before each gaging, both before and after unloading. Lightening by pumping or by transfer of crew or supplies will not be permitted while stone is being transferred. Rejected graded stone and unacceptable material must be left aboard the barge until after the final readings have been taken.

(2) If barge tables are furnished for fresh water and if it is believed that barge displacement measurements made within the contract limits of the work are being taken in water that has salinity, the Contractor will have the option of obtaining water samples and determining densities or unit weights of these samples. These water samples must be taken in accordance with ASTM D3370 (Practice A - Grab Samples) at depths of 4 and 8 feet in the area where measurements are made. Water sampling must be performed when the barges are measured for quantities, both when fully loaded and when empty. Water samples must be taken by the Contractor and witnessed by the Contracting Officer with the use of "Polypro" 2000 ml water sampler, or equal. Densities must be determined as specified in ASTM D1429 (Method D-Hydrometer Method). Testing must be done for the Contractor by a certified testing laboratory, and test results certified by the laboratory. After review and approval of the test results by the Contracting Officer, the average of the densities obtained at 4 and 8 feet will be used as the suitable salt water conversion factor.

#### 1.2.1.2 Payment

Payment for graded stone satisfactorily placed will be made at the applicable contract unit price per ton for "Graded Stone - Dike Cap", "Graded Stone - Dike Cap OW1", if Option Work 1 (OW1) is exercised, "Graded Stone - Splash Pad", or "Graded Stone - Splash Pad OW1", if Option Work 1 (OW1) is exercised. Price and payment will constitute full compensation for furnishing all plant, labor, materials and equipment for placement of the graded stone; including surveys, stockpiling, hauling, handling, and testing; and all other work incidental thereto; as specified herein and as shown on the drawings.

#### 1.3 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.

ASTM INTERNATIONAL (ASTM)

|            |                                                                                                                  |
|------------|------------------------------------------------------------------------------------------------------------------|
| ASTM C127  | (2025) Standard Test Method for Density, Relative Density (Specific Gravity), and Absorption of Coarse Aggregate |
| ASTM D1429 | (2003) Specific Gravity of Water and Brine                                                                       |
| ASTM D3370 | (2018) Standard Practices for Sampling Water from Flowing Process Streams                                        |
| ASTM D4791 | (2019) Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate                  |
| ASTM D5519 | (2015) Particle Size Analysis of Natural and Man-Made Riprap Materials                                           |

U.S. ARMY CORPS OF ENGINEERS (USACE)

|                |                                                             |
|----------------|-------------------------------------------------------------|
| EM 1110-2-1601 | (1994; Change 1) Hydraulic Design of Flood Control Channels |
|----------------|-------------------------------------------------------------|

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 must be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Stone Construction Plan; G, ED

Stone Sources; G, ED

SD-03 Product Data

Graded Stone; G, DO

Submit the source for materials used in graded stone

Gaging Table Data

Submit stone hauling vessel gaging tables and a copy of the data and calculations used for the preparation of the tables.

SD-04 Samples

Stone; G

Submit suitable stone samples prior to delivery of any such material to the work site if stone is not from one of the stone sources listed in Section 01 10 00 GENERAL PROVISIONS paragraph entitled STONE SOURCES.

SD-06 Test Reports

Gradation Test; G, DO

Submit the gradation tests using the GRADATION TEST DATA SHEET attached at end of this section.

SD-07 Certificates

Stone; G, DO

Submit certificates of compliance attesting that the materials meet specification requirements.

1.5 GOVERNMENT TESTING AND STUDIES

1.5.1 Stone

1.5.1.1 General

All stone must be durable material as approved by the Contracting Officer.

1.5.1.2 Sources

Stone must be furnished from any of the approved sources listed in Section 01 10 00 GENERAL PROVISIONS paragraph entitled STONE SOURCES.

1.5.1.3 Random Sampling

The stone used by the Contractor in this contract will be sampled by the Government for Quality Assurance testing on the basis of a minimum once each year, or once for every 50,000 tons of stone placed. The samples will be evaluated based upon petrographic analysis, specific gravity, bulk specific gravity (SSD), and absorption.

1.6 CONSTRUCTION TOLERANCES

The finished surface and stone layer thickness must not deviate from the lines and grades shown by more than the tolerances listed below. Tolerances are measured perpendicular to the indicated neat lines. Extreme limits of the tolerances given must not be continuous in any direction for more than 1 times the nominal stone dimension nor for an area greater than 100 square feet of the structure surface. The intention is that the work must be built generally to the required elevations, slope and grade and that the outer surfaces must be even and present a neat appearance. Placed material not meeting these limits must be removed or reworked as directed by the Contracting Officer. Payment will not be made for excess material which the Contracting Officer permits to remain in place.

NEATLINE TOLERANCES

| MATERIAL       | Above Neatline<br>inches | Below Neatline<br>inches |
|----------------|--------------------------|--------------------------|
| Stone Dike Cap | 12                       | 0                        |
| Splash Pad     | 6                        | 3                        |

## 1.7 TERMINOLOGY

### 1.7.1 Graded Stone

Graded stone is defined as a material having a gradation band similar to those specified in EM 1110-2-1601, Chapter 3, uniform graded material. Graded stone is normally produced by mechanical methods, with a jaw crusher and grizzly after the stone has been mined by blasting in a quarry. Graded stone gradations shall have a maximum top size of 1.0 ton.

## PART 2 PRODUCTS

### 2.1 STONE

#### 2.1.1 Gradation Test

The Contractor must perform a gradation test or tests on the graded stone at the quarry in accordance with paragraph "Gradation Test Method For Graded Stone". The sample must be taken by the Contractor in the presence of the Contracting Officer. The Contractor must notify the Contracting Officer not less than 3 days in advance of each test. In the event of unavailability of the Contracting Officer, the Contractor must perform the tests and certify to the Contracting Officer that the graded stone, shipped, complies to the requirements specified herein. At least one gradation test must be performed per 50,000 tons of 2,200 lb graded stone, placed, but not less than one test must be performed. At least one gradation test must be performed per 15,000 tons of 200 lb graded stone, placed, but not less than one test must be performed. The gradation tests must be reported using the GRADATION TEST DATA SHEET and ENG FORM 4794-R, attached at end of this section. The Contractor must designate on the test form that portion in tons of the lot tested which is applicable to this contract. Any deviation from the reported tonnage must be corrected and recorded on a revised GRADATION TEST DATA SHEET. The sample must consist of not less than 25 tons of graded stone, and must be collected in a random manner which will provide a sample which accurately reflects the actual gradation arriving at the jobsite. Failure of the test on the initial sample and on an additional sample will be considered cause for rejection of the quarry and/or quarry process, and all graded stone represented by the failed tests must be set aside and not incorporated into the work. The Contracting Officer may direct, under the Contract provision in Section 00 72 00 GENERAL CONDITIONS entitled INSPECTION OF CONSTRUCTION, additional testing of material furnished to the worksite if the material appears, by visual inspection, to be of questionable gradation or quality. Any additional tests required because of the failure of an initial test sample will not be considered as one of the other required tests.

##### 2.1.1.1 Proportional Dimension Limitations

The maximum aspect ratio (greatest dimension:least dimension) of any piece of graded stone for size ranges which are not graded with a screen or grizzly, must be not greater than 3:1 when measured across mutually perpendicular axis. Not more than 25 percent (25%) of the stones within a gradation range must have an aspect ratio greater than 2.5:1. A maximum of 15 percent flat and elongated pieces by weight will be acceptable. A flat and elongated piece of graded stone is defined as having a ratio of width to thickness or length to width greater than 3:1. ASTM D4791 must be used as a guide to perform the test.



### 2.1.2 Graded Stone

Only quarried stone must be used. Graded stone quality must be as specified in paragraph GOVERNMENT TESTING AND STUDIES, subparagraph "Stone". Stone must be well graded and must conform to the table below.

#### 2,200 lbs Graded Stone Gradation (Stone Dike Cap)

| PERCENT LIGHTER BY WEIGHT | LIMITS OF STONE WEIGHT IN LBS. |
|---------------------------|--------------------------------|
| 100                       | 2200 - 900                     |
| 50                        | 930 - 440                      |
| 15                        | 460 - 130                      |

#### 200 lbs Graded Stone Gradation (Splash Pad)

| PERCENT LIGHTER BY WEIGHT | LIMITS OF STONE WEIGHT IN LBS. |
|---------------------------|--------------------------------|
| 100                       | 200 - 80                       |
| 50                        | 80 - 40                        |
| 15                        | 40 - 10                        |

### 2.1.3 Evaluation Testing Of Stone

Stone shall be obtained in accordance with Section 01 10 00 GENERAL PROVISIONS paragraph entitled STONE SOURCES. If the Contractor proposes to furnish stone from a source not listed in STONE SOURCES, the Government will make such investigations as necessary to determine whether acceptable stone can be produced from the proposed source. Satisfactory service records on work outside the Corps of Engineers will be acceptable. If no such records are available, the Government will make tests to assure the acceptability of the stone. The tests to which the stone may be subjected will include petrographic analysis, specific gravity, abrasion, unit weight, absorption, wetting and drying, freezing and thawing and such other tests as may be considered necessary by the Contracting Officer. The following guidance is provided for use by the Contractor in analyzing a source of stone not listed in STONE SOURCES. Stone that weighs less than 155 pounds per cubic foot or has more than 2 percent absorption will not be accepted unless other tests and service records show that the stone is satisfactory. The method of test for unit weight and absorption will be ASTM C127 except that unit weight will be calculated in accordance with note 5 using bulk specific gravity, S.S.D. Samples of stone from a source not listed in STONE SOURCES shall be submitted to the Contracting Officer for testing and acceptance prior to delivery of any stone to the site of the work. Samples shall consist of at least seven pieces of stone, roughly cubical in shape and weighing not less than 100 pounds each. All such samples shall be taken by the Contractor under the supervision of the Contracting Officer. The samples shall be shipped at the Contractor's expense to the U.S. Army Engineer Research and Development Center (ERDC), 3909 Halls Ferry Road, Vicksburg, Mississippi, at least 90 days in advance of the time of the placing of the stone is expected to begin. The tests will be conducted in accordance with applicable Corps of Engineers methods of tests and will be performed at the U.S. Army Engineer Research and Development Center (ERDC), Vicksburg, Mississippi. The cost of testing will be borne by the Government.

## PART 3 EXECUTION

### 3.1 STONE CONSTRUCTION PLAN

The Contractor must submit a "Stone Construction Plan" for Government approval. The plan must indicate the Contractors intended order of operations and methods for placement of stone. The plan must include, but not limited to, the following:

- a. The intended location(s) along the stone dike alignment where placement of stone will begin.
- b. Acceptance Reaches: The intended acceptance sections of placed stone to the full theoretical section(s), for acceptance and payment by the Government.
- c. The stone source in accordance Section 01 10 00 GENERAL PROVISIONS, paragraph STONE SOURCES.

### 3.2 PRE-CONSTRUCTION STONE DIKE CAP CROSS SECTION SURVEYS

Prior to stone placement for the stone dike cap, the Contractor must perform the "Pre-Construction Stone Dike Cap Cross Section Surveys" in accordance with Section 02 21 10.00 12 SURVEYS.

### 3.3 GEOTEXTILE (SPLASH PAD)

Installation of geotextile must be as specified in Section 31 05 19.02 12, SEPARATOR GEOTEXTILE prior to placing stone for the splash pad.

### 3.4 PLACEMENT OF GRADED STONE

#### 3.4.1 General

Graded stone for the splash pad must be placed on the geotextile at the limits shown on the drawings. Graded stone for the stone dike cap must be placed on the existing stone dike at the limits shown on the drawings. The Contractor shall minimize drop distance of stone placement on existing or previously placed stone. Minimizing drop distance will prevent fracturing of stones on impact at placement. In general, drop distance shall be limited to 18 inches. Stone fracturing will be monitored to see if an adjustment to drop distance is necessary.

#### 3.4.2 Placement

Under water placement must be used when the top of the layer to be placed is covered by more than 3 feet of water.

##### 3.4.2.1 Above Water

Graded stone must be placed in a manner which will produce a well-graded mass of rock with the minimum practicable percentage of voids, and must be constructed, within the specified tolerances, to the lines and grades shown on the contract drawings or staked in the field. A tolerance of plus 12 inches from the slope lines and grades shown on the contract drawings will be allowed in the finished surface of the 2,200 lb graded stone, except that the extreme of this tolerance must not be continuous over an area greater than 100 square feet. A tolerance of plus 6 inches and minus 3 inches from the slope lines and grades shown on the contract drawings will

be allowed in the finished surface of the 200 lb graded stone, except that the extreme of this tolerance must not be continuous over an area greater than 100 square feet. The average tolerance of the entire job must have no more than 50 percent of the tolerances specified above. Graded stone must be placed by means of crane operated skip-pan, dragline bucket, clamshell, rock-bucket, hydraulic excavator "Gradall", trackhoe, or other approved equipment. Graded stone must be placed to its full course thickness in one operation and in such manner as to avoid displacing the geotextile. The large stones must be well distributed and the entire mass of stones in their final position must be graded to conform to the gradation specified in paragraph "Graded Stone". Placement must begin at the bottom of the area to be covered and continue up slope. Subsequent loads of material must be placed against previously placed material in such a manner as to ensure a relatively homogenous mass. The finished graded stone must be free from objectionable pockets of small stones and clusters of larger stones. Placing graded stone in layers will not be permitted. Placing graded stone by dumping it into chutes, or by similar methods likely to cause segregation of the various sizes, must not be permitted. Placing graded stone by dumping it at the top of the slope and pushing it down the slope must not be permitted. No equipment must be operated directly on the completed stone protection system. The desired distribution of the various sizes of stones throughout the mass must be obtained by selective loading of the material at the quarry or other source; by controlled dumping of successive loads during final placing; or by other methods of placement which will produce the specified results. Rearranging of individual stones must be required to the extent necessary to obtain a well-graded distribution of stone sizes as specified above. However, manipulating stone by means of dozers or other blade equipment must not be permitted.

#### 3.4.2.2 Under Water

When graded stone is placed under water onto geotextile it may be dropped from the water surface if the geotextile is greater than 5 feet below the water surface. Otherwise, it must be dropped no greater than 1 foot onto the geotextile.

#### 3.5 POST-CONSTRUCTION STONE DIKE CAP SURVEYS

After placement of the stone dike cap, the Contractor must perform the "Post-Construction Stone Dike Cap Surveys" in accordance with Section 02 21 10.00 12 SURVEYS.

#### 3.6 TESTS AND INSPECTIONS

##### 3.6.1 Gradation Tests for Stone

##### 3.6.1.1 Gradation Test Method for Graded Stone

Gradation tests must be performed in accordance with ASTM D5519.

##### 3.6.1.2 Standard Test Method for Gradation of Graded Stone

- a. Select a representative sample (Note No. 1), weigh and dump on hard stand.
- b. Select specific sizes (see example) on which to run "individual weight larger than" test. (See Note No. 2). Procedure is similar to the standard aggregate gradation test for "individual weight retained".

- c. Determine the largest size stone in the sample. (100 percent size)
- d. Separate by "size larger than" the selected weights, starting with the larger sizes. Use reference stones, with identified weights, for visual comparison in separating the obviously "larger than" stones. Stones that appear close to the specific weight must be individually weighed to determine size grouping. Weigh each size group, either individually or cumulatively.
- e. Paragraph d above will result in "individual weight retained" figures. Calculate individual percent retained (heavier than), cumulative percent retained, and cumulative percent passing (lighter than). Plot percent passing, along with the specification curve on ENG Form 4794-R.

Note No. 1: Sample Selection: The most important part of the test and the least precise is the selection of a representative sample. No "standard" can be devised; larger quarry run stone is best sampled at the shot or stockpile by given direction to the loader; small graded stone is best sampled by random selection from the transporting vehicles. If possible, all parties should take part in the sample selection and agree before the sample is run that the sample is representative.

Note No. 2: Selection of Size for Separation: It is quite possible and accurate to run a gradation using any convenient sizes for the separation, without reference to the specifications. After the test is plotted on a curve, then the gradation limits may be plotted. Overlapping gradations with this method are no problem. However, it is usually more convenient to select points from the gradation limits, such as the minimum 50 percent size, the minimum 15 percent size, and one or two others, as separation points. For these types of stone gradations the separation points need to be selected as the smallest size stone at each break in the gradation specified.

# F O R E X A M P L E O N L Y

## EXAMPLE GRADATION SPECIFICATIONS

| PERCENT LIGHTER BY WEIGHT | STONE WEIGHT IN LBS. |
|---------------------------|----------------------|
| 100                       | 400 - 160            |
| 50                        | 160 - 80             |
| 15                        | 80 - 30              |

## EXAMPLE WORKSHEET

| STONE SIZE<br>LBS. | INDIVIDUAL<br>WT. RETAINED | INDIVIDUAL<br>PERCENT RETAINED | CUMULATIVE PERCENT<br>RETAINED | CUMULATIVE PERCENT<br>PASSING |
|--------------------|----------------------------|--------------------------------|--------------------------------|-------------------------------|
| 400                | 0                          | 0                              | 0                              | 100                           |
| 160                | 9,600                      | 30                             | 30                             | 70                            |

EXAMPLE WORKSHEET

| STONE SIZE<br>LBS. | INDIVIDUAL<br>WT. RETAINED | INDIVIDUAL<br>PERCENT RETAINED | CUMULATIVE PERCENT<br>RETAINED | PERCENT<br>PASSING |
|--------------------|----------------------------|--------------------------------|--------------------------------|--------------------|
| 80                 | 11,200                     | 35                             | 65                             | 35                 |
| 30                 | 8,000                      | 25                             | 90                             | 10                 |
| <30                | 3,200                      | 10                             | 100                            | -                  |

TOTAL 32,000 pounds

NOTE: Largest stone 251 pounds

G R A D A T I O N      T E S T      D A T A      S H E E T

Quarry \_\_\_\_\_ Type of Stone Tested \_\_\_\_\_  
Date of Test \_\_\_\_\_ Testing Rate \_\_\_\_\_

T E S T      R E P R E S E N T S

| Contract No. | District | Tons |
|--------------|----------|------|
|              |          |      |
|              |          |      |
|              |          |      |
| TOTAL        |          |      |

G R A D A T I O N

| Stone Size<br>(lbs) | Weight<br>Retained | Individual<br>% Retained | Cumulative<br>% Ret.    % Pass | Specification<br>% Finer by wt |
|---------------------|--------------------|--------------------------|--------------------------------|--------------------------------|
|                     |                    |                          |                                |                                |
|                     |                    |                          |                                |                                |
|                     |                    |                          |                                |                                |
|                     |                    |                          |                                |                                |
|                     |                    |                          |                                |                                |
|                     |                    |                          |                                |                                |
|                     |                    |                          |                                |                                |
|                     |                    |                          |                                |                                |
|                     |                    |                          |                                |                                |
| Total Weight        |                    |                          |                                |                                |
| Max Size Stone =    |                    |                          |                                |                                |

Remarks:

I certify that the above stone sample is representative of the total tonnage covered by this test report.

Contractor Representative \_\_\_\_\_  
Government Representative \_\_\_\_\_

STONE SOURCES

| LATITUDE/<br>LONGITUDE | QUARRY LOCATION, ADDRESS,<br>& TELEPHONE NUMBER | MAIN OFFICE ADDRESS<br>& TELEPHONE NUMBER |
|------------------------|-------------------------------------------------|-------------------------------------------|
|                        | STATE                                           |                                           |
| _____                  | _____<br>_____<br>_____<br>_____                | _____<br>_____<br>_____<br>_____          |
| _____                  | _____<br>_____<br>_____<br>_____                | _____<br>_____<br>_____<br>_____          |
|                        | STATE                                           |                                           |
| _____                  | _____<br>_____<br>_____<br>_____                | _____<br>_____<br>_____<br>_____          |
| _____                  | _____<br>_____<br>_____<br>_____                | _____<br>_____<br>_____<br>_____          |

-- End of Section --

# RIPRAP GRADATION CURVES

For use of this form, see EM 1110-2-1601; the proponent agency is DAEN-CWE-HO.

