

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>			1. CONTRACT ID CODE J	PAGE OF PAGES 1   19
2. AMENDMENT/MODIFICATION NO. 0001	3. EFFECTIVE DATE 24-Aug-2015	4. REQUISITION/PURCHASE REQ. NO. W66QKZ51215710		5. PROJECT NO.(If applicable)
6. ISSUED BY US ARMY CORPS OF ENGINEERS JEFFREY RENNEN PO BOX 2946 PORTLAND OR 97208-2946	CODE W9127N	7. ADMINISTERED BY (If other than item 6) <b>See Item 6</b>		
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)		X	9A. AMENDMENT OF SOLICITATION NO. W9127N-15-R-0003	
		X	9B. DATED (SEE ITEM 11) 04-Aug-2015	
			10A. MOD. OF CONTRACT/ORDER NO.	
			10B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE			
<b>11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS</b>				
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning <u>1</u> copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.				
12. ACCOUNTING AND APPROPRIATION DATA (If required)				
<b>13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.</b>				
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.				
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).				
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:				
D. OTHER (Specify type of modification and authority)				
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.				
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)  Adjusts Disclosure of the Magnitude of Construction to reflect current estimates, updates list of plan drawings, updates the basis of award section, updates 01 45 00.00 25 (3.4.2), 01 35 26.00 25 (1.6.1.1.c), 01 35 26.00 25 (1.6.1.1.d).				
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.				
15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
		TEL:	EMAIL:	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA		16C. DATE SIGNED
_____ (Signature of person authorized to sign)		BY _____ (Signature of Contracting Officer)		

## SECTION SF 30 BLOCK 14 CONTINUATION PAGE

**SUMMARY OF CHANGES**

## SECTION 00010 - SOLICITATION CONTRACT FORM

The required performance has changed from NAME: Mouth of the Columbia River Jetty A Rehabilitation LOCATION: Mouth of the Columbia River, Pacific County, Washington MAGNITUDE OF CONSTRUCTION: \$5,000,000.00 to \$10,000,000.00 SOCIO-ECONOMIC: Unrestricted Procurement to NAME: Mouth of the Columbia River Jetty A Rehabilitation LOCATION: Mouth of the Columbia River, Pacific County, Washington MAGNITUDE OF CONSTRUCTION: \$10,000,000.00 to \$25,000,000.00 (DFARS 236.204(i)) SOCIO-ECONOMIC: Unrestricted Procurement.

## SECTION 00100 - BIDDING SCHEDULE / INSTRUCTIONS TO BIDDERS

The following have been modified:

INSTRUCTION AND BASIS OF AWARD**A. General.**

(1) This solicitation is an unrestricted procurement and is open to all offerors. The Government intends to award a single, firm-fixed price construction contract to the responsible offeror whose proposal represents the best value after evaluation in accordance with the factors and sub-factors in the solicitation. Offerors shall submit a technical proposal (including a Small Business Participation Plan), and a price proposal. The evaluation results of the non-price and price proposals will determine an awardee. All evaluation factors other than price are approximately equal in importance to one another. All evaluation factors other than price, when combined, are more important than price.

(2) The Government intends to make an award without discussions, but reserves the right to conduct discussions should discussions prove to be necessary or advantageous to the Government. Because the Government does not intend to hold discussions offerors are encouraged to include their best pricing in their initial proposal.

(3) In the context of this proposal, "offeror" refers to the proposed prime contractor. A major subcontractor is defined as one who will be providing critical elements (i.e. quarry, delivery, placement activities (major features of work)) and/or whose subcontract is for more than 25% of the total proposed price.

(4) Information submitted about any company other than the offeror, whether an affiliated company, major subcontractor, or other associated business, may not be given much weight unless the proposal contains evidence that the offeror has obtained a written commitment from this other business entity to perform a portion of the work.

(5) All proposals received will stand alone and be considered complete and final. The evaluation board will not consider any information or data incorporated by reference or otherwise referred to. The successful offeror will be selected solely on the basis of the evaluation factors set forth

below. Accordingly, proposals submitted in response to this solicitation should provide clear, complete, concise, and straightforward responses to the evaluation factors. Elaborate proposals, color brochures, and other excesses are discouraged.

### **B. Evaluation Ratings.**

All non-price factors other than past performance shall be rated using the combined technical/risk rating as follows:

<b>COLOR</b>	<b>RATING</b>	<b>DESCRIPTION</b>
<b>Blue</b>	Outstanding	<b>Proposal meets requirements and indicates an exceptional approach and understanding of the requirements. Strengths far outweigh any weaknesses. Risk of unsuccessful performance is very low.</b>
<b>Purple</b>	Good	<b>Proposal meets requirements and indicates a thorough approach and understanding of the requirements. Proposal contains strengths which outweigh any weaknesses. Risk of unsuccessful performance is low.</b>
<b>Green</b>	Acceptable	<b>Proposal meets requirements and indicates an adequate approach and understanding of the requirements. Strengths and weaknesses are offsetting or will have little or no impact on contract performance. Risk of unsuccessful performance is no worse than moderate.</b>
<b>Yellow</b>	Marginal	<b>Proposal does not clearly meet requirements and has not demonstrated an adequate approach and understanding of the requirements. The proposal has one or more weaknesses which are not offset by the strengths. Risk of unsuccessful performance is high.</b>
<b>Red</b>	Unacceptable	<b>Proposal does not meet the requirements and contains one or more deficiencies. Proposal is unacceptable and unawardable.</b>

Past performance shall be rated using the following ratings:

<b>Past Performance Relevancy Ratings</b>	
<b>RATING</b>	<b>DEFINITION</b>
Very Relevant	Present/past performance effort involved essentially the same scope and magnitude of effort and complexities this solicitation requires.
Relevant	Present/past performance effort involved similar scope and magnitude of effort and complexities this solicitation requires.
Somewhat	Present/past performance effort involved some of the scope and magnitude Relevant of effort and complexities this solicitation requires.
Not Relevant	Present/past performance effort involved little or none of the scope

	and magnitude of effort and complexities this solicitation requires.
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<b>Performance Confidence Assessments</b>	
<b>RATING</b>	<b>DESCRIPTION</b>
Substantial Confidence	Based on the offeror's recent/relevant performance record, the Government has a high expectation that the offeror will successfully perform the required effort.
Satisfactory Confidence	Based on the offeror's recent/relevant performance record, the Government has a reasonable expectation that the offeror will successfully perform the required effort.
Limited Confidence	Based on the offeror's recent/relevant performance record, the Government has a low expectation that the offeror will successfully perform the required effort.
No Confidence	Based on the offeror's recent/relevant performance record, the Government has no expectation that the offeror will be able to successfully perform the required effort.
Unknown Confidence (Neutral)	No recent/relevant performance record is available or the offeror's performance record is so sparse that no meaningful confidence assessment rating can be reasonably assigned.

### **C. Definitions.**

**Deficiency** A material failure of a proposal to meet a Government requirement or a combination of weaknesses in a proposal that increases the risk of unsuccessful contract performance to an unacceptable level. See FAR 15.001.

**Strength** An aspect of an offerors' proposal that has merit or exceeds specified performance or capability requirements in a way that will be advantageous to the Government during contract performance.

**Significant Strength** An aspect of an offeror's proposal that has appreciable merit or appreciably exceeds specified performance or capability requirements in a way that will be appreciably advantageous to the Government during contract performance.

**Weakness** A flaw in the proposal that increases the risk of unsuccessful contract performance. See FAR 15.001.

**Significant Weakness** in the proposal is a flaw that appreciably increases the risk of unsuccessful contract performance. See FAR 15.001.

**Uncertainty** is any aspect of a non-cost/price factor proposal for which the intent of the offer is unclear (e.g. more than one way to interpret the offer or inconsistencies in the proposal indicating that there may have been an error, omission, or mistake).

## **5. SUBMISSION OF PROPOSALS AND EVALUATION**

**A. Administrative Details and General Instructions:** Proposals are due no later than the time and date specified in Block 13 of Standard Form 1442.

**(1) General Proposal Format.** Submit each copy of the proposal in tabbed, 3-ring binders with a “D” ring or locking closures.

**Title Page.** Each copy must include the Offeror’s name and address, phone number and email address, title of the solicitation, solicitation number and date of submittal clearly identified on the front cover of the binder.

**Table of Contents.** Each binder of the proposal shall contain a detailed table of contents. The complete table of contents shall be included in each binder.

**Printed Matter Submissions.** Pages containing text are expected to be 8 ½ x 11 inches with at least one-inch margins at the top, bottom, and both sides. Paragraphs should be separated by at least one blank line. A standard 11-point font in either Arial or Times New Roman is preferred.

**Organization charts or schedules.** A folded 11” x 17” format may be used. Larger format drawings or tables may be added by folding them to fit within the binder.

All information must be confined to the appropriate volume. If the materials do not fit within a single volume, they should be separated in additional binders, but clearly identified as such. Each volume of the proposal is expected to contain a table of contents, summary section with a brief abstract of the volume, and the narrative discussion.

**(2) Proposal Content Limitations.**

The Offeror must confine the proposal to relevant information and documentation sufficient to provide an adequate basis for evaluation. Offerors are responsible for including sufficient details, in a concise manner, to permit a complete and accurate evaluation of the proposal. The page count is at the discretion of the offeror, however the proposal may not be more than 100 pages total except Factor 4 Subfactor 1 Tab 5 Quarry Production does not count towards the 100 page limit. There is no page limit for that tab-

The evaluation panel for the Government is instructed to evaluate the non-price proposal factors on the basis of the information provided. Extraneous information provided in the proposals will not be considered in the evaluations; therefore, the offeror should only provide information that satisfies the solicitation requirements. Merely restating the specifications without sufficient elaboration demonstrates a lack of understanding of the requirement.

**DO NOT** cross reference past performance information. It is acceptable to repeat data, project information or experience in more than one non-price area as long as it satisfies the requirements of the factor.

**Proprietary information must be clearly marked.**

**B. Content of Proposals:** All proposals must be prepared in two volumes: A technical proposal (Volume I), a price proposal (Volume II). Each of the volumes shall be separate and complete in itself so that evaluation of one may be accomplished independently from evaluation of the other. The technical proposal (Volume I) must not contain reference to price. Offerors who fail to submit a complete proposal may be excluded and thus receive no further consideration for award.

**(1) Technical Proposal, Volume I: Provide one (1) original and three (3) copies and one (1) pdf. file on a CD-ROM.** Volume I shall consist of information for the six (6) factors, and the associated sub-factors, listed in tabular form, as noted below.

<b>VOLUME I – TECHNICAL (NON-PRICE FACTORS)</b>		
<b>TAB</b>	<b>EVALUATION FACTOR</b>	<b>SUBFACTOR</b>
1	Past Experience (Factor 1)	
2	Past Performance (Factor 2)	
3	Management Plan (Factor 3)	Prime Contractor Personnel (Sub-factor 1)
4	Management Plan (Factor 3)	Subcontractor (Sub-factor 2)
5	Procurement (Factor 4)	Quarry Production (Sub-factor 1)
6	Procurement (Factor 4)	Jetty Stone Delivery Plan (Sub-factor 2)
7	Project Execution (Factor 5)	Jetty Stone Placement (Sub-factor 1)
8	Project Execution (Factor 5)	Schedule (Sub-factor 2)
9	Project Execution (Factor 5)	Safety (Sub-factor 3)
10	Small Business Participation (Factor 6)	

**Volume I – Technical (Non-Price) Factors and Sub-factors:**

**Factor 1: Past Experience**

**Factor 2: Past Performance**

**Factor 3: Management Plan**

Sub-factor 1: Prime Contractor Personnel

Sub-factor 2: Subcontractor

**Factor 4: Procurement**

Sub-factor 1: Quarry Production

Sub-factor 2: Jetty Stone Delivery Plan

**Factor 5: Project Execution**

Sub-factor 1: Jetty Stone Placement

Sub-factor 2: Schedule  
 Sub-factor 3: Safety

## **Factor 6: Small Business Participation Plan**

### **Volume I – Technical (Non-Price) Submission Requirements and Evaluation Method:**

#### **FACTOR 1 (TAB 1) – Past Experience**

##### Submission Requirements:

The offeror shall provide project information for a minimum of 1 project for the prime, and a minimum of 1 projects of each of the proposed major subcontractor(s)\*, completed or substantially completed\*\* in the past 15 years that are comparable in size, scope, and complexity with the project required by this solicitation.

Project information shall contain:

- A description of the project and the contractor's involvement in the project;
- Project location;
- Brief summary of the challenges and solutions;
- Information on significant problems encountered, customer dissatisfaction, and corrective actions.
- Name, address, telephone number and email address of a current representative of the contact customer representative;
- Contract awarded amount;
- Project start date
- Project completion date (If not complete, provide % currently complete)
- Site map identifying location of work (i.e. root, trunk, or head of jetty).
- ~~Representative cross section view of repair area in addition to~~ range and quantity of stone sizes utilized.

\*Indicate if the offeror will not be having any major subcontractors perform a portion of the work. An offeror will not be treated unfavorably for failing to utilize a major subcontractor.

\*\* Substantially completed is defined as having completed more than 75% of the project work at the time of proposal submission.

##### Evaluation Method:

More favorable ratings will be assigned to more recent projects, and projects similar in size, scope and complexity to the requirement in this solicitation. Less recent and smaller dollar value projects may be given less consideration.

Projects demonstrating that the prime and major subcontractor(s) have a history and are capable of completing the following major features of work will be more highly rated: Working in a marine environment including atop of jetties along the Pacific Ocean, successful experience working with > 15 ton stones.

Note: The Government may consider past experience information regarding predecessor companies, key personnel who have relevant experience or subcontractors that will perform major or critical aspects of the requirement.

## **FACTOR 2 (TAB 2) – Past Performance**

### Submission Requirements:

The offeror shall provide past performance information for each project listed by the offeror under Factor 1: Past Experience.

Submit completed Contractor Performance Assessment Reporting System (CPARS) evaluation if available, with the proposal. When a completed CPARS evaluation is not available, respond and submit the standard Past Performance Questionnaire (PPQ) for USACE (Form PPQ-0 (9/30/11)) provided as an attachment to the solicitation. PPQ-0 is provided for the offeror or its team members to submit to the client for each project the offeror includes in its proposal under Factor 1, Past Experience, and for which a completed CPARS evaluation is not available. (Ensure correct phone numbers and email addresses are provided for the client point of contact.) **Do not submit a PPQ when a completed CPARS is available.**

Completed PPQs should be submitted with your proposal. If the offeror is unable to obtain a completed PPQ from a client for a project(s) before proposal closing date, the offeror should complete and submit with the proposal the first page of the PPQ, which will provide contract and client information for the respective project(s). Offerors should follow-up with clients/references to ensure timely submittal of questionnaires. If the client requests, questionnaires may be submitted directly to the Government's point of contact, **Jeffrey S. Renner**, via email at [Jeffery.s.renner@usace.army.mil](mailto:Jeffery.s.renner@usace.army.mil) prior to proposal closing date. Offerors shall not incorporate by reference into their proposal PPQs or CPARS previously submitted for other RFPs. However, this does not preclude the Government from utilizing previously submitted PPQ information in the past performance evaluation.

Also include performance recognition documents received within the **last five (5) years** such as awards, award fee determinations, customer letters of commendation, and any other forms of performance recognition.

In addition to the above, the Government may review any other sources of information for evaluating past performance. Other sources may include, but are not limited to, past performance information retrieved through the PPIRS, including CPARS, using all CAGE/DUNS numbers of team members (partnership, joint venture, teaming arrangement, or parent company/subsidiary/affiliate) identified in the offeror's proposal,



inquiries of owner representative(s), FAPIIS, Electronic Subcontract Reporting System (eSRS), telephone interviews with organizations familiar with the offeror's performance, Government personnel with personal knowledge of the offeror's performance capability, and any other known sources not provided by the offeror.

While the Government may elect to consider data from other sources, the burden of providing detailed, current, accurate and complete past performance information rests with the Offeror.

Evaluation Method:

The Government seeks a contractor who maintains a strong commitment to customer satisfaction and superior performance. It is the offeror's responsibility to affirmatively document these qualities in its technical proposal. In doing so, be mindful that "*past performance*" and "*past experience*" are not identical. Past *experience* measures what you have done and how many times, or for how long, you have done it. Past *performance*, however, measures how well you have performed.

Past Performance on projects that are similar in size and scope to this project may be considered to be more advantageous to the Government. Thus, the Government will take into consideration the age and relevance of past performance information and the offeror's overall performance record. If any performance issues are identified, the Government will consider the number, type and severity of the problems and effectiveness of corrective actions taken.

There are two aspects to the past performance evaluation. The first is to evaluate the offeror's past performance to determine how relevant a recent effort accomplished by the offeror is to the effort to be acquired. With respect to relevancy, more relevant past performance will typically be a stronger predictor of future success and have more influence on the past performance confidence assessment than past performance of lesser relevance. Common aspects of relevancy include similarity of service/support, complexity, dollar value, contract type, and degree of subcontract/teaming.

The second aspect of the past performance evaluation is to determine how well the contractor performed on the contracts. The past performance evaluation performed in support of a current source selection does not establish, create, or change the existing record and history of the offeror's past performance on past contracts; rather, the past performance evaluation process gathers information from customers on how well the offeror performed those past contracts.

Past performance questionnaires and/or ratings in Contractor Performance Assessment Reporting System (CPARS), indicating high levels of customer satisfaction, or completing in advance of original contract schedule, or finding innovative ways to cut costs, or increase value to the customer, will receive a better rating.

In the case of an offeror without a record of relevant past performance or for whom information on past performance is not available, the offeror may not be evaluated favorably or unfavorably on past performance.

Note: The Government may consider past performance information regarding predecessor companies, key personnel who have relevant experience or subcontractors that will perform major or critical aspects of the requirement.

### **FACTOR 3 –Management Plan**

This factor will be rated on the offerors' ability to demonstrate their project team has the expertise, qualifications, and experience to be able to complete the work and complete the work safely.

#### **Sub-factor 1 (TAB 3): Prime contractor personnel.**

##### Submission Requirements:

Provide the prime contractor's **organization chart** indicating key construction personnel. At a minimum, the chart must include the positions of project manager, project superintendent, contractor quality control (CQC) system manager, Site Safety and Health Officer (SSHO), and Stone Placement Equipment Operator (SPEO) that will be assigned to this project. **Current resumes** for these positions shall be provided. The resumes shall include the duties and responsibilities of the individuals and examples of project experience. In addition, **current certifications** for the SSHO, CQC, and SPEO should be provided. Examples of project experience shall include capacity the individual served on each project, dates employed on each project, and monetary size of each project.

##### Evaluation Method:

Firms will be evaluated to ensure key positions are properly certified, in addition, more favorable evaluations may be given to personnel who have been working in the field longer than those with less experience. Emphasis will be given to resumes with more recent experience and experience similar in size, scope, and complexity to the project called for under this solicitation.

#### **Sub-factor 2 (TAB 4): Subcontractor.**

##### Submission Requirements:

Provide current resumes of major subcontractors proposed to complete all work associated with this project. Each resume shall consist of a brief description of the company, services to be provided for this contract, number of years in business, and number of contracts between the prime contractor and subcontractor.

##### Evaluation Method:

More favorable evaluations may be given to subcontractors who have been in business longer, and have had more past business relationships with the prime contractor and who have provided written commitments of the subcontractors.

## **FACTOR 4 – Procurement**

### **Sub-factor 1 (TAB 5): Quarry Production.**

#### Submission Requirements:

Provide detailed project work plan describing the methodology of procurement of stone for the jetty.

Project work plan shall contain:

- Primary and Contingency sources of stone. Provide written evidence that commitments have been secured from the quarries to supply stones for this job. List the quarries, locations, contacts, and phone numbers;
- Written statements from the Primary and Contingency quarries that they can produce the specified quantity and sizes of job-required stones to complete this job within the specified time of performance. If multiple quarries are expected to be utilized, the combined total of stones produced must equal or exceed the required amount. Indicate the following:
  1. The quantity and sizes of suitable stone that has already been quarried and is “on the ground” and dedicated to this job.
  2. The volume of unmined stone (reserves) in the quarry(s), as well as the amount anticipated minable for this job.
  3. The expected yield(s) for the various sizes of job-required stones expressed as a percentage of all mined stones. Include information on assumptions, calculations, drill records (logs), geologic reports, and any other information that verify that adequate stone reserves meeting the requirements of this contract exist at the quarry(s).
- Documentation that all necessary permits to operate the quarry have been obtained and are currently active;
- Overall and historical production records of jetty-sized-stone quarry service records and include stone quality test results for each proposed quarry;
- Information from the quarry on the anticipated stone production rate.
- Any quarry related challenges and proposed solutions

**Note:** The Government reserves the right to conduct visual inspections of the quarries and collect and test stone samples to verify information presented in the proposal.

#### Evaluation Method:

A highly rated proposal for this factor will demonstrate that the offeror's methodology for procurement of jetty stone will be effective and the offeror is prepared with solutions to any challenges. A detailed and specific work plan will be rated higher than a vague and general work plan.

### **Sub-factor 2 (TAB 6) : Delivery Plan.**

#### Submission Requirements:

Provide detailed description for the methodology for delivery of stone to the jetty.

Project information shall contain:

- Methodology for stone hauling, delivery, and stockpiling;
- An outline of the jetty stone delivery plan to include the transportation equipment to be used to deliver stone to the jetty (barges or trucks or a combination of each), and the anticipated transportation routes. Provide evidence that the stone transportation equipment will be available during the performance period of this contract and note whether the prime contractor owns, leases or intends to subcontract the transport equipment. Identify any highway restrictions (weight and/or length) along transportation routes and/or dredging requirements for delivery;
- If the Contractor plans to barge rather than deliver by truck the plan shall include dredging requirements and mitigation to include eelgrass planting and monitoring and the experience of the firm that will perform and monitor the environmental mitigation.
- Information on the anticipated stone delivery rate and the calculations and assumptions to determine the delivery rate to include site and weather related constraints.
- Identification of all storage areas for the stones both at the quarry and at the job site.
- Address contingencies that may arise and a plan to deal with each.

#### Evaluation Method:

This sub-factor will be evaluated by the source selection team against the criteria addressed above. A highly rated plan will demonstrate that the offeror thoroughly describes the proposed methodology and conveys a thorough understanding of the required work, contingencies that may arise and plans to deal with them, and the site and weather related constraints. A detailed and specific work plan will be rated higher than a vague and general work plan.

## **FACTOR 5 – Project Execution**

### **Sub-factor 1 (TAB 7): Jetty Stone Placement.**

**Submission Requirements:**

Provide detailed description for the methodology of stone placement on the jetty.

The detailed description shall contain:

- A description of stone placement equipment. Provide crane and/or excavator rating load charts for the equipment, and the reach and swing of the equipment for anticipated stone weights and sizes. List attachments, grapples, power tag lines and other accessories proposed to be mounted on the placing equipment. Indicate the current location of the equipment and provide evidence that it will be available during the performance period of this contract. Proposals will be rated on the adequacy of the equipment to perform the necessary work;
- A description of how placement efforts will be controlled both above and below water and along the different reaches of the jetty (i.e. transition sections, main body, head) based on design changes or exposures to ensure stone is placed according to the design template within the specified tolerances and how individual stone placement will be controlled to achieve an interlocked mass with the maximum surface contact and interlock with stones making contact on all faces;
- Information on the General Plan of Operations to include how haul road construction on the jetty crest will be conducted to prevent or minimize damage to the jetty. Indicate the amount of stone proposed to be placed with the placing equipment stationed on the crest (top) of the jetty and the amount of stone proposed to be placed with the equipment benched on the slopes of the jetty. If stone is proposed to be placed with the equipment benched on the slopes of the jetty, describe: how the existing intact jetty stones will be protected and preserved at their present location and condition; how base material on which equipment operates will be excluded from the final jetty stone matrix; and how the benching operations will be conducted, including diagrams that the proposed placement technique is feasible, describe how placement effort will reflect safe operating condition as a function of waves and tides, evacuation measures;
- Information on the anticipated stone placement rate to complete the project by dates specified in the contract, and the calculations and assumptions used to determine the production rate;
- A description of how environmental requirements will be met, including water quality monitoring and management practices.

**Evaluation Method:**

This sub-factor will be evaluated by the source selection team against the criteria addressed above. A highly rated plan will demonstrate that the offeror understands the required work, contingencies that may arise and how to deal with them, the site and weather related constraints, the equipment to be used, and the importance of proper placement technique. A detailed and specific work plan will be rated higher than a vague and general work plan.

## Sub-factor 2 (TAB 8) – Schedule

### Submission Requirements:

**Gantt Chart.** The offeror shall submit a Gantt chart (MS Project or Primavera software) showing a planned schedule to complete the project. The schedule shall identify stations of work with any specific details noted that have the potential to impact the manner in which work will be conducted or the schedule. Information on potentially restrictive tide and wave windows should be addressed. The schedule shall also include mobilization, demobilization, ~~any planned major scheduling of any equipment~~ maintenance ~~(main or auxiliary) scheduled for stone placement equipment,~~ quarry operations, ~~and all items listed on the bid schedule,~~ critical submittals, interim milestones, and contract completion date.

**Narrative.** The Gantt chart shall be accompanied with a narrative addressing how the offeror will maintain and accomplish the project schedule. Examples of narrative topics include critical path, production rates, weather days, assumptions used (i.e. size of crew, hrs/day, days/wk), anticipated problem areas or delaying factors and their impact, proposed corrective actions and contingency plans to meet project milestones and other factors that demonstrate the ability to accomplish the schedule.

### Evaluation Method:

This sub-factor will be evaluated by the source selection team against the criteria addressed above. A highly rated schedule will demonstrate that the offeror fully understands the required work, contingencies that may arise and how to deal with them, the site constraints, process related to schedule, and has a realistic plan to complete the work on time.

## Sub-factor 3 (TAB 9): Safety Record.

### Submission Requirements:

Offerors shall include the Prime and major subcontractors' safety record and evidence of their ability to safely conduct construction operations. Information on the prime and major subcontractors' safety record must include the following:

- Experience Modification Rate (EMR) for Workers' Compensation Insurance issued by an accredited bureau, state, or council. Contractors or subcontractors with a rating over 1.0 EMR must provide explanation as to their rating and what steps have been taken to reduce their rating.
- OSHA Incident Rates for the last 3 years– OSHA Form 300
- ~~Awards or recognition for safety within the last 3 years, if any.~~

### Evaluation Method:

Evaluation will be based on the safety record submitted for the prime and major subcontractors. Offerors with a lower Experience Modification rates (EMRs) will result in a higher evaluation rating. EMRs above 1.0 will result in a lower evaluation rating. Higher evaluation ratings will also be given to offerors that demonstrate continual compliance with OSHA, ~~and have received recognition for safety in the last 3 years.~~

## **FACTOR 6 (TAB 10) -- Small Business Participation Plan**

### Submission Requirements:

The purpose of this criterion is to evaluate the amount of work to be performed by Small Businesses as prime or subcontractors in relation to the total value of the project. This criteria is evaluated for all offerors and is not to be confused with the submission of a Small and Small Disadvantaged Business Subcontracting Plan which is only required of Large Business offerors. All offerors (both large and small businesses) shall submit the Small Business Participation Plan (SBPP) template found at Attachment SBPP. A mandatory minimum Total Small Business Participation goal of 20% of the total contract value (through small business participation from small-, small disadvantaged-, HUBZone-, Service Disabled Vet-, Vet-, or Woman-owned businesses) is required based on the nature of the work for this project. The offeror should articulate how small businesses will participate through performance as either a small business prime or as a subcontractor offeror as well as demonstrating the past performance of the offeror in complying with requirements of the clauses at FAR 52.219-8, Utilization of Small Business Concerns and 52.219-9, Small Business Subcontracting Plan. Offerors are required to submit information that can be verified on **at least three projects** that demonstrate the degree (both by dollar and by percent of total contract value) to which the contractor utilized small business firms in performing the project. For small business offerors, consideration will be given to self performance if a small business for that project, as well as for providing subcontracting opportunities to small businesses - as is the policy of the government. For large business offerors, in addition to the information for the three required projects, consideration may also include review of Individual Subcontracting Reports (ISR's) and Summary Subcontracting Reports (SSR 's) from the electronic Subcontracting Reporting System (eSRS). The project information submitted for the small business participation plan evaluation does not have to be the same as those listed for Past Performance factor.

### Evaluation Method:

Using Attachment SBPP to this solicitation, the government will evaluate offerors on the extent of the planned participation of U.S. small businesses in the performance of this acquisition as follows:

The total level of participation of small business prime offerors and small business subcontractors in terms of the percentage of the value of the total acquisition vs. the large business participation percentage.

The extent, to which, the offeror meets or exceeds the suggested socioeconomic category goals. These goals are a percentage of the value of the total acquisition. A mandatory minimum Total

Small Business Participation goal of 20% of the total contract value is assigned to this acquisition.

In addition to the mandatory Small Business goal of 20% of the TOTAL contract value, the following goals are suggested for the individual socioeconomic categories and determined to be reasonable based on market research for this requirement. Goals are based on % of TOTAL contract value:

- {5% } Small Disadvantaged Business
- {3% } Woman-Owned Small Business (WOSB)
- {2% } Historically Underutilized Business Zone (HUB Zone) Small Business
- {5% } Veteran Owned Small Business (VOSB)
- {2% } Service Disabled Veteran Owned Small Business (SDVOSB)

The extent (i.e. length of and formality considerations) of demonstrated commitment to use such firms (enforceable commitments (JV, MP or written teaming agreements) will be considered more favorably than non-enforceable ones;

Verifiable past performance of the offerors in complying with requirements of the clauses at FAR 52.219-8, Utilization of Small Business Concerns, (both small and Large businesses) and FAR 52.219-9, Small Business Subcontracting Plan (Large Business primes only).

## **Volume II – Price Proposal:**

**Price Proposal, Volume II:** The Price Proposal shall be complete, detailed and submitted on forms provided in the Request for Proposal (RFP) (**one (1) original and one (1) pdf. file on a CD-ROM**). Contractors shall provide pricing and complete all line items on Standard Form 1442 (SF 1442).

The Price Proposal will be evaluated to determine reasonableness. Price will be evaluated based on the total for all line items, to include option items. Evaluation of price may also include price realism analysis, if such analysis is determined necessary. If determined necessary, price realism will be evaluated on the basis of whether pricing information reflects a clear understanding of the costs and risks associated with the project. It may also include verification of an offeror's price, and exchanges with the offeror to determine whether it has an acceptable understanding of the difficulties that may be encountered in performing the contract. The results of a price realism analysis may impact the evaluation of non-cost factors and the resulting award decision.

**Volume II - Price.** Your price proposal must be prepared in accordance with below paragraphs and must include:

### **Tab 1 - SF1442, Solicitation, Offer, and Award.**

The SF1442 shall be filled out completely by the offeror and signed by an official that is authorized to bind the company. The offeror shall also acknowledge all amendments to the solicitation in accordance with the instructions on the Standard Form 30 or Block 19 of SF1442.



**Tab 2 – Section 00010, Proposal Price / Bid Schedule.**

The offeror shall fully complete this section.

**Tab 3 - Representations, Certifications and other Statements of Offerors.**

The offeror shall complete all representations and certifications in Section 00600 and also ensure current registration and completed/updated Annual Representations and Certifications on the System for Award Management (SAM) website, [www.sam.gov](http://www.sam.gov).

**Tab 4 - Bid/Offer Guarantee.****Tab 5 - Small Business Subcontracting Plan. (Large Businesses Only)**

Separate from the Small Business Participation Plan, which is included in Volume I, other than U.S. Small Business Offerors (e.g. Large Businesses) must also submit a small business subcontracting plan meeting the requirements of FAR 52.219-9 and DFARS 252.219-7003 (or DFARS 252.219-7004 if the offeror has a comprehensive subcontracting plan) contained in Section 00700, Contract Clauses. Large businesses must submit acceptable subcontracting plans to be eligible for award. Subcontracting plans shall reflect and be consistent with the commitments offered in the Small Business Participation Plan.

Large Businesses shall provide a completed Subcontracting Plan and most recent annual subcontracting report.

A model subcontracting plan is included as an attachment to this solicitation. For information on the evaluation of subcontracting plans, see Army Federal Acquisition Regulation Supplement (AFARS), Appendix DD.

**Submission of Proposals:** Proposals must arrive at the location designated in the RFP for receipt of such proposals prior to the time and date established in Block 13, SF 1442. There will not be a public proposal opening. In order for the proposal to be considered, it **MUST** be prepared in ENGLISH, and must be submitted as a **hardcopy original (Volume I, and II) and three (3) copies (Volume I only) with the required electronic CD-ROM:**

**BY HAND OR COURIER TO:**

U. S. ARMY CORPS OF ENGINEERS, NWP  
Block 300 (10<sup>th</sup> Floor USACE Security Desk)  
333 SW. First Avenue  
Portland, Oregon 97204  
**Attention: Jeffrey S. Renner – CECT-NWP-C**

**OR SURFACE MAIL ADDRESS:**

U. S. ARMY CORPS OF ENGINEERS, NWP  
P. O. Box 2946  
Portland, OR 97208-2946  
**Attention: Jeffrey S. Renner – CECT-NWP-C**

NOTE: E-MAIL SUBMISSIONS WILL NOT BE CONSIDERED. If the electronic CD-ROM proposal differs from the hard copy, the hard copy will take precedence.

**OFFEROR SHALL MARK THE OUTSIDE ENVELOPE(S) (PURSUANT TO FAR 14.201-5) AS FOLLOWS:**

Envelope(s) shall be plainly marked with the following information:

Solicitation No. **W9127N-15-R-0003**

Opening Date:

Number of each amendment that has been received:

SECTION 00800 - SPECIAL CONTRACT REQUIREMENTS

The following have been modified:

252.236-7001 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:

**SEE PLAN SET**

(End of clause)

(End of Summary of Changes)

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GOVERNMENTAL SAFETY REQUIREMENTS

PART 1 GENERAL

1.1 REFERENCES

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

AMERICAN SOCIETY OF SAFETY ENGINEERS (ASSE/SAFE)

ASSE/SAFE A10.28	(2011) Safety Requirements for Work Platforms Suspended from Cranes or Derricks - American National Standard for Construction and Demolition Operations
ASSE/SAFE A10.34	(2001; R 2012) Protection of the Public on or Adjacent to Construction Sites
ASSE/SAFE Z359-PKG	(2009) Fall Protection Code
ANSI/ASSE Z490.1	(2009) Criteria for Acceptance Practices in Safety, Health, & Environmental Training

ASME INTERNATIONAL (ASME)

ASME B30-PKG	Load Handling Equipment
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NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 10	(2013) Standard for Portable Fire Extinguishers
NFPA 241	(2013) Standard for Safeguarding Construction, Alteration, and Demolition Operations
NFPA 51B	(2014) Standard for Fire Prevention During Welding, Cutting, and Other Hot Work
NFPA 70	(2014; AMD 1 2013; Errata 2013; AMD 2 2013) National Electrical Code
NFPA 70E	(2012; Errata 2012) Standard for Electrical Safety in the Workplace

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2014) Safety and Health Requirements Manual
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U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910	Occupational Safety and Health Standards
29 CFR 1910.146	Permit-required Confined Spaces
29 CFR 1915	Occupational Safety and Health Standards for Shipyard Employment
29 CFR 1919	Gear Certification Marine Activity
29 CFR 1926	Safety and Health Regulations for Construction
CPL 2.100	(1995) Application of the Permit-Required Confined Spaces (PRCS) Standards, 29 CFR 1910.146

1.2 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

Crane Operators; G, Section 01 of EM 385-1-1.

Training Plan; G, Section 01 of EM 385-1-1.

Accident Prevention Plan (APP); G, Section 01 and Appendix A of EM 385-1-1.

Activity Hazard Analysis (AHA); G, Section 01 of EM 385-1-1.

Inclement Weather and Heat/Cold Stress Management Plans; G, Section 06 and 19 of EM 385-1-1.

Fall Prevention and Protection Plan; G, Section 21 of EM 385-1-1.

Fatigue Management Plan (FMP); G, Section 01 of EM 385-1-1.

SD-06 Test Reports

Submit reports as their incidence occurs, in accordance with the requirements of the paragraph, REPORTS.

Regulatory Citations, Violations, and Corrective Action

Drug and Alcohol Use Prevention Program

Accident or Mishap Reports, Section 01 of EM 385-1-1.

Crane Testing Reports

SD-07 Certificates

Confined Space Entry Permit, Section 34 of EM 385-1-1.

Hot Work Permit, Section 9 and 10 of EM 385-1-1.

Submit one copy of each permit attached to each Daily Contractor Quality Control Report (Section 01 45 00.00 25, QUALITY CONTROL).

Third Party Certification of Barge-Mounted Mobile Cranes and Mobile Equipment, , Section 16 and 19 of EM 385-1-1.

Certificate of Compliance

### 1.3 DEFINITIONS

a. High Visibility Mishap. Any mishap which may generate publicity and/or high visibility. The following high visibility mishaps must be reported immediately:

- (1) Electrical - to include Arc Flash and Uncontrolled release of Hazardous Energy.
- (2) Load Handling Equipment of Rigging.
- (3) Fall-from-Height; and
- (4) Underwater diving

b. Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even though provided by a physician or registered personnel.

c. Recordable Injuries or Illnesses. Any work-related injury or illness that results in:

- (1) Death, regardless of the time between the injury and death, or the length of the illness;
- (2) Days away from work (any time lost after day of injury/illness onset);
- (3) Restricted work or transfer to another job;
- (4) Medical treatment beyond first aid;
- (5) Loss of consciousness; or
- (6) A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (1) through (5) above.

d. "USACE" property and equipment specified in EM 385-1-1 must be interpreted as Government property and equipment.

### 1.4 REGULATORY REQUIREMENTS

a. In addition to the detailed requirements included in the provisions of this Contract, comply with the most recent edition of EM 385-1-1, in effect on the date of the Solicitation for this Contract, and applicable Federal, State, and local laws, ordinances, criteria, rules



and regulations. Submit regulatory citations, violations, and corrective action and 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 must apply.

b. Contact the Contracting Officer immediately of any OSHA or other regulatory agency inspection or visit, and provide the Contracting Officer with a copy of each citation, report, and Contractor response. Correct violations and citations promptly and provide written corrective actions to the Contracting Officer.

#### 1.5 DRUG AND ALCOHOL USE PREVENTION PROGRAM

Conduct a proactive drug and alcohol use prevention program for all workers, prime and subcontractor, on the site, to include administrative action for employees failing the program. Ensure that no employee uses illegal drugs, in accordance with Federal law, or consumes alcohol during work hours. Ensure there are no employees under the influence of drugs or alcohol during work hours and are fit for duty. During the Contract period a copy of tests, to include results of random testing, must be submitted to the Contracting Officer. No personal data must be submitted, only numbers of individuals tested and results of tests.

#### 1.6 SITE QUALIFICATIONS, DUTIES, AND MEETINGS

##### 1.6.1 Personnel Qualifications

##### 1.6.1.1 Site Safety and Health Officer (SSHO)

a. Provide a Safety oversight team that includes a minimum of one competent person to function as the SSHO. The SSHO must meet the requirements of EM 385-1-1, section 1, and ensure that the requirements of 29 CFR 1926 are met for the project. The SSHO must be at the work site at all times to implement and administer the Contractor's safety program and Government-accepted Accident Prevention Plan. The SSHO's training, experience, and qualifications must be as required by EM 385-1-1.

b. Provide a Competent Person for all of the hazards identified in the Contractor's Safety and Health Program in accordance with the accepted Accident Prevention Plan. The Competent Person must be on-site at all times when the work that presents the hazards associated with their professional expertise is being performed. Provide the credentials of the Competent Persons(s) for acceptance by the Contracting Officer in consultation with the Safety Office.

c. The Contractor Quality Control (CQC) manager cannot be the SSHO on this project during stone placement operations, even though the CQC has safety inspection responsibilities as part of the QC duties.

d. The SSHO shall have no duties other than SSHO during stone placement operations; at other times, the SSHO may also be the CQC manager but have no other duties. The SSHO shall meet the following requirements:

- (1) A minimum of five years of continuous construction industry safety experience in supervising/managing general construction (managing safety programs or processes or conducting hazard

analyses and developing controls) on similar projects.

(2) Thirty-hour OSHA Construction safety class or equivalent within the last four years.

(3) SSHOs must maintain competency through having taken eight hours of documented formal, on-line, or self-study safety and health related coursework every year.

(4) Competent person training as needed.

#### 1.6.1.2 Alternate SSHO and Designated Representative (DR)

a. The Alternate SSHO must meet the same requirements and assume the responsibilities of the project SSHO. Assistant SSHO's may be necessary during the main shift along with the lead SSHO, but are primarily intended to be on-site during the times that the lead SSHO is absent from the work site. The assistant SSHO may have other duties on the jobsite.

b. If the SSHO is off-site for a period longer than 24 hours, an alternate SSHO must be provided and fulfill the same roles and responsibilities as the primary SSHO.

c. When the SSHO is temporarily (up to 24 hours) off-site, a Designated Representative (DR), as identified in the AHA may be used in lieu of an Alternate SSHO, and shall be on the project site at all times when work is being performed.

Note: DRs are collateral duty safety personnel, with safety duties in addition to their full-time occupation.

d. If an activity, task or DFOW contains multiple sites and has been assessed and given an activity Risk Assessment Code (RAC) of low or medium, a DR shall be appointed for each site where remote work locations are more than 45 minutes travel time from the SSHO's duty location.

(1) DRs shall perform safety program tasks as designated by the SSHO and report safety findings to the SSHO.

(2) A DR may not be assigned to projects that have a RAC level of high or extremely high.

#### 1.6.1.3 SSHO Requirements for Dredging

a. In addition to requirements stated elsewhere in this specification, the SSHO must be present at the project site, located so they have full mobility and reasonable access to all major work operations, for at least one shift in each 24 hour period when work is being done. The SSHO, or Alternate SSHO, must be available during all shifts for immediate verbal consultation and notification, either by phone or radio. The SSHO must be a full-time, dedicated position.

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

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

d. If the SSHO is off-site for a period longer than 24 hours, a qualified replacement SSHO must be provided and must fulfill the same roles and responsibilities as the primary/initial SSHO.

### 1.6.1.4 Designated Representative (DR) Requirements for Dredging

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

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

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

### 1.6.1.5 Safety Personnel Training Requirements for Dredging

a. The SSHO, Alternate SSHO, and DR for dredging contracts must take either the OSHA 30-hour Construction Safety Course or an equivalent 30 hours of formal safety and health training covering the subjects of the OSHA 30-hour Course (see EM 385-1-1 Appendix A, paragraph 4.b) applicable to dredging work and given by qualified instructors.

b. The SSHOs must also have taken eight hours of formal classroom or online safety and health related coursework in the past four years. Hours spent as an instructor in such courses will be considered the same as attending them, but each course only gets credit once (i.e. Instructing a 1-hour asbestos awareness course five times in the past four years provides one hour credit for training).

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

### 1.6.1.6 Crane Operators

Meet the crane operator's training and medical requirements in EM 385-1-1, Section 16 and Appendix I; ASME B30-PKG; 29 CFR 1910; and 29 CFR 1926.

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Provide proof of current qualification.

### 1.6.2 Personnel Duties

#### 1.6.2.1 Site Safety and Health Officer (SSHO)

Failure to perform the following duties will result in dismissal of the superintendent, QC manager, SSHO, and a project work stoppage will go into effect. The project work stoppage will remain in effect pending approval of a suitable replacement. The SSHO must:

- a. Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. Attach safety inspection logs to the Daily Contractor Quality Control Report.
- b. Conduct mishap investigations and complete required reports. Maintain the OSHA Form 300 and Daily Contractor Quality Control Report for prime and subcontractors.
- c. Maintain applicable safety reference material on the job site.
- d. Attend the pre-construction conference, pre-work meetings including the Contractor Quality Control Preparatory Phase inspection meeting, Initial Phase inspection meetings, Follow-up Phase, additional Preparatory and Initial Phase meetings, and periodic in-progress meetings.
- e. Implement and enforce accepted APPs and AHAs.
- f. Maintain a safety and health deficiency tracking system that monitors outstanding deficiencies until resolution. Post a list of unresolved safety and health deficiencies on the safety bulletin board.
- g. Ensure subcontractor compliance with safety and health requirements.
- h. Maintain a list of hazardous chemicals on site and their safety data sheets (SDS).

### 1.6.3 Meetings

#### 1.6.3.1 Preconstruction Conference

- a. The purpose of the Preconstruction conference is for the Contractor and the Contracting Officer to become acquainted and explain the functions and operating procedures of their respective organizations.
- b. 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, SSHO, quality control supervisor, or any other assigned safety and health professionals who participated in the development of the APP (including the Activity Hazard Analyses (AHAs) and special plans, program and procedures associated with it).
- c. Discuss the details of the submitted APP to include incorporated plans, programs, procedures, and a listing of anticipated AHAs that will be developed and implemented during the performance of the

Contract. This list of proposed AHAs will be reviewed at the conference and an agreement will be reached between the Contractor and the Contracting Officer's representative as to which phases will require an analysis. In addition, establish a schedule for the preparation, submittal, review, and acceptance of AHAs to preclude project delays.

d. Deficiencies in the submitted APP will be brought to the attention of the Contractor at the Preconstruction conference, and the Contractor must revise the plan to correct deficiencies and re-submit it for acceptance. Do not begin work until there is an accepted APP.

#### 1.6.3.2 Safety Meetings

Conduct weekly safety meetings at the project site for all employees as required by EM 385-1-1. The Contracting Officer must be informed of the meeting in advance and be allowed attendance. Minutes showing Contract title, signatures of attendees, and a list of topics discussed must be attached to the Daily Contractor Quality Control Report.

#### 1.6.3.3 Work Phase Meetings

Appropriate AHA's must be discussed during CQC work phase meetings as required in Section 01 45 00.00 25, QUALITY CONTROL.

### 1.7 TRAINING

#### 1.7.1 New Employee Indoctrination

New employees (prime and subcontractor) must be informed of specific site hazards before they begin work. Documentation of this orientation must be kept on file at the project site.

#### 1.7.2 Periodic Training

Provide Safety and Health Training in accordance with EM 385-1-1 and the accepted APP. Ensure all required training has been accomplished for all onsite employees.

#### 1.7.3 Training Plan

Prior to beginning a new phase, training must be provided to all affected employees to include a review of the AHA to be implemented. Contractors can choose to utilize Job Hazard Analyses in lieu of AHAs as long as the JHA meets the requirements of an AHA to include a Risk Assessment.

### 1.8 ACCIDENT PREVENTION PLAN (APP)

#### 1.8.1 General Information

a. Use a Qualified person to prepare the written site-specific APP. See Appendix Q of EM 385-1-1 for definition of Qualified Person. Prepare the APP in accordance with the format and requirements of EM 385-1-1 and as supplemented herein. Cover all paragraph and subparagraph elements in EM 385-1-1, **Appendix A, entitled Minimum Basic Outline for Accident Prevention Plans**. Specific requirements for some of the APP elements are described below:

- (1) The APP must be job-specific and must address any unusual or

unique aspects of the project or activity for which it is written.

(2) The APP must interface with the Contractor's overall safety and health program. Include any portions of the Contractor's overall safety and health program referenced in the APP in the applicable APP element and made site-specific.

(3) The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors.

(4) Contractors must inform 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.

(5) The APP must be signed by the person and firm (senior person) preparing the APP, the Contractor, the on-site superintendent, the designated SSHO.

b. Submit the APP to the Contracting Officer 15 calendar days after Notice to Proceed for acceptance. Work cannot proceed without an accepted APP. The Contracting Officer will review and comment on the Contractor's submitted APP and accept it when it meets the requirements of the Contract provisions.

c. Once accepted by the Contracting Officer, the APP and appendices will be enforced as part of the Contract. Disregarding the provisions of this Contract or the accepted APP will be cause for stoppage of work, at the discretion of the Contracting Officer, until the matter has been rectified.

d. Once work begins, changes to the accepted APP must be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSHO, and quality control manager. Should any severe hazard exposure, i.e. imminent danger, become evident, stop work in the area, secure the area, and develop a plan to remove the exposure and control the hazard. Notify the Contracting Officer, both verbally and in writing, within 24 hours of discovery. In the interim all necessary action must be taken by the Contractor to restore and maintain safe working conditions in order to safeguard on-site personnel, visitors, the public (as defined by ASSE/SAFE A10.34), and the environment.

e. Copies of the accepted APP must be maintained at the CO's office and at the work site. Continuously review and amend the APP, as necessary, throughout the life of the Contract. Incorporate unusual or high-hazard activities not identified in the original APP in the plan as they are discovered.

#### 1.8.2 EM 385-1-1 Contents

In addition to the requirements above and those outlined in Appendix A of EM 385-1-1, the following is required:

a. Names and qualifications (resumes including education, training, experience and certifications) of all 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. The duties of each position must be specified.

b. Qualifications of Competent and Qualified persons. As a minimum, designate Competent persons and submit qualifications 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; personal protective equipment and clothing to include selection, use and maintenance.

c. Confined Space Entry Plan. Develop a confined space entry plan in accordance with EM 385-1-1, applicable OSHA standards 29 CFR 1910, 29 CFR 1910.146, 29 CFR 1915, and 29 CFR 1926, and any other Federal, State, and local regulatory requirements identified in this Contract. Identify the Qualified person's name and qualifications, training, and experience. Delineate the Qualified person's authority to direct work stoppage in the event of hazardous conditions. Include procedure for rescue by Contractor personnel and the coordination with emergency responders. (If there is no confined space work, include a statement that no confined space work exists and none will be created.)

d. Health Hazard Control Program. Designate a Competent and Qualified person to establish and oversee a Health Hazard Control Program in accordance with EM 385-1-1, Section 6. The program must ensure that employees, on-site Government representatives, and others, are not adversely exposed to chemical, physical, and biological agents and that necessary controls and protective actions are instituted to ensure health.

e. A Drug and Alcohol Use Prevention Program. Provide description of the on-site prevention program.

f. Training Records and Requirements. List of mandatory training and certifications which are applicable to this project (e.g. explosive actuated tools, confined space entry, fall protection, crane operation, hazardous energy control, vehicle operator, forklift operators, personal protective equipment); list of requirements for periodic retraining/certification; outline requirements for supervisory and employee safety meetings.

g. Fall Protection and Prevention (FP&P) Plan. The plan must be site specific and address all fall hazards in the work place and during different phases of construction (paragraph entitled FALL HAZARD PROTECTION AND PREVENTION PROGRAM). It must address how to protect and prevent workers from falling to lower levels when they are exposed to fall hazards above 6 feet. A Competent Person For Fall Protection or a Qualified Person for Fall Protection prepare and sign the plan. See Appendix Q of EM 385-1-1 for definitions of Competent and Qualified Person for Fall Protection. The plan must include fall protection and prevention systems, equipment and methods employed for every phase of work, responsibilities, self-rescue, rescue and escape equipment and operations, evacuation procedures, training requirements, and monitoring methods. For Horizontal Lifelines, see EM 385-1-1, section 21 and ASSE/SAFE Z359-PKG. Revise the Fall Protection and Prevention Plan for lengthy projects, reflecting any changes during the course of construction due to changes in personnel, equipment, systems, or work habits. The accepted Fall Protection and Prevention Plan must be kept and maintained at the job site for the duration of the project.

- h. Occupant Protection Plan. The safety and health aspects of lead-based paint removal, prepared in accordance with EM 385-1-1, Section 06.
- i. Site Safety and Health Plan. The safety and health aspects prepared in accordance with EM 385-1-1.
- j. Excavation Plan. The safety and health aspects prepared in accordance with EM 385-1-1.
- k. Crane Critical Lift Plan. Prepare and sign weight handling critical lift plans for lifts over 75 percent of the capacity of the crane or hoist (or lifts over 50 percent of the capacity of a barge mounted mobile crane's hoists) at any radius of lift; lifts involving more than one crane or hoist; lifts of personnel; and lifts involving non-routine rigging or operation, sensitive equipment, or unusual safety risks. Submit 15 calendar days prior to on-site work and include the requirements of EM 385-1-1, Section 16, ASME B30-PKG, and the following:
  - (1) For lifts of personnel, the plan must demonstrate compliance with the requirements of EM 385-1-1, Section 16.
  - (2) For barge mounted mobile cranes, a Naval Architectural Analysis (NAA) must be performed to determine barge stability calculations identifying barge list and trim based on anticipated loading; and load charts based on calculated list and trim. The amount of list and trim must be within the crane manufacturer's requirements.
- o. Standard Lift Plan. For all crane activities a written standard lift plan (SLP) must be prepared for every lift or series of lifts (if duty cycle or routine lifts are being performed). The SLP must be developed, reviewed and accepted by all personnel involved in the lift in accordance with EM 385-1-1, Section 16.
- p. Fatigue Management Plan (FMP). A FMP must be completed as part of the APP whenever work hours:
  - (1) exceed 10-hours a day for more than four consecutive days;
  - (2) exceed 50-hours in a 7-day work week;
  - (3) exceed 12-hours a day for more than three consecutive days, or
  - (4) exceed 58-hours a week for sedentary (to include office) work.

## 1.9 ACTIVITY HAZARD ANALYSIS (AHA)

### 1.9.1 General

- a. The Activity Hazard Analysis (AHA) format must be in accordance with EM 385-1-1. Submit the AHA for review at least 15 calendar days prior to the start of each phase. Format subsequent AHAs as amendments to the APP. The analysis must be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls. Develop an AHA for every operation involving a type of work presenting hazards not experienced in previous project operations or where a new work crew or subcontractor is to perform



work. The analysis must identify and evaluate hazards and outline the proposed methods and techniques for the safe completion of each phase of work. At a minimum, define activity being performed, sequence of work, specific safety and health hazards anticipated, control measures (to include personal protective equipment) to eliminate or reduce each hazard to acceptable levels, equipment to be used, inspection requirements, training requirements for all involved, and the Competent and Qualified persons in charge of that phase of work. For work with fall hazards, include fall hazards associated with scaffold erection and removal, identify the appropriate fall arrest systems. For work with materials handling equipment, address safeguarding measures related to materials handling equipment. For work requiring excavations, include requirements for safeguarding excavations. For work with commissioning, address safeguarding measures related to commissioning.

b. An activity requiring an AHA must not proceed until the AHA has been accepted by the Contracting Officer and a meeting has been conducted by the Contractor to discuss its contents with everyone engaged in the activity, including on-site Government representatives. The Contractor must document meeting attendance at the preparatory, initial, and follow-up phases of quality control inspection.

c. The AHA must be continuously reviewed and, when appropriate, modified to address changing site conditions or operations.

d. Develop the activity hazard analyses using the project schedule as the basis for the activities performed. Any activities listed on the project schedule will require an AHA. The AHAs will be developed by the Contractor, supplier, or subcontractor and provided to the Prime Contractor for submittal to the Contracting Officer.

e. Contractor may use Job Hazard Analyses, Job Safety Analyses, or similar Risk Management procedures in lieu of an AHA, provided the data collected is the same as that required by the AHA.

#### 1.9.2 Periodic AHA Review and Updating

Review the AHAs periodically (at least monthly) at the Contractor supervisory safety meeting and update when procedures, scheduling, or hazards change. The on-site superintendent, SSHO, and Competent persons used to develop the AHAs, including updates, must sign and date the AHAs before they are implemented.

#### 1.10 DISPLAY OF SAFETY INFORMATION

Within one calendar day after commencement of on-site work, erect a Safety and Health Bulletin Board at the job site. Where size, duration, or logistics of project do not facilitate a bulletin board, an alternative method, acceptable to the Contracting Officer, that is accessible and includes all mandatory information for employee and visitor review, will be deemed as meeting the requirement for a bulletin board. Include and maintain information on safety bulletin board as required by EM 385-1-1, Section 01.A.06. Additional items required to be posted include:

- a. Confined space entry permit.
- b. Hot work permit

c. Marine Chemist Certificate (Marine Activities).

1.11 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in paragraph entitled REFERENCES. Maintain applicable equipment manufacturer's manuals.

1.12 EMERGENCY MEDICAL TREATMENT

Contractors must arrange for their own emergency medical treatment. Government has no responsibility to provide emergency medical treatment.

1.13 THIRD PARTY CERTIFICATION OF BARGE-MOUNTED MOBILE CRANES AND MOBILE EQUIPMENT

Barge-mounted mobile cranes must be certified in accordance with 29 CFR 1919 and ASME B30-PKG, by an OSHA accredited person.

1.14 REPORTS

1.14.1 Accident Notification

Notify the Contracting Officer as soon as practical, but no more than four hours, after any mishap meeting the definition of Recordable Injuries or Illnesses or High Visibility Mishap; meeting EM 385-1-1, Section 01, to include property damage equal to or greater than \$5,000. In conjunction with Section 00700 Contract Clause 52.236-13 Alt I, ACCIDENT PREVENTION - ALTERNATIVE I, and EM 385-1-1 Section 1, the Contractor must report to the Government monthly the total man-hours expended at the project site by all employees (supervisory as well as labor) together with those of all subcontractors. The reporting period will start at 12:01 a.m. the first day of each month and end as of midnight on the last day of each month. Reporting must be made by telephone to the CO and Resident Engineer's office prior to the fifth day of the following month.

1.14.2 Accident or Mishap Reports

All accidents involving property damage, fires, personal equipment, and all injuries to the public, regardless of degree, must be reported to the CO and Resident Engineer on ENG Form 3394 and according to the schedule which follows:

a. Investigation and Reporting

(1) Conduct a mishap investigation for recordable injuries and illnesses, for Medical Treatment as defined in paragraph DEFINITIONS, property damage accidents resulting in at least \$5,000 in damages, and near misses as defined in EM 385-1-1, to establish the root cause(s) of the accident. Complete the accident or mishap reports form, ENG Form 3394, and provide the report to the CO within five calendar days of the accident.

(2) Conduct an accident investigation for any of the following High Visibility Mishap: (1) Electrical, (2) Load Handling Equipment or Rigging, (3) Fall-from-Height, (4) Underwater Diving to establish the root cause(s) of the accident. Initial report must be made within four hours, and a , completed ENG Form 3394 must be provide to the Contracting Officer within five calendar

days of the accident. Do not proceed with further operations until cause is determined and corrective actions have been implemented to the satisfaction of the CO.

(3) The CO and Resident Engineer must be notified by the most expeditious means available of all fatal and permanent total disability injuries, three or more persons hospitalized, all property damage of \$500,000 or more, and structural damage involving a question of structural adequacy. All incidents involving disabling injury or an injury which may result in an employee's lost time, or property damage of \$5,000 or more must be reported to the CO and Resident Engineer by telephone as soon as possible and in all cases within four hours.

(4) In all accidents enumerated in sub-item (3), investigate the circumstances before the scene of the accident is changed, take corrective action, and within 48 hours forward to the CO and Resident Engineer four copies of ENG Form 3394.

(5) In the event of an accident involving a fatality, permanent total disability, hospitalization of one or more persons, or property damage of \$500,000 or more, the Contractor must promptly suspend all operations at the scene of the accident and notify the CO and Resident Engineer of the occurrence. Immediately provide for the rescue and/or care of the injured. Except in situations where safety may be compromised, access to the area must be restricted and the scene left undisturbed until investigated by a Government appointed board of investigation and until the Contractor is authorized to resume operations.

(6) If property damage and injury result from the same accident, the consequence may be noted on the same ENG Form 3394. If more than one person is injured in a single accident, ENG Form 3394 must be submitted for each person injured. The Resident Office staff will provide the required forms and assist in their preparation immediately upon notification of an accident.

b. Types of Accidents and Reports. For each accident that results in a consequence or combination of the consequences listed below, a complete report on ENG Form 3394 must be furnished to the CO and Resident Engineer. Please note that these reports cannot be used for any purpose other than accident reporting.

(1) Disabling injury (including death) is an injury that renders a person unable to perform a regularly established job on the day following the injury or on any subsequent day. Known suicide or deaths from natural causes are not reportable.

(2) Damage of \$5,000 or more to the Contractor's property or equipment, including motor vehicles and fire and/or damage to other property caused by the Contractor while executing the Contract.

(3) Accidents occasioned by flood, hurricane, tornado, fire, navigation, wind, ice, etc., and structural failure in excess of \$5,000.

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### 1.14.3 Crane Testing Reports

Submit crane inspection reports required in accordance with Section 16 and Appendix I of EM 385-1-1, ASME B30-PKG, and as specified herein with the daily reports of inspections.

### 1.14.4 Certificate of Compliance

Provide a Certificate of Compliance for each crane entering an activity under this Contract (see Contracting Officer for a blank certificate). State within the certificate that the crane and rigging gear meet applicable OSHA regulations (with the Contractor citing which OSHA regulations are applicable, e.g., cranes used in construction, demolition, or maintenance comply with 29 CFR 1926 and EM 385-1-1 Section 16 and Appendix I. Certify on the Certificate of Compliance that the crane operator(s) is qualified and trained in the operation of the crane to be used. Also certify that all of its crane operators have been trained in the proper use of all safety devices (e.g., anti-two block devices). Post certifications on the crane.

### 1.15 HOT WORK

a. Submit and obtain a written permit prior to performing "Hot Work" (i.e. welding or cutting, etc.) or operating other flame-producing/spark producing devices. Contractors are required to meet all criteria before a permit is issued. In accordance with EM 385-1-1, provide at least two 20 pound 4A:20 BC rated extinguishers for normal "Hot Work". All extinguishers must have current inspection tag, approved safety pin, and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" done. The Fire Watch must be trained in accordance with NFPA 51B and remain on-site for a minimum of 60 minutes after completion of the task or as specified on the hot work permit.

b. For floating plant, obtain services from a NFPA Certified Marine Chemist for "HOT WORK" within or around flammable materials (such as fuel systems, welding/cutting on fuel pipes) or confined spaces (such as sewer wet wells, manholes, vaults, etc.) that have the potential for flammable or explosive atmospheres.

### 1.16 FACILITY OCCUPANCY CLOSURE

Streets, walks, and other facilities occupied and used by the Government must not be closed or obstructed without written permission from the CO.

### 1.17 INCLEMENT WEATHER AND HEAT/COLD STRESS MANAGEMENT

In the event of a severe storm warning, the Contractor must:

a. Secure outside equipment and materials and place materials that could be damaged in protected areas.

b. Check surrounding area for loose material, equipment, debris, and other objects that could be blown away or against existing work.

c. Ensure that temporary erosion controls are adequate. d. Provide a INCLEMENT WEATHER AND HEAT/COLD STRESS MANAGEMENT PLANS for removing or securing plant and evacuation of personnel for floating plants in emergencies. This plan must be part of the AHA and meet the

requirements of EM 385-1-1, Section 19.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 CONSTRUCTION AND OTHER WORK

3.1.1 General

Comply with EM 385-1-1, NFPA 241, ASME B30-PKG, the APP, the AHA, Federal and/or State OSHA regulations, and other related submittals and activity fire and safety regulations. The most stringent standard will prevail.

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, and lead-based paint are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials.

3.1.3 Unforeseen Hazardous Material

If material, not indicated, that may be hazardous to human health upon disturbance during construction operations is encountered, stop that portion of work and notify the Contracting Officer immediately. Within 14 calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification pursuant to Section 00700 Contract Clauses 52.243-4, CHANGES, and 52.236-2, DIFFERING SITE CONDITIONS.

3.2 FALL HAZARD PROTECTION AND PREVENTION PROGRAM

3.2.1 General

Designate a Competent or Qualified Person for Fall Protection to establish, prepare, and sign a fall protection and prevention (FP&P) plan for the protection of all employees exposed to fall hazards in accordance with ASSE/SAFE Z359-PKG and EM 385-1-1. Establish a fall protection and prevention program, for the protection of all employees exposed to fall hazards. The plan will include: company policy, identify responsibilities, qualifications, 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; and must be submitted in the APP. Definitions and nomenclature must be used in accordance with ASSE/SAFE Z359-PKG. Identify Competent/Qualified persons, as required, for fall protection and must maintain a list of current certificates and completed training courses for each person. Qualified and Competent persons (See EM 385-1-1, Appendix Q) requirements are as follows:

a. A Qualified person must have a recognized degree or professional certificate that relates to fall protection and rescue and with extensive knowledge, training, and experience in the fall protection and rescue field and must be capable of designing, analyzing, evaluating, specifying, inspecting, and assembling fall protection and rescue equipment and systems. The Qualified person must also have working knowledge of current fall protection regulations and standards, physical sciences, engineering principles, and meet the qualifications of a Competent person.

b. A Competent person, designated in writing by the Contractor, will be responsible for the immediate supervision, implementation, and monitoring of the Contractor's managed Fall Hazard Protection and Prevention Program, who through training and knowledge in the fall protection and rescue field, is capable of identifying, evaluating, and addressing existing and potential fall hazards, and who has the authority to take necessary corrective measures. To be qualified as a Competent Person for Fall Protection, the individual must have a minimum of 24 hours of Competent Person for Fall Protection training, with a combination of formal classroom and practical documented training. Training will be performed by a competent person training or a qualified person trainer conforming to the requirements of ANSI/ASSE Z490.1, Criteria for Accepted Practices in Safety, Health and Environmental Training. In addition, Competent Person refresher training must be conducted at least every two years to stay current with fall protection and rescue educational industry requirements, or when new fall protection systems are used or installed, or new fall hazards are encountered per ASSE/SAFE Z359-PKG. A Qualified person may perform the duties and responsibilities of a Competent person if their training meets the above minimum training requirements.

### 3.2.2 Fall Protection Equipment and Systems

#### 3.2.2.1 General

Enforce use of the fall protection equipment and systems designated for each specific work activity in the Fall Protection and Prevention Plan and/or AHA at all times when an employee is exposed to a fall hazard. Protect employees from fall hazards as specified in EM 385-1-1, Section 21. In addition to the required fall protection systems, safety skiff, personal floatation devices, and life rings etc., are required when working above or next to water in accordance with EM 385-1-1, Section 05 and 21. Personal fall arrest systems are required when working from an articulating or extendible boom, swing stages, or suspended platforms. Safety requirements for work platforms suspended from cranes or derricks must comply with ASSE/SAFE A10.28. In addition, personal fall restraint systems are required when operating other equipment such as scissor lifts. Fall protection must comply with EM 385-1-1, and ASSE/SAFE Z359-PKG.

#### 3.2.2.2 Personal Fall Arrest Equipment

Personal fall arrest equipment, systems, subsystems, and components must meet ASSE/SAFE Z359-PKG. Only a full-body harness with a shock-absorbing lanyard or self-retracting lanyard is an acceptable personal fall arrest body support device. Body belts are prohibited, to include use in Fall Restraint. 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. Only locking snap hooks and carabiners must be used meeting the 3,600 lb. gate strength requirement.

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Webbing, straps, and ropes must be made of synthetic fiber. The maximum free fall distance when using fall arrest equipment must not exceed 6 feet. The total fall distance and any swinging of the worker (pendulum-like motion) that can occur during a fall shall always be taken into consideration when attaching a person to a fall arrest system. All harnesses must be equipped with Trauma Suspension Straps or similar to provide short-term relief from the effects of orthostatic intolerance. Effective July 2016, all energy absorbers must be equipped with a deployment indicator.

### 3.2.3 Work Over Water

Prepare and provide a fall prevention and protection plan. The plan must comply with EM 385-1-1, Section 21.

### 3.2.4 Personal Flotation Devices (PFD's)

Personal flotation devices are required for any personnel not in a vehicle on the jetty. PFD's must meet all requirements in accordance with EM 385-1-1

### 3.2.5 Guardrails and Safety Nets

Design, install, and use guardrails and safety nets in accordance with EM 385-1-1, Section 21 and 19 (Marine).

### 3.2.6 Rescue and Evacuation Procedures

When personal fall arrest systems are used, ensure that the mishap victim can self-rescue or can be rescued promptly should a fall occur. Prepare a Rescue and Evacuation Plan and include a detailed discussion of the following: methods of rescue; methods of self-rescue; equipment used; training requirement; specialized training for the rescuers; procedures for requesting rescue and medical assistance; and transportation routes to a medical facility. Include the Rescue and Evacuation Plan within the AHA for the phase of work, in the FP&P Plan, and the APP.

### 3.2.7 Aerial Lift Equipment and Movable Work Platforms

In addition to the guardrail provided, the equipment must be equipped with anchorages meeting ASSE/SAFE Z359-PKG. A restraint system must be used in addition to guardrails and the lanyards must be sufficiently short to prohibit workers from climbing out of, or being ejected from the platform.

### 3.2.8 Safety Monitoring System

The use of a safety monitoring system as a fall protection method is prohibited.

### 3.2.9 Controlled Access Zones

The use of Controlled Access Zones as a fall protection method is prohibited.

## 3.3 EQUIPMENT

### 3.3.1 Load Handling Equipment (LHE)

Load Handling Equipment (LHE) must comply with ASME B30-PKG and the

following:

- a. Load Handling Equipment such as forklifts must not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions.
- b. The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions.
- c. Operators of forklifts or power industrial trucks must be licensed in accordance with OSHA.

### 3.3.2 Cranes, Hoists, and Rigging

- a. LHE as specified in EM 385-1-1, Section 16.
- b. Comply with the LHE manufacturer's specifications and limitations for erection and operation of LHE used in support of the work. Perform erection under the supervision of a designated person (as defined in ASME B30-PKG). Perform all testing in accordance with the manufacturer's recommended procedures.
- c. Comply with ASME B30-PKG, OSHA and the EM 385-1-1 for all cranes.
- d. When operating in the vicinity of overhead transmission lines, operators and riggers must be alert to this special hazard and follow the requirements of EM 385-1-1, Sections 11, and ASME B30-PKG.
- e. Do not use personnel work platforms (man-baskets) unless the Contractor proves that using any other access to the work location would provide a greater hazard to the workers or is impossible. Hoisting personnel must be allowed by the LHE Manufacture, this activity is a critical lift and a critical lift plan is required.
- f. Inspect, maintain, and recharge portable fire extinguishers as specified in NFPA 10, Standard for Portable Fire Extinguishers.
- g. All employees must keep clear of loads about to be lifted and of suspended loads.
- h. Use cribbing when performing lifts on outriggers.
- i. The LHE hook/block must be positioned directly over the load. Side loading of LHE is prohibited unless allowed by the manufacture.
- j. Position a physical barricade to prevent personnel from entering the counterweight swing (tail swing) area of the crane.
- k. Certification records which include the date of inspection, signature of the person performing the inspection, and the serial number or other identifier of the LHE that was inspected must always be available onsite.
- l. Written reports listing the load test procedures used along with any repairs or alterations performed on the crane must be available onsite.
- m. Certify that all LHE operators have been trained in proper use of the equipment they are authorized by type, class and capacity.



n. Certify that all LHE meet the manufactures requirements by completing and submitting the certification of compliance (COC)for in the EM 385-1-1 prior to the start of work.

o. All LHE operators must have a physical if required by the EM 385-1-1, and must be signed by a Medical Doctor (MD) or Doctor of Osteopathy (DO).

p. All lifts with LHE must be planned in advance by developing a Standard lift plan (SLP) per the EM 385-1-1.

### 3.4 ELECTRICAL

#### 3.4.1 Conduct of Electrical Work

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. Positive cable identification must be made prior to submitting any outage request for electrical systems. Arrangements are to be coordinated with the Contracting Officer and Station Utilities for identification. The Contracting Officer will not accept an outage request until the Contractor satisfactorily documents that the circuits have been clearly identified. 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 will be 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 shall be permitted to enter. When work requires Contractor to work near energized circuits as defined by the NFPA 70, high voltage personnel must use personal protective equipment that includes, as a minimum, electrical hard hat, safety shoes, insulating gloves with leather protective sleeves, fire retarding shirts, coveralls, face shields, and safety glasses. In addition, provide 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.

#### 3.4.2 Portable Extension Cords

Size portable extension cords in accordance with manufacturer ratings for the tool to be powered and protected from damage. Immediately remove from service all damaged extension cords. Portable extension cords must meet the requirements of EM 385-1-1, NFPA 70E, and OSHA electrical standards.

### 3.5 WORK IN CONFINED SPACES

Comply with the requirements in Section 34 of EM 385-1-1, OSHA 29 CFR 1915 (marine works), OSHA Directive CPL 2.100, and OSHA 29 CFR 1926. Any potential for a hazard in the confined space requires a permit system to be used.

a. Entry Procedures - Prohibit entry into a confined space by personnel for any purpose, including hot work, until the Qualified person has conducted appropriate tests to ensure the confined or enclosed space is safe for the work intended and that all potential hazards are controlled or eliminated and documented. See EM 385-1-1, Section 34,

for entry procedures.) All hazards pertaining to the space must be reviewed with each employee during review of the AHA.

b. Forced air ventilation is required for all confined space entry operations and the minimum air exchange requirements must be maintained to ensure exposure to any hazardous atmosphere is kept below its' action level.

c. Ensure the use of rescue and retrieval devices in confined spaces greater than 5 feet in depth. Conform to Section 34 of EM 385-1-1.

d. Sewer wet wells require continuous atmosphere monitoring with audible alarm for toxic gas detection.

e. Include training information for employees who will be involved as entrants and attendants for the work. Conform to Section 34 of EM 385-1-1.

f. Post the confined space entry permit in a conspicuous place close to the confined space entrance.

### 3.6 HOUSEKEEPING

#### 3.6.1 Clean-Up

All debris in work areas shall be cleaned up daily or more frequently if necessary. Construction debris may be temporarily located in an approved location; however garbage accumulation must be removed each day.

#### 3.6.2 Dust control

In addition to the dust control measures required elsewhere in the Contract documents, dry cutting of brick or masonry must be prohibited. Wet cutting must address control of water runoff.

-- End of Section --

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QUALITY CONTROL

PART 1 GENERAL

1.1 REFERENCES

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

ASTM INTERNATIONAL (ASTM)

ASTM C1077	(2014) Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation
ASTM C1093	(2009) Standard Practice for Accreditation of Testing Agencies for Masonry
ASTM D3666	(2013) Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials
ASTM D3740	(2012a) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
ASTM E329	(2014a) Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1.2 SUBMITTALS

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

SD-01 Preconstruction Submittals

Contractor Quality Control Plan; G

Construction Quality Management for Contractors

The Contractor must furnish documentation that the Contractor Quality Control System Manager has completed the Corps of Engineers course titled "Construction Quality Management for Contractors."

SD-06 Test Reports

Daily CQC Report

1.3 LABORATORY VALIDATION

For tests performed under this Contract, use a testing laboratory validated by the Corps of Engineers Material Testing Center (MTC). See paragraph entitled TESTS.

1.4 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control system, and all associated costs will be included in the applicable unit prices or lump-sum prices contained in the Price Schedule.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

3.1.1 Quality Control System

Establish and maintain an effective quality control (QC) system in compliance with Section 00700 Contract Clause 52.246-12, 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 QC system must cover all construction operations, both onsite and offsite, and be keyed to the proposed construction sequence.

3.1.2 Project Superintendent

Identify an individual, within the onsite work organization, as Project Superintendent. The Project Superintendent must be a Journeyman with a minimum of five years experience in a verifiable Project Superintendent role on jobs similar to this Contracts. The designated Project Superintendent must be acceptable to the CO. The Project Superintendent must be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer (CO) for non-compliance with the quality requirements specified in the Contract. In this context the highest level manager responsible for the overall construction activities at the site, including quality and production is the Project Superintendent. The Project Superintendent must maintain a physical presence at the site at all times, except as otherwise acceptable to the CO, and must be responsible for all construction and construction related activities at the site. The Project Superintendent must have no other duties; they may not perform the duties of an equipment operator, flagger, laborer, or any other position. Identify an alternate for the Project Superintendent to serve in the event of the Project Superintendent's absence and/or to cover work performed on additional shift. The requirements for the alternate are the same as the designated Project Superintendent.

3.2 CONTRACTOR QUALITY CONTROL PLAN

Submit no later than 21 days after receipt of Notice to Proceed, the Contractor Quality Control (CQC) Plan proposed to implement the

requirements of Section 00700 Contract Clause 52.246-12, INSPECTION OF CONSTRUCTION. The Government will consider an interim plan for the first 10 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.

### 3.2.1 Content of the CQC Plan

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. Include in the staff a CQC System Manager.

b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function; see paragraph entitled QUALITY CONTROL ORGANIZATION.

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. Letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities must be issued by the CQC System Manager. Copies of these letters must 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. (Use laboratory facilities approved by the CO.)

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. Establish verification procedures 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 CQC Plan

Acceptance of the CQC 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, notify the CO in writing of any proposed change. Proposed changes are subject to acceptance by the CO.

## 3.3 MUTUAL UNDERSTANDING 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 CO and discuss the Contractor's quality control system. Submit the CQC Plan for review a minimum of 10 calendar days prior to the Coordination Meeting. During the 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 will be prepared by the Government and signed by both the Contractor and the CO and will 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 Contract compliance. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly must 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. All CQC staff members must be subject to acceptance by the CO. Promptly complete and furnish all letters, material submittals, shop drawing submittals, schedules, and all other project documentation to the CQC organization. The CQC organization must maintain these documents and records at the site at all times, except as otherwise acceptable to the CO.

### 3.4.2 CQC System Manager Qualifications

Identify an individual, within the onsite work organization, as CQC System Manager who must be responsible for writing and executing a complete CQC

plan, 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 five years experience in a verifiable CQC role on jobs similar to this Contract. This CQC System Manager must be on the site at all times during construction and be employed by the prime Contractor. The CQC System Manager must be assigned no other duties. Identify in the plan an alternate for the CQC System Manager to serve in the event of the CQC System Manager's absence and/or to cover work performed on additional shifts. The requirements for the alternate are the same as the designated CQC System Manager.

#### 3.4.3 CQC Specialized Personnel

In addition to CQC personnel specified elsewhere in the Contract, provide as part of the CQC organization specialized personnel to assist the CQC System Manager for the following areas: civil, structural, environmental, if the CQC manager is not qualified to cover these areas. These individuals must be directly employed by the prime Contractor and may not be employed by a supplier or subcontractor on this project; must be responsible to the CQC System Manager; be physically present at the construction site during work on their areas of responsibility; and meet the same experience/education qualifications in their own discipline as for the CQC Manager. 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 and that workload allows.

#### 3.4.4 Construction Quality Management for Contractors

In addition to the above experience and/or education requirements, the CQC System Manager and Alternate CQC System Manager must have successfully completed the course entitled "Construction Quality Management For Contractors." This course is periodically offered by the Associated Builders and Constructors, Inc., or Associated General Contractor, Inc. and must be retaken every five years. The course has been coordinated with the Navy and certificates from the Navy will be accepted. For further information regarding courses in the Portland area contact: Associated General Contractors, Oregon-Columbia Chapter at (503) 682-3363 or <http://www.agc-oregon.org/education-and-training/army-corps-of-engineers/>.

#### 3.4.5 Organizational Changes

Maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, revise the CQC Plan to reflect the changes and submit the changes to the CO for acceptance.

#### 3.5 SUBMITTALS AND DELIVERABLES

Submittals, if needed, must comply with the requirements in Section 01 33 00, SUBMITTAL PROCEDURES. The CQC organization must be responsible for certifying that all submittals and deliverables are in compliance with Contract requirements.

#### 3.6 QUALITY 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



## MCR Jetty A Rehabilitation

(Preparatory, Initial, and Follow-up) 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 includes:

- a. Review each paragraph of applicable specifications, reference codes, and standards. Make available during the preparatory inspection a copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field. Maintain and make available in the field for use by Government personnel until final acceptance of the work.
- b. Review of the Contract drawings.
- c. 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. 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. 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. Check to ensure that the portion of the plan for the work to be performed has been accepted by the CO.
- j. Discussion of the initial control phase.
- k. Notify the Government at least 24 hours in advance of beginning the preparatory control phase. Include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The CQC System Manager must prepare and document the results of the preparatory phase actions by separate minutes, and attach 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. Accomplish the following:

- a. Check 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. Notify the Government at least 24 hours in advance of beginning the initial phase. Document separate minutes of this phase, prepared by the CQC System Manager, and attach to the daily CQC report. Indicate exact location of initial phase for future reference and comparison with follow-up phases.
- g. Repeat the initial phase for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

### 3.6.3 Follow-up Phase

Perform daily checks to assure control activities, including control testing, are providing continued compliance with Contract requirements, until completion of the particular feature of work. Record the daily checks in the CQC documentation. Conduct final follow-up checks and correct all deficiencies 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

Conduct additional preparatory and initial phases 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

Perform specified or required tests to verify that control measures are adequate to provide a product that conforms to Contract requirements. Report all test results using industry standard forms at the frequency specified in the Contract. Upon request, furnish to the Government duplicate samples of test specimens for QA verification testing by the Government. Procure the services of a Corps of Engineers approved testing laboratory, as described in subparagraph entitled Testing Laboratories, or establish an approved testing laboratory at the project site. 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. Record results of all tests taken, both passing and failing, on the CQC report for the date taken. Include Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test. If approved by the CO, actual test reports may be submitted later with a reference to the test number and date taken. Provide an information copy of tests performed by an offsite or commercial test facility directly to the CO. 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.

### 3.7.2 Testing Laboratories

The Government reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the Contract specifications and to check the laboratory technician's testing procedures and techniques.

a. Validation. The validation of a testing laboratory is site-specific and cannot be transferred to a facility at a different location. Costs for validation by the Corps of Engineers MTC must be borne by the laboratory and/or the Contractor. Validation is granted only for the specific testing procedures requested to be validated. The laboratory may select the testing procedures to be validated, except for the Quality Assurance requirements of the applicable ASTM standards listed in this paragraph.

b. Validation Procedures. Validation of a testing laboratory consists of either an inspection or audit, as defined below:

(1) Inspection must be performed by the MTC to verify compliance with the applicable provisions of ASTM C1077, ASTM C1093, ASTM D3666, ASTM D3740, and ASTM E329.

(2) An audit would be performed by the MTC in lieu of an inspection for laboratories holding a current AASHTO accreditation. Inspection by the MTC may be required after auditing if critical testing procedures required in the Contract were not included in the applicable CCRL or AMRL inspections.

c. Validation Schedule. For aggregate, concrete, bituminous materials, soil, rock, riprap, and metal components, the frequency of validation inspections or audits is once every two years. For water quality and sediment testing the validation schedule is every 18 months. When conditions change substantially from the time of the last validation, laboratories must be re-validated.

d. Validation Process. For information on the validation process and costs contact the MTC at (601) 634-2496 or fax at (601) 634-3242.

Procedures for validation, including forms requesting validation may be obtained from the MTC web site at:

[www.erdc.usace.army.mil/Media/FactSheets/FactSheetArticleView/tabid/9254/Article/6289/materials-testing-center.aspx](http://www.erdc.usace.army.mil/Media/FactSheets/FactSheetArticleView/tabid/9254/Article/6289/materials-testing-center.aspx).

The Contractor is cautioned that the validation process is lengthy and that it requires immediate action. Keep the CO informed about the validation process as it proceeds in a timely manner.

### 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 Portland District contract commercial Laboratory in the District area. Coordination for each specific test, exact delivery location, and dates must be made through the Portland District Resident Office.

## 3.8 COMPLETION INSPECTION

### 3.8.1 Punch-Out Inspection

The CQC Manager must conduct an inspection of the work near the end of the work, or any increment of the work established by a time stated in the specifications, or the Section 00700 Contract Clause 52.211-10, COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK. As required by paragraph DOCUMENTATION, prepare and include in the CQC documentation a punch list of items which do not conform to the approved drawings and specifications. Include within the list of deficiencies 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, 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. Correct any items noted on the Pre-Final inspection 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 CO must be in attendance at the final acceptance inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil

Facility Engineer user groups and major commands may also be in attendance. The final acceptance inspection will be formally scheduled by the CO based upon results of the Pre-Final inspection. Notify the CO at least 14 days prior to the final acceptance inspection and 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 CO to bill the Contractor for the Government's additional inspection cost in accordance with Section 00700 Contract Clause 52.246-12, INSPECTION OF CONSTRUCTION.

### 3.9 DOCUMENTATION

#### Daily CQC Report:

a. Maintain current records providing factual evidence that required quality control activities and/or tests have been performed. Include in these records the work of subcontractors and suppliers on an acceptable form that includes, as a minimum, the following information:

- (1) Contractor/subcontractor and their area of responsibility.
- (2) Operating plant/equipment with hours worked, idle, or down for repair.
- (3) 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.
- (4) Test and/or control activities performed with results and references to specifications/drawings requirements. Identify the control phase (Preparatory, Initial, or Follow-up). List of deficiencies noted, along with corrective action.
- (5) Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- (6) Submittals and deliverables reviewed, with Contract reference, by whom, and action taken.
- (7) Offsite surveillance activities, including actions taken.
- (8) Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- (9) Instructions given/received and conflicts in plans and/or specifications.
- (10) Contractor's verification statement.
- (11) Deficiency Tracking System. Maintain a cumulative list of deficiencies identified for the duration of the project. Deficiencies to be listed include those failures, Government oral observations, and Notifications of Noncompliance. Maintain the list at the project site. Submit copies of updated listings to the Government at least every 30 days.

(12) Daily dredging report - daily production rates, quantities, effective work time, placement location, ect.

(13) Daily pile driving reports - locations, number of piles, blow count, ect.

b. Indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. Cover both conforming and deficient features and include a statement that equipment and materials incorporated in the work and workmanship comply with the Contract. Electronically submit daily reports and a signed, printed copy of these records to the Government within 24 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, prepare and submit one report for every seven 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. Include copies of test reports and copies of reports prepared by all subordinate quality control personnel within the Daily CQC Report.

### 3.10 NOTIFICATION OF NONCOMPLIANCE

The CO 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 CO may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor must make no part of the time lost due to such stop orders the subject of claim for extension of time or for excess costs or damages.

-- End of Section --