

REQUEST FOR QUOTE



RFQ NUMBER: RFQ-24-P-153721

Vendor to fill in below information		Completed by FBP Buyer
Vendor Name		DATE ISSUED: 03/14/24
Address		CLOSING DATE: 04/01/24 1:00pm EST
City, State, ZIP		BUYER: Mark Pollard
POC:		E-MAIL: mark.pollard@ports.pppo.gov
Telephone		
E-Mail		740-897-3758

SET-ASIDE ()Yes (x)No Set-Aside category :

This solicitation is designated as a Small Business Set-Aside.

The North American Industry Classification System (NAICS) is **238120** The small business size standard is **up to 750 employees**.

REQUEST FOR QUOTE INSTRUCTIONS

1. Upon receipt of this RFQ, please notify sender via email you are in receipt.
2. Please submit a "NO BID" if you do not wish to submit a quote.
3. ALL pages of this Request For Quotation must be returned.
4. Your fixed-price quotation must be returned complete with unit price (USD), extended pricing, delivery dates, FOB point, payment terms, and quote validity (30 days).
5. Each line item must be addressed. If you do not wish to submit a quote for specific line items, state "NO BID" in that item's unit and extended price blocks.
6. Multiple awards may be awarded at the sole discretion of Fluor-BWXT Portsmouth LLC.
7. ***Your quotation must be submitted on or before the RFQ CLOSING DATE in order to be considered. If you need more time to submit your quotation, you must notify Buyer via e-mail prior to the due date.***
8. If the "NO SUBS" box is checked on an item, FBP will **NOT** consider an alternate item. When quoting a "like or equal to" part, a technical data sheet must be provided for review. The technical data sheet (cut sheet) must contain the manufacturer name, manufacturer's part #, material composition, specifications, dimensions, etc. If you do not include supporting data to validate your substitution your quote will not be considered. Additionally, identify the item number in the remarks space and your quotation must contain the statement that "the quoted item is equal or superior to the requested item in fit, form, and function".
9. Incorrect or damaged materials will not be accepted and will be returned at supplier's expense.
10. Any subsequent order will be subject to terms and requirements identified on the attached CONTRACT CLAUSES INCORPORATED BY REFERENCE form
11. MODE of Transportation and "F.O.B. Destination" (see address below) must be listed on this returned RFQ Proposal Submission.
12. Please be advised that Fluor BWXT Portsmouth LLC will have no obligation to award an order on the basis of this Request for Quotation or otherwise pay for the information solicited.
13. For goods and items quoted, in accordance with FAR Clause 52.225-1, Buy American Act – Suppliers (Feb 2009), you are hereby required to state the country of manufacturer for each item being offered. This clause requires preferential buying be made to US made products, and as such, vendors are strongly encouraged to quote only US made products when possible. Failure to provide the country of manufacture may result in your quote being removed from further consideration.
14. Quotes should be consistent with required delivery dates. Dates proposed other than the identified required delivery dates may result in your quote being removed from further consideration.

INFORMATION BELOW IS REQUIRED.

Upon award, Successful Offeror shall reference the Purchase Order Number and line number on any Packing Lists, Boxes or Invoices

Direct all shipments to the following address:

Fluor-BWXT Portsmouth LLC
 3930 U.S. Route 23 South, Attn: Warehouse Building X720
 Piketon, Ohio 45661

Visit Request will be required at time of award to access the site for any deliveries.

Deliveries should be made between the hours of 8:00 a.m. to 3:00 p.m. Monday through Thursday, excluding holidays

EVALUATION CRITERIA

1. This is a lowest price technically acceptable (LPTA) award. All item(s) must meet the description and technical specifications listed in the line item description block to be considered technically acceptable. Award will be made to the lowest price technically acceptable once evaluation criteria factor #2 is applied (if over \$10,000).
2. Small businesses within the four county area (Jackson, Pike, Ross, and Scioto counties) will be provided a *Regional Purchasing Pricing Preference* in acquisitions exceeding the competitive threshold of \$10,000. The prices preference will be given by adding a 5% adjustment factor to the proposed total price/cost including priced options of the bidders/offers whose businesses do not reside within the Jackson, Pike, Ross or Scioto Counties of Ohio. The definition of a residence is a small business concern that is: 1) actively engaged in doing business in one of the counties; 2) has an operative business location in one of the counties; 3) uses at least 51% labor who reside within the Ohio, Kentucky, or West Virginia Tri-State area(s); and 4) has a facility within the counties that can support the business activity contemplated by the Statement of Work/Scope of Work. Upon request by Fluor-BWXT, bidders/offers must provide requested documentation demonstrating fulfillment of requirements applicable to the *Regional Purchasing Pricing Preference*.

REQUEST FOR QUOTE



RFQ NUMBER: RFQ-24-P-153721

QUOTATION VALID FOR 30 DAYS	QUOTE DATE:	MODE of Transportation is: FOB DESTINATION
QUOTE PREPARED BY <i>(Print Name)</i>		Payment Terms: NET 30 DAYS

This is not a purchase order it is only a bidding offer on your part to provide the goods or services below.

Item No.	Line Time Reference #	Description	Quantity	U/M	Required Delivery Date	Unit Price	Extended Price
1	1	West Heavy Equipment Maintenance Building as per drawing and specs	1	ASSY	Sept, 2024		\$
							\$
							\$
							\$
							\$
							\$
							\$
							\$
							\$
	Please include shipping cost in your pricing.						
	*All item(s) must meet the description and submittal requirements detailed in the statement of work. QIP requirements and drawings attached.						
TOTAL OF ALL ABOVE LINE ITEMS							\$

CONTRACT CLAUSES INCORPORATED BY REFERENCE

REQ 153721

Procurement of West Heavy Equipment Maintenance Building
3/6/2024

Mailing Address:

FLUOR BWXT Portsmouth
3930 U.S. Route 23 South
PO Box 548
Piketon, OH 45661
Attn: Mark Pollard
Phone Number: 740-897-3758
Email Address: mark.pollard@ports.pppo.gov

NOTE:

ALL PACKING LIST MUST INCLUDE; PO#, RELEASE# (if applicable), LINE#, AND WORK ORDER # (if applicable). ONE PACKING LIST FOR EACH "DELIVER TO" LISTED ON PO.

Below is a list of documents that contain standard contract clauses that are utilized by Fluor-BWXT. For any document with a checkmark in front of it, the clauses contained within in it are hereby incorporated by reference as a legally binding part of this procurement action. The documents, and its associated clauses, are to be considered a part of both the solicitation and the resulting contract to be issued.

All of the below documents can be viewed and printed from the FBP following website:

<http://www.fbportsmouth.com/working-with-us/documents/index.htm>

- Purchase Order Master Clauses - REV 11
(These clauses pertain to all procurement actions.)

General Fluor BWXT Terms and Conditions of Purchase:

- FBP Terms & Conditions Rental REV December 09, 2021**
(Pertains to rental agreements only)
- FBP Terms & Conditions Standard Rev December 09, 2021**

Vendor Set-up Requirements for FBP

- Representations and Certifications, Page 1 of 14**
- W-9 Request for Taxpayer Identification Number and Certification (Rev. January 2011)**

Special Terms and Conditions - Clauses to Federal Acquisition Regulation (FAR) Flowdown to Vendor

- Mandatory Flowdown Clauses, Rev.3 - dated October 28, 2021**
- Service Contract Act of 1965, Amended (NOV 2007), Rev. 14, dated June 19, 2013**
- Lists A & B Requirement Sources and Implementing Documents & Applicable DOE Directives**

Applies when vendor performs activities on-site or any FBP leased or controlled facilities:

- Workplace Substance Abuse Program, FBP-HR-POL-00026, Rev. 6, June 1, 2020 or most current version**
- Special Provisions – Vendor On Site Services, Rev. 2 dated March 29, 2016, or most current version**

Scoping Document – Procurement of West Heavy Equipment Maintenance Building

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3.0	CORRESPONDENCE, SUBMITTALS AND COMMUNICATION REQUIREMENTS.....	3
4.0	QUALITY ASSURANCE	3

EXHIBIT

Exhibit 1	Drawings
Exhibit 2	Schedule
Exhibit 3	Attachment J-6 Correspondence and Submittal Process
Exhibit 4	Attachment J-8 Contractor / Supplier Submittal Register
Exhibit 5	Attachment J-16 Standard Procurement Quality Requirements

Scoping Document – Procurement of West Heavy Equipment Maintenance Building

1.0 DESCRIPTION OF WORK

- 1.1 This work consists of the design, fabrication and furnishing of associated appurtenances platforms and stairs for West Heavy Equipment Maintenance Building (WHEMB) that conform to the applicable drawings and specifications. The products are to be furnished by the Fabricator also referred to as the Manufacturer. The products are to be furnished to Fluor-BWXT Portsmouth LLC also referred to as FBP or Company.

Except as otherwise expressly provided herein, Fabricator shall supply all adequate and competent labor, supervision, tools, equipment, consumable materials, services, and testing devices necessary to complete the fabrication, testing, evaluation, quality assurance, and shipment and delivery, hereinafter called the "Work".

All Work shall be performed in accordance with drawings and specifications listed herein.

The applicable drawings for this Work, which are provided as Exhibit 1 (Drawings) include:

X-785-A-14290 West Heavy Equipment Maintenance Building Floor Plan

X-785-A-14291 West Heavy Equipment Maintenance Building Exterior Elevations

X-785-A-14292 West Heavy Equipment Maintenance Building Sections

X-785-S-14293 West Heavy Equipment Maintenance Roof Framing Plan

2.0 SCHEDULE, DELIVERIES, AND REPORTING

2.1 Schedule

- 2.1.1 Specific milestones, interfaces, and other schedule related bases of this Contract are as set forth in Exhibit 2.
- 2.1.2 Fabricator shall submit a detailed schedule for work, including duration and estimated time between notice to proceed and start of work, fabrication duration, fabrication sequence, shipping/delivery dates and sequence. The detailed schedule shall clearly identify both, all logical relationships/dependencies between activities related to the project, and the project's projected critical path from Notice to Proceed through project completion.

2.2 Deliveries

- 2.2.1 Deliveries shall be permitted Monday through Thursday, 8:00 AM-3:00 PM Eastern Time. Deliveries must be coordinated with the Company at least seven (7) working days in advance. Deliveries outside of these times must be coordinated with the Company at least two-weeks in advance.

Prior to material shipment, final review and confirmation of compliance of manufacturer's quality control submittals and conformance testing performed by the Company's Construction Quality Control (CQC) Contractor shall be complete. In addition, Manufacturer shall provide recommendations for all aspects of unloading, storing, installing, and maintaining the aforementioned materials.

Scoping Document – Procurement of West Heavy Equipment Maintenance Building

2.3 Reporting

- 2.3.1 Fabricator shall participate in weekly progress meetings. Fabricator shall provide for each meeting a written report showing schedule progress versus actual progress including details of the work completed in relation to the approved schedule.

3.0 CORRESPONDENCE, SUBMITTALS AND COMMUNICATION REQUIREMENTS

- 3.1 Correspondence, submittals and communication with the Company shall be in accordance with Attachment J-6, Exhibit 3.

- 3.2 Fabricator shall transmit to Company, technical submittals, shop drawings or samples, including supporting catalog cuts, manufacturer's literature, sketches or drawings, calculations and other pertinent data, in sufficient detail to enable Company to review the information and determine that Fabricator clearly understands the requirements of the Contract. Documents shall be transmitted to Company under cover of formal contract correspondence utilizing Attachment J-6 Contractor/Supplier Cover Sheet, Exhibit 5. Fabricator shall provide submittals listed on Attachment J-8 (Contractor / Supplier Submittal Register), Exhibit 4, as part of the Contract.

- 3.2.1 Although Work may proceed on receipt of data with a Code "B" notation, Fabricator must incorporate the changes indicated, resubmit for final approval Code "A" before release of materials or equipment for shipment can be approved by Company. Returned copies of data with Code "B" and "C" shall be resubmitted not later than ten days after the date of transmittal by Company.

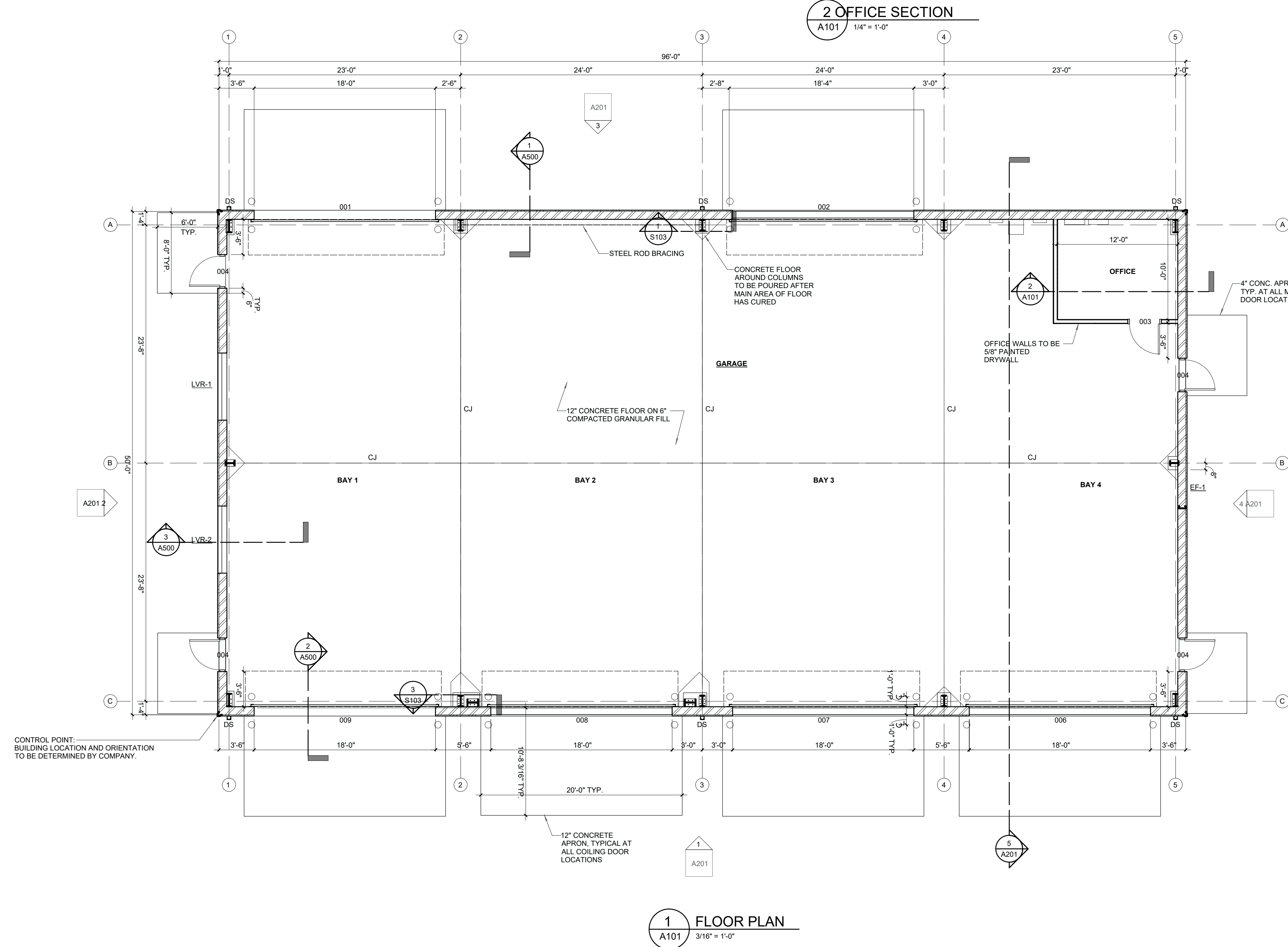
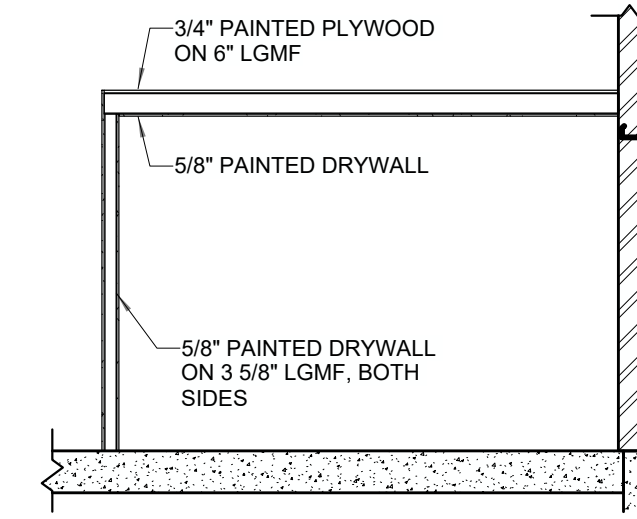
4.0 QUALITY ASSURANCE

- 4.1 Fabricator shall be responsible for the performance of all quality assurance program criteria specified in the J-16, Standard Procurement Quality Requirements, Exhibit 5. The Fabricator shall submit a Quality Assurance Program Manual and supporting Manufacturing Quality Control procedures required to perform the work defined in the Description of Work, J-8 and specifications.
- 4.2 FBP approval of Fabricator quality documents submittals is required prior to commencing work affected by the specific submittals. FBP has the right of access to Fabricator facilities to conduct oversight activities including but not limited to audits, surveillances, inspections, and document reviews, as described in the specifications.

DOOR AND FRAME SCHEDULE																				
#	# OF LEAFS	WIDTH	HEIGHT	TRK	TYPE	MATL	FINISH	DEPTH	TYPE	MATL	FINISH	HEAD	JAMB	SILL	FRAME	RATING	HDWR	SET	NOTES	DOOR #
001		18'-0"	20'-0"	2"															OVERHEAD COILING DOOR	001
002		18'-0"	20'-0"	2"															OVERHEAD COILING DOOR	002
003	1	3'-0"	7'-0"	1 3/4"	F	WD				5 3/4"	1	HM								003
004	1	3'-0"	7'-0"	1 3/4"	F	WD				5 3/4"	1	HM								004
004	1	3'-0"	7'-0"	1 3/4"	F	WD				5 3/4"	1	HM								004
004	1	3'-0"	7'-0"	1 3/4"	F	WD				5 3/4"	1	HM								004
006		18'-0"	20'-0"	2"															OVERHEAD COILING DOOR	006
007		18'-0"	20'-0"	2"															OVERHEAD COILING DOOR	007
008		18'-0"	20'-0"	2"															OVERHEAD COILING DOOR	008
009		18'-0"	20'-0"	2"															OVERHEAD COILING DOOR	009

GENERAL NOTES - ARCHITECTURAL PLANS

- ALL DIMENSIONS ARE TO FACE OF MASONRY, FACE OF STUD, OR FACE OF EXISTING FINISH UNLESS NOTED OTHERWISE.



This document has been reviewed and is UNCLASSIFIED and NOT UCNL. This review does not constitute clearance for public release.

PORTS DESIGN AUTHORITY

ISSUE FOR BID

REFERENCE DRAWINGS	REV	REVISION DESCRIPTION	DRN BY	CHK BY	APP BY	DATE
	A	ISSUE FOR BID PER ESO E9007	JGC	AMM	DIGITAL SIGNATURE	

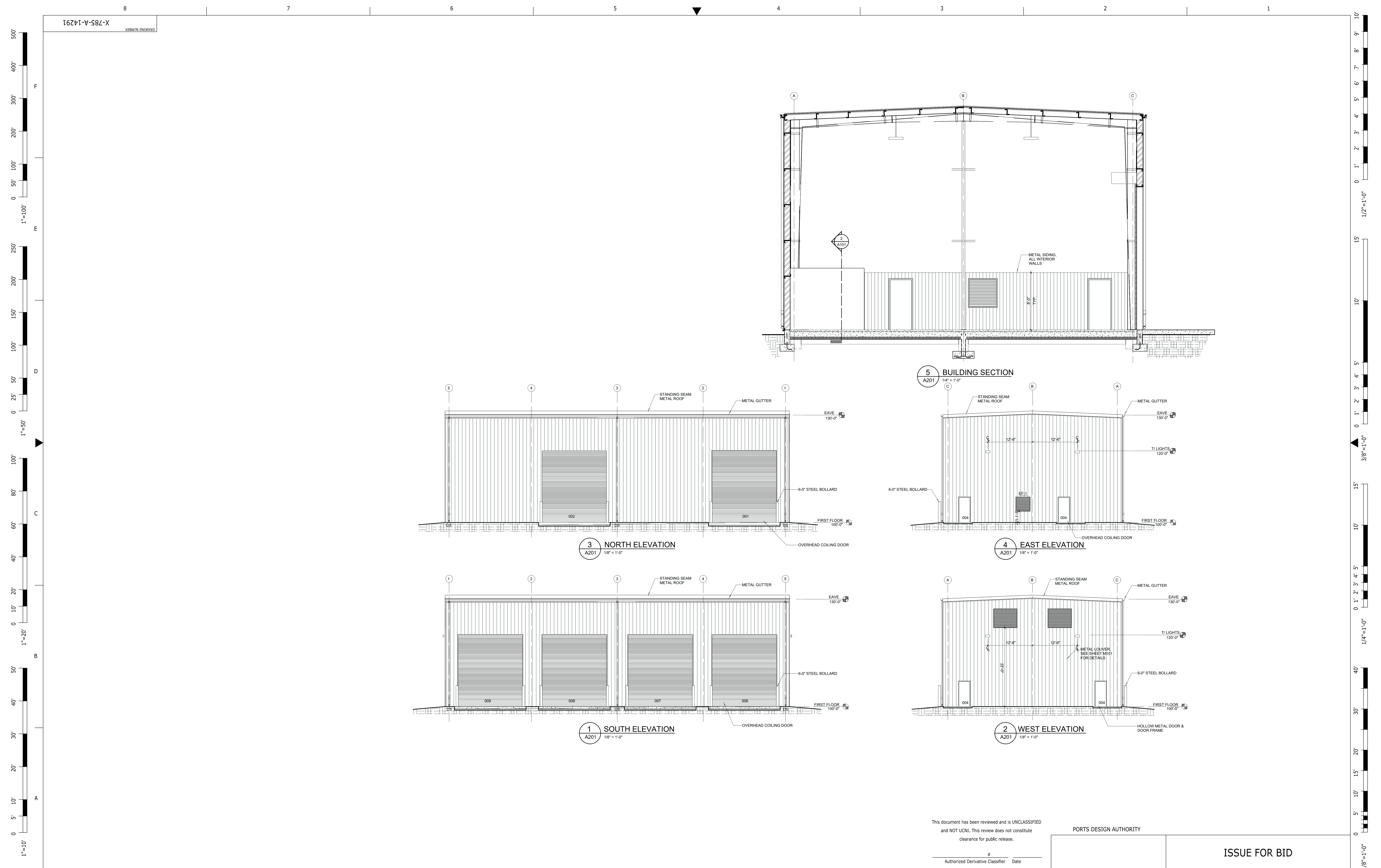
Fluor-BWXT | Portsmouth

P.O. BOX 548 PIKETON, OHIO 45661

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CONTRACT	DE-AC30-10CC40017
DRAWN BY	JGC
CHECKED BY	AMM
APPROVED BY	AMM
ENGINEERING MANAGER	
DIGITAL SIGNATURE	
DATE	
DIGITAL SIGNATURE	
SHEET NUMBER	1 OF 1

PROJECT	PORTSMOUTH GASEOUS DIFFUSION PLANT D & D PROJECT
PROJECT	ON-SITE WASTE DISPOSAL FACILITY
TITLE	WEST HEAVY EQUIPMENT MAINTENANCE BUILDING FLOOR PLAN
SCALE	
DRAWING NUMBER	X-785-A-14290
REV	A



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PORTS DESIGN AUTHORITY

Authorized Derivative Classifier Date

ISSUE FOR BID

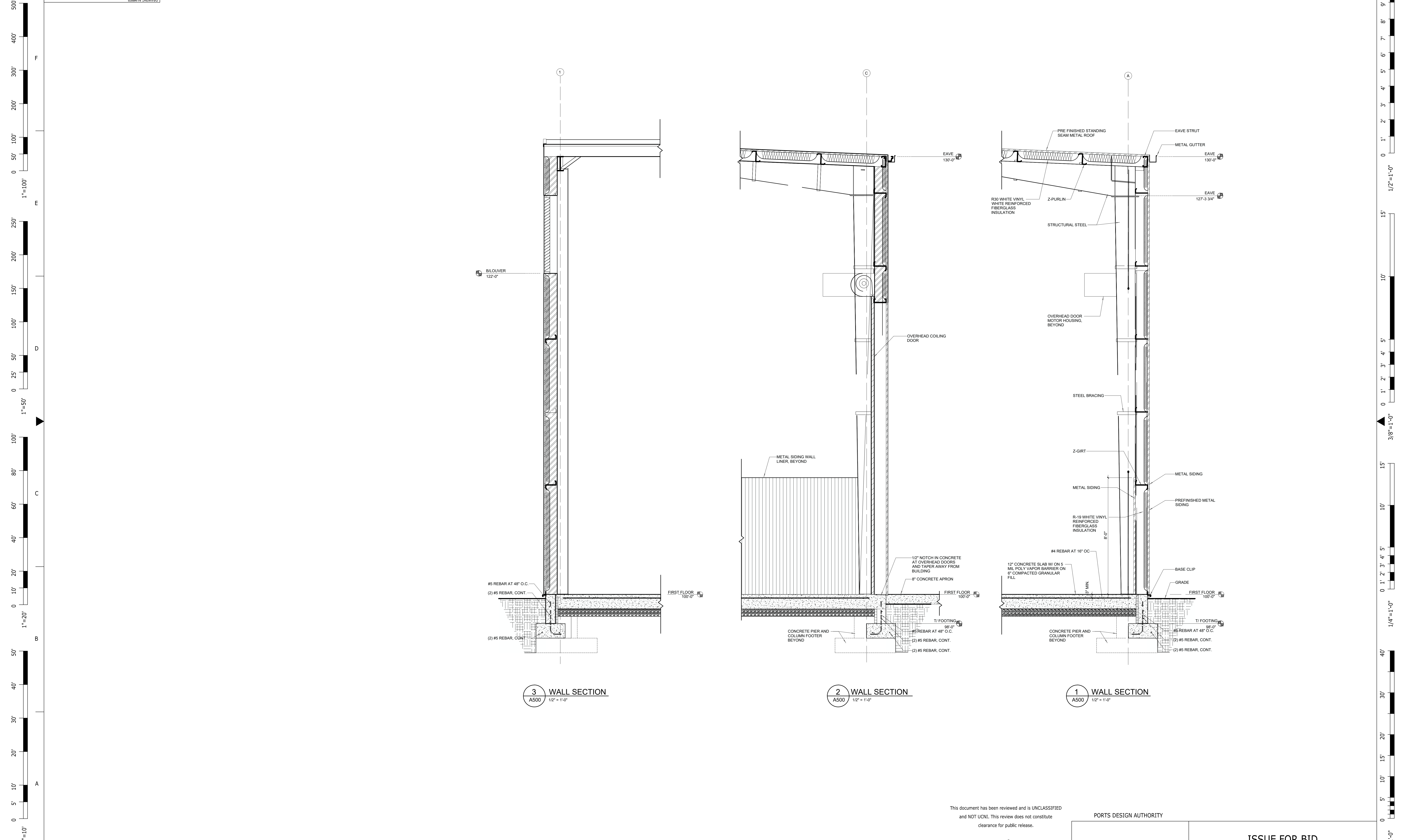
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APPROVED BY	AMM
ENGINEERING MANAGER	DIGITAL SIGNATURE
DATE	DIGITAL SIGNATURE
SHEET NUMBER	1 OF 1

PROJECT	PORTSMOUTH GASEOUS DIFFUSION PLANT D & D PROJECT
TITLE	ON-SITE WASTE DISPOSAL FACILITY
TITLE	WEST HEAVY EQUIPMENT MAINTENANCE BUILDING EXTERIOR ELEVATIONS
SCALE	DRAWING NUMBER
	X-785-A-14291
REV	A



3 WALL SECTION
A500 1/2" = 1'-0"

2 WALL SECTION
A500 1/2" = 1'-0"

1 WALL SECTION
A500 1/2" = 1'-0"

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Authorized Derivative Classifier Date

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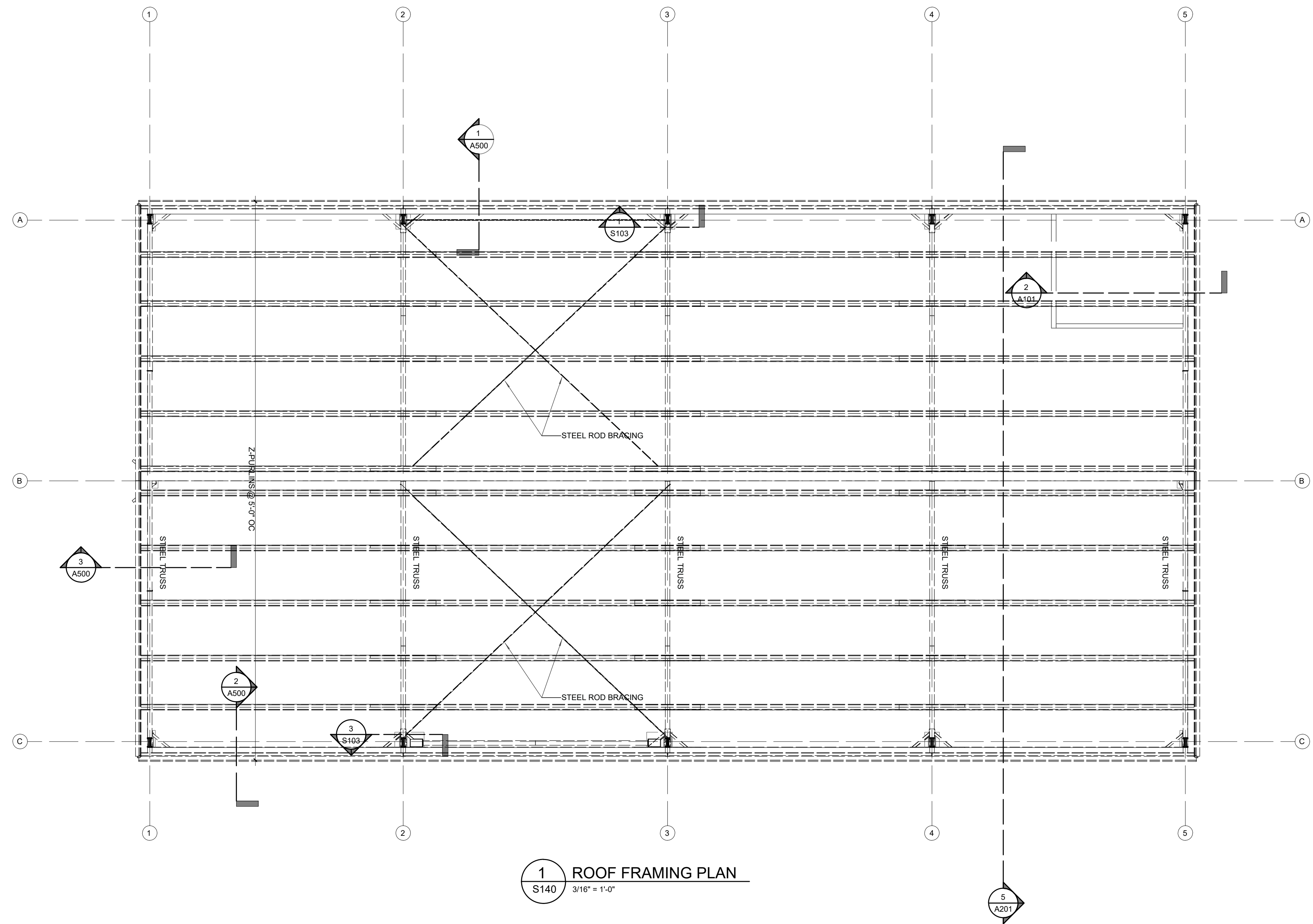
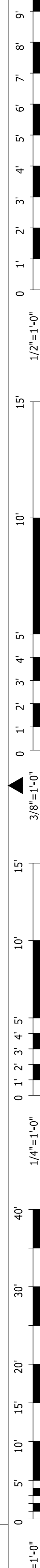
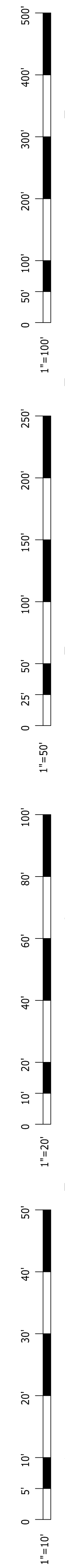


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CONTRACT	DE-AC30-10CC40017
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CHECKED BY	AMM
APPROVED BY	AMM
ENGINEERING MANAGER	DIGITAL SIGNATURE
DATE	DIGITAL SIGNATURE
SHEET NUMBER	1 OF 1

PROJECT	PORTSMOUTH GASEOUS DIFFUSION PLANT D & D PROJECT		
PROJECT	ON-SITE WASTE DISPOSAL FACILITY		
TITLE	WEST HEAVY EQUIPMENT MAINTENANCE BUILDING SECTIONS		
SCALE	DRAWING NUMBER	REV	A
	X-785-A-14292		



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A		ISSUE FOR BID PER ESO E9007	JGC	AMM	DIGITAL	SIGNATURE

Fluor-BWXT | Portsmouth
 P.O. BOX 548 PIKETON, OHIO 45661

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PROJECT	PORTSMOUTH GASEOUS DIFFUSION PLANT D & D PROJECT
TITLE	ON-SITE WASTE DISPOSAL FACILITY
TITLE	WEST HEAVY EQUIPMENT MAINTENANCE BUILDING ROOF FRAMING PLAN
SCALE	DRAWING NUMBER
	X-785-S-14293
REV	A

EXHIBIT 3 – SCHEDULE SUMMARY

Schedule Summary		
Item	Schedule Activities	Duration (Calendar Days)
1	Notice to Proceed (NTP)	-
2	Pre-Construction Submittals	45 Days after NTP
3	Building Fabrication	145 Days after NTP
4	Building Delivery	170 Days after NTP
5	Contract Close Out	190 Days after NTP



**ATTACHMENT J-6
CORRESPONDENCE AND SUBMITTAL PROCESS**

Table of Contents

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5.0	REQUESTS FOR INFORMATION (RFI).	6



ATTACHMENT J-6 CORRESPONDENCE AND SUBMITTAL PROCESS

1.0 INTRODUCTION.

It is the purpose of this Attachment to specify the procedures to be employed by Contractor in the processing Correspondence, Communications Submittals and Request for Information during performance of this Contract.

2.0 CORRESPONDENCE AND COMMUNICATION.

Routine communication between Company and Contractor shall be in letter format. Letters may be faxed or sent via e-mail as a PDF file, but shall still be in letter format. Such communication shall not be identified as requests for information nor shall they substitute for any other written requirement pursuant to the provisions of the Contract.

2.1 Correspondence Numbering

All correspondence shall be between Company and Contractor and shall be uniquely numbered by both Company and Contractor. The number on all correspondence shall be as follows:

LTR - F/CON - XXXXXX-001

↓ ↓ ↓ ↓

↓ ↓ ↓ ↓

↓ ↓ ↓ ↓→→ Sequential numbering 001-999

↓ ↓ ↓→→ Contract or PO Number

↓ ↓→→→ Sender's identification **FROM** (Company Acronym)/**TO**

↓ (Contractor Acronym)

→→→→→ Correspondence identification

2.1.1 Correspondence Identification Codes are as follows:

FAX = Facsimile

E = Email

LTR = Letter

T = Contract Document Transmittal

2.1.2 The following sequential number system shall be used:

- 1) Separated by Contract No., there is one sequential numbering system common to Facsimiles and Letters beginning with 001, for example:

LTR-F/CON-XXXXXXXX-001, FAX-F/CON-XXXXXXXX-002, LTR-F/CON-XXXXXXXX-003, etc.

- 2) Separated by Contract No., there is one sequential numbering system for Document Transmittals, beginning with 001, for example:

T-F/CON-XXXXXXXX-001, T-F/CON-XXXXXXXX-002, etc.

2.2 Correspondence Register



ATTACHMENT J-6 CORRESPONDENCE AND SUBMITTAL PROCESS

- Contractor/Supplier shall maintain a register of all correspondence with Company, noting the sequence number, the correspondence date, the originator and a description (subject, reference, etc.).
- 2.3 All communications (with the exception of Contract Site Instructions, Requests for Information and responses thereto, Contract Document Transmittals and Contract Daily Reports) will be covered by written correspondence.
- 2.4 All written correspondence from Contractor will be signed by Contractor's authorized representative and shall be issued/delivered to Company's Buyer. Correspondence from Company shall be issued in the name of Company's authorized representative, and shall be signed by Company's Buyer or other Company representative if authorized by Company's Buyer.
- 2.5 Any correspondence not issued in accordance with this procedure will not have contractual validity and Contractor waives any entitlement, recourse or otherwise under this Contract that may arise as a result of acting in accordance with unofficial correspondence.

3.0 DRAWINGS AND DOCUMENT TRANSMITTALS.

3.1 Company Drawings and Specifications

Drawings, specifications and other related documents will be transmitted to Contractor under cover of the "Company Document Transmittal" form. Contractor shall acknowledge receipt of such documents by following requirements provided on the form, signing and returning the duplicate form. The form will be numbered as for letters, except that the designator letters "LTR" shall be replaced by "T", and a separate sequence of numbers shall be used.

- 3.1.1 Documents marked other than "ISSUED FOR CONSTRUCTION" (IFC) or not marked, shall be considered as example drawings issued "For General Information Only." These items will be noted as such under the "Status" column on the "Company Document Transmittal" form.
- 3.1.2 Company shall issue one (1) reproducible and one (1) copy of all drawings over size A3 (11"x17"). Drawings size A3 (11"x17") and below and specifications shall be issued in one (1) copy only. One (1) copy of drawings and specifications provided to Contractor shall be maintained by Contractor in his site office and shall be made available for inspection and use by Company upon request.
- 3.1.3 Company may issue an electronic copy of documents for the purposes of Contractor completing finalized "As-Built" drawings.
- 3.1.4 Contractor shall, in interpreting the drawings and specifications, be bound by the figures marked thereon and not by scaled measurements.
- 3.1.5 Where the contract price is lump sum and Contractor believes that new or revised IFC documents constitute a change to the contract price or schedule, Contractor shall notify Company of the change in accordance with the requirements of Changes Clause of the Contract. Contractor shall not proceed with the changes until instructed to do so by Company.



ATTACHMENT J-6 CORRESPONDENCE AND SUBMITTAL PROCESS

- 3.1.6 Where the Contract Price is based on unit prices and the changes on new or revised IFC documents represent only an increase or decrease in quantities that can be measured in accordance with the Contract base pricing structure, this will not be considered to be a change. Contractor shall immediately proceed with any such work in such circumstances.

4.0 CONTRACTOR'S DRAWING AND DATA SUBMITTALS.

- 4.1.1 Documents and data provided by Contractor under the Contract are subject to Company review prior to Contractor's start of procurement and/or production on these particular items as noted in Part I – Scope of Work to the Contract.
- 4.1.2 Review of drawings, documents and/or data, etc. by Company, shall not absolve Contractor from any responsibilities under this Contract or for the design, construction and erection work as defined in Part I – Section “C” Scope of Work.
- 4.1.3 The Contractor shall make all submittals as listed on form FBP-BS-DIR-00003-F01 – Contractor/Supplier Submittal Register, even if the Submittal Register is just a partial list
- 4.1.4 The Contractor/Supplier is responsible for making all submittals required to perform the work as specified in the contract/PO, failure of the required submittal being listed on the submittal register does not relieve the contractor from making the submittal.
- 4.1.5 When a submittal is omitted from the Submittal register the contractor shall update the submittal register and submit it to FBP for information noting the change on the Transmittal.
- 4.1.6 The Contractor shall transmit all submittals using completed form FBP-BS-DIR-00003-F02 – Contractor/Supplier Cover Sheet (attached hereto).
- 4.1.6.1 This cover sheet shall be used to bear both the vendor stamp and provide pertinent information about the submittal, such as title, revision, pagination, in addition to a contractor/supplier stamp. This contractor/supplier stamp, shown below, requires contractor/supplier signature prior to submission to FBP



**ATTACHMENT J-6
CORRESPONDENCE AND SUBMITTAL PROCESS**

The contractor / supplier certifies that this submittal complies with contract / purchase order number: _____

SIGNATURE _____ DATE _____



- A – APPROVED OR ACCEPTED
- B – APPROVED AS NOTED, CHANGE AS NOTED AND RESUBMIT
- C – NOT APPROVED, CHANGE AS NOTED AND RESUBMIT
- D – INFORMATION ONLY, RECEIPT ACKNOWLEDGED
- Q – QUALITY IS BELOW STANDARDS, CORRECT AND RESUBMIT

SIGNATURE _____ DATE _____

- 4.1.7 The vendor shall submit all listed submittals in accordance with the following information provided on the Contractor / Supplier Submittal Register
 - a. Submittal Schedule Date
 - b. Document Submitted To
 - i. For PROC designation, submit according to submittal register
 - ii. For DC designation, submit documentation to:
RMDC@fbports.com
- 4.1.8 The Contractor shall submit all listed submittals with completed form, FBP-BS-DIR-00003-F03, Contractors Document Transmittal Sheet (attached hereto) and is responsible for filling out the following information on the sheet:
 - a. Name and Address of Company
 - b. Selection who the submittal(s) will be provided to
 - i. Either PROC or DC
 - c. Transmittal Number – refer to Section 2.0 of Attachment B for numbering
 - d. Date of Transmittal
 - e. Submittal Number
 - f. Submittal Title
 - g. Revision Number
 - h. Enter either Y (yes) or N (no) if the submittal(s) is a revised submission
 - i. Document Page Count
 - j. Document Special Handling Requirements – Optional
 - k. Remarks – Optional
- 4.1.9 The review by Company with or without comments shall not relieve Contractor of any obligations or requirements under the Contract nor be construed as an authorization of, or consent to, any deviation from the Contract. If Contractor considers that Company’s comments constitute a change to the Contract, Contractor shall request a change in accordance with Changes Clause of the Contract.



ATTACHMENT J-6 CORRESPONDENCE AND SUBMITTAL PROCESS

- 4.1.10 All drawings and other documents shall be in English and be sized in accordance with imperial standard sizes and shall carry titles to indicated equipment numbers or any other identification number of the portion of work covered on the particular drawing and/or document.
- 4.1.11 The revision number shall mark changes or additions to any document, at the point of a revision, and the revision must be reflected in its title block or drawing number by an appropriate revision indication.
- 4.1.12 If a document is superseded when returned to Company, indication of the substitution must appear in or near the title block, or in the transmittal letter.
- 4.1.13 When the Review process is complete, FBP Portsmouth will return the Submittal to the contractor with the following stamp affixed and signed.
- 4.2 "As-Built" Drawings
 - 4.2.1 Part I to the Contract shall state the type of drawings that are to be submitted as "As-Built" drawings. "As-Built" drawings shall be submitted to Company utilizing a Contract Document Transmittal.
- 4.3 Quality Control/Assurance Documentation

Formal documentation in connection with the Quality Control and Assurance obligations set forth in Attachment E shall be submitted by Contractor to Company utilizing formal correspondence.
- 4.4 Contractor's Requests for Substitution
 - 4.4.1 Contractor may request to substitute a material, article, device, product, fixture, form, type of construction or process called for in the Contract with another item that is equal, or better, in all respects to that so indicated or called for.
 - 4.4.2 Such requests shall be submitted under cover of a letter in accordance with Article 2.0 of this Attachment.
 - 4.4.3 Company's review and approval or rejection of such request shall not relieve Contractor of any obligations or responsibilities under the Contract.
 - 4.4.4 In all cases, the request shall be submitted by Contractor with sufficient duration in advance of the requirement for the substitution in order to allow Company sufficient time to fully evaluate the request. Rejection of the request shall not be a basis for a change to the contract price or schedule.

5.0 REQUESTS FOR INFORMATION (RFI).

In the event that Contractor determines that some portion of a drawing, specification or the contract document requires clarification or interpretation by Company, Contractor shall initiate and submit a request for information (RFI) using form FBP-BS-DIR-00004-F01 (attached hereto).

- 5.1 Utilizing the approved RFI form, Contractor shall clearly and concisely set forth the following information:



ATTACHMENT J-6 CORRESPONDENCE AND SUBMITTAL PROCESS

- 5.1.1 Company Name
 - 5.1.2 Contract or PO number
 - 5.1.3 RFI Number
 - 5.1.3.1 RFIs are noted on contractor/supplier submittal registers as a distinct line item. Each technical RFI submitted will be numbered sequentially against this line item number. For example, RFI's may be listed with a line item number of 1234567-001. When sending in the first RFI to be reviewed, the number shall be 1234567-001-01, the second shall be numbered as 1234567-001-02, etc.
 - 5.1.4 Applicable reference documents
 - 5.1.5 The issue for which clarification is sought and why a response is needed from Company
 - 5.1.6 Contractor's interpretation or understanding of the Contract requirements together with reasons therefore and any proposed resolutions
 - 5.2 Contractor acknowledges that this is a complex project, and it is anticipated that Contractor will issue RFIs to Company throughout the life of the Contract to question and or seek clarification of the Work.
 - 5.3 After completion of the form, Contractor submits the RFI
 - 5.3.1 Technical RFI's are to be submitted to Records Management/Document Control (RMDC) with a copy to the Contract Administrator
 - 5.3.2 Commercial RFI's are to be submitted directly to the Contract Administrator for processing
 - 5.4 RMDC shall log all incoming RFI's and route to appropriate project personnel
 - 5.5 FBP shall review all RFIs to determine whether or not they are RFIs within the meaning set forth in this directive. If Company determines that the RFI is inappropriate, it shall be returned within the working days stated on the Submittal Register from receipt, without response except to state one of the following:
 - 5.5.1 Information to resolve the request exists in the Contract.
 - 5.5.2 Information to resolve the request exists on an issued drawing.
 - 5.5.3 Information to resolve the request exists in an issued Specification or Document.
 - 5.5.4 The use of the RFI form is incorrect and the subject should be covered by a letter, transmittal or other as defined in this Attachment.
- RFIs returned for any of the foregoing reasons shall be clearly shown in Company's RFI register as "Not Applicable" meaning that they constitute incorrect use of the RFI procedure.
- 5.6 Company shall respond to RFIs within the working days stated on the Submittal Register from receipt by Company, unless Company determines that a longer period is required to fully review and respond. In this case, Contractor will be advised of the longer period required within five (5) working days of initial receipt.



ATTACHMENT J-6 CORRESPONDENCE AND SUBMITTAL PROCESS

- 5.7 If Contractor submits an RFI on an activity within the working days stated on the Submittal Register from or less of float on the agreed Contract Schedule, Contractor shall not be entitled to any time extension due to the time taken for Company to respond to the RFI.
- 5.8 RMDC shall register when RFIs are returned to Contractor. The RFI register shall be reviewed at each progress meeting.
- 5.9 Company's response to RFIs are considered to be within the Scope of Work of the Contract, will not change any requirements of the Contract and do not in themselves constitute agreement or authorization to perform a change. In all instances, agreement with Contractor's interpretation and proposed resolution specifically waives any entitlement that Contractor may have to a change in price or schedule.
- 5.10 If Company considers that the response to an RFI constitutes a change to the Contract Price, Company will issue in parallel a Contract Site Instruction or a Contract Modification, and this shall be referenced on the RFI response. Only the Contract Site Instruction or Contract Modification constitutes authorization to proceed with the RFI response if it is a change.
- 5.11 If Contractor receives a response to an RFI that Company has not registered as a change, but which Contractor believes constitutes a basis for a change, Contractor shall not proceed in accordance with the response. Contractor shall immediately notify Company in accordance with the Changes Clause in Section H and shall not proceed with the Work, which is believed to be changed, without the receipt of a Contact Site Instruction from Company.

END OF ATTACHMENT J-6



[CONTRACT NUMBER], [CONTRACT TITLE]

Submittal [Number]

[Submittal Title]

Revision [Number]

[Contractor Name] for Fluor-B&W Portsmouth LLC

[Date]

The contractor / supplier certifies that this submittal complies with contract / purchase order number: _____

SIGNATURE _____ DATE _____



- A – APPROVED OR ACCEPTED
- B – APPROVED AS NOTED, CHANGE AS NOTED AND RESUBMIT
- C – NOT APPROVED, CHANGE AS NOTED AND RESUBMIT
- D – INFORMATION ONLY, RECEIPT ACKNOWLEDGED
- Q – QUALITY IS BELOW STANDARDS, CORRECT AND RESUBMIT

SIGNATURE _____ DATE _____



CONTRACTOR'S DOCUMENT TRANSMITTAL SHEET

FROM: (NAME & ADDRESS OF CONTRACTOR)	TO <input type="checkbox"/> FLUOR-B&W PORTSMOUTH LLC DOCUMENT CONTROL CONTRACT/PO NUMBER:	TO <input type="checkbox"/> FLUOR-B&W PORTSMOUTH LLC PROCUREMENT / SUBCONTRACTS CONTRACT/PO NUMBER:
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DATE OF TRANSMITTAL:	DATE OF RECEIPT:	DATE OF RECEIPT:
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SUBMITTAL NUMBER	SUBMITTAL TITLE	REV	Revised Submission? (Y/N)	DOCUMENT PAGE COUNT	DOCUMENT SPECIAL HANDLING REQUIREMENTS

RMDC Reviewed and Received By/Date:	RMDC Comments:
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REMARKS



**Attachment –J-8
Contractor / Supplier Submittal Register**

Contract / PO Number:		Contract / PO Title:	West Heavy Equipment Maintenance Building (WHEMB)	Contractor:	
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*This register does not eliminate Contractor/Supplier responsibility for ensuring all required data submittals outlined in Contract are submitted to FBP.

Submittal Number	Submittal Title	Spec/PO/Contract Section Reference	Submittal Schedule Date	Submittal Review Period (Calendar Days)	Document Submitted To	Submittal Purpose	Submittal Review (Internal Use)	Submittal Approval (Internal Use)	Submittal Distribution (Internal Use)
Proposal Submittals									
N/A	Quality Manual	J-16,	G	N/A	PROC	ACC	DESIGN, QA	PROC	Proc. File
N/A	Past Experience	Section L	G	N/A	DC	INF	PROC	PROC	PROC
Procurement Submittals									
NA	Pay Item Schedule Invoice	Section G.5.1 (b)	Other	10	PROC	APP	PROC	PROC	Proc. File
Construction Submittals									
001	Acceptance Testing Reports	J-16, Specifications	H	10	DC	ACC	QA, DESIGN	DESIGN	QA, DESIGN
002	Technical Request for Information (RFI)	Attachment J-11	H (14)	14	DC	ACC	DESIGN, CONST	DESIGN	PROC
003	Non-Conformance Report	QA Plan	H (7)	7	DC	APP	CONST, DESIGN, QA, HSE	DESIGN	CONST, DESIGN, HSE, PROC
004	Corrective Action Report	QA Plan	H (7)	7	DC	APP	CONST, DESIGN, QA, HSE	QA	CONST, DESIGN, HSE, PROC

Submittal Schedule Date	Document Submitted To	Submittal Purpose	Submittal Review (Internal Use)	Submittal Approval (Internal Use)	Submittal Distribution (Internal Use)
A = Within X days after award	PROC = Procurement	APP = Approval	DESIGN = Eng. of Record Review	DESIGN = Eng. of Record Review	DESIGN = Eng. of Record Review
B = XX Days Max. from NTP	DC = Document Control	ACC = Acceptance	QA = Quality	QA = Quality	QA = Quality
C = Prior to Authorization to Mobilize		INF = Information	CONST = Construction	CONST = Construction	CONST = Construction
D = XX Days Prior to Start of the Activity		Other = As Identified	PROC = Procurement	PROC = Procurement	PROC = Procurement
E = XX Days After Completion of Activity			HSE = Health, Safety, Environ.	HSE = Health, Safety, Environ.	HSE = Health, Safety, Environ.
F = Prior to Entry			EP = Environmental Protection	EP = Environmental Protection	DC (Project File) – Record Copy
G = With Bid / With Proposal			RP = Radiation Protection	RP = Radiation Protection	RP = Radiation Protection
H = As Required/As Needed			Other = As Identified	Other = As Identified	Other = As Identified
Other = As Identified					



**Attachment –J-8
Contractor / Supplier Submittal Register**

Contract / PO Number:		Contract / PO Title:	West Heavy Equipment Maintenance Building (WHEMB)	Contractor:	
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*This register does not eliminate Contractor/Supplier responsibility for ensuring all required data submittals outlined in Contract are submitted to FBP.

Submittal Number	Submittal Title	Spec/PO/Contract Section Reference	Submittal Schedule Date	Submittal Review Period (Calendar Days)	Document Submitted To	Submittal Purpose	Submittal Review (Internal Use)	Submittal Approval (Internal Use)	Submittal Distribution (Internal Use)
005	QA Reports	Project Quality Assurance Plan	E (14)	7	DC	APP	CONST, QA, Design	QA	QA
006	Notice of Completion	Section H.54 (a)	Other	7	DC	ACC	DESIGN	DESIGN	PROC
007	Manufacturer's Door and Frame information	Specification WHEMB Technical Functional Requirements (TFR)	D (14)	7	DC	APP	CONST, DESIGN, QA	DESIGN	CONST, QA
008	Metal Wall Louvers	Specification WHEMB Technical Functional Requirements (TFR)	D (14)	7	DC	APP	CONST, DESIGN, QA	DESIGN	CONST, QA
009	Pre-Engineering Metal Building Information	Specification WHEMB Technical Functional Requirements (TFR)	D (14)	7	DC	APP	CONST, DESIGN, QA	DESIGN	CONST, QA

Submittal Schedule Date	Document Submitted To	Submittal Purpose	Submittal Review (Internal Use)	Submittal Approval (Internal Use)	Submittal Distribution (Internal Use)
A = Within X days after award	PROC = Procurement	APP = Approval	DESIGN = Eng. of Record Review	DESIGN = Eng. of Record Review	DESIGN = Eng. of Record Review
B = XX Days Max. from NTP	DC = Document Control	ACC = Acceptance	QA = Quality	QA = Quality	QA = Quality
C = Prior to Authorization to Mobilize		INF = Information	CONST = Construction	CONST = Construction	CONST = Construction
D = XX Days Prior to Start of the Activity		Other = As Identified	PROC = Procurement	PROC = Procurement	PROC = Procurement
E = XX Days After Completion of Activity			HSE = Health, Safety, Environ.	HSE = Health, Safety, Environ.	HSE = Health, Safety, Environ.
F = Prior to Entry			EP = Environmental Protection	EP = Environmental Protection	DC (Project File) – Record Copy
G = With Bid / With Proposal			RP = Radiation Protection	RP = Radiation Protection	RP = Radiation Protection
H = As Required/As Needed			Other = As Identified	Other = As Identified	Other = As Identified
Other = As Identified					



**Attachment –J-8
Contractor / Supplier Submittal Register**

Contract / PO Number:		Contract / PO Title:	West Heavy Equipment Maintenance Building (WHEMB)	Contractor:	
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*This register does not eliminate Contractor/Supplier responsibility for ensuring all required data submittals outlined in Contract are submitted to FBP.

Submittal Number	Submittal Title	Spec/PO/Contract Section Reference	Submittal Schedule Date	Submittal Review Period (Calendar Days)	Document Submitted To	Submittal Purpose	Submittal Review (Internal Use)	Submittal Approval (Internal Use)	Submittal Distribution (Internal Use)
010	Platforms and Ladder Information	Specification WHEMB Technical Functional Requirements (TFR)	D (14)	7	DC	APP	CONST, DESIGN, QA	DESIGN	CONST, QA
011	Manufacturer's Product Data, drawings and sketches, and recommendations.	Specification WHEMB Technical Functional Requirements (TFR)	D (14)	7	DC	APP	CONST, DESIGN, QA	DESIGN	CONST, QA

Submittal Schedule Date	Document Submitted To	Submittal Purpose	Submittal Review (Internal Use)	Submittal Approval (Internal Use)	Submittal Distribution (Internal Use)
A = Within X days after award	PROC = Procurement	APP = Approval	DESIGN = Eng. of Record Review	DESIGN = Eng. of Record Review	DESIGN = Eng. of Record Review
B = XX Days Max. from NTP	DC = Document Control	ACC = Acceptance	QA = Quality	QA = Quality	QA = Quality
C = Prior to Authorization to Mobilize		INF = Information	CONST = Construction	CONST = Construction	CONST = Construction
D = XX Days Prior to Start of the Activity		Other = As Identified	PROC = Procurement	PROC = Procurement	PROC = Procurement
E = XX Days After Completion of Activity			HSE = Health, Safety, Environ.	HSE = Health, Safety, Environ.	HSE = Health, Safety, Environ.
F = Prior to Entry			EP = Environmental Protection	EP = Environmental Protection	DC (Project File) – Record Copy
G = With Bid / With Proposal			RP = Radiation Protection	RP = Radiation Protection	RP = Radiation Protection
H = As Required/As Needed			Other = As Identified	Other = As Identified	Other = As Identified
Other = As Identified					

Instructions
Completion of the Submittal Register – Part I
Instructions for Fluor-B&W Portsmouth LLC

1. FBP will insert the submittal number as follows:
 - Contract Number/PO Number
 - Sequential number

Contract #	Sequence#
XXXXXXXX	001
Contract #	Sequence #
XXXXXXXX	001
2. **Note:** When additional submittals are required the Contractor shall enter the next sequential number in that submittal group (i.e. if the last submittal number in a group was XXXXXXXX--025, the next submittal number would be XXXXXXXX--026).FBP will insert the Submittal Title
3. FBP will insert the Specification/PO/or Contract Section the submittal is referenced in
4. FBP will replace the XX with the desired number of days on the Submittal Schedule date
 - A – Within XX days after award
 - B – XX days max from Notice to Proceed (NTP)
 - C – Prior to authorization to mobilize
 - D – XX days prior to start of the activity
 - E – XX days after completion of activity
 - F – Prior to entry
 - G – With Bid / With Proposal
 - H – As required/As Needed
5. FBP will insert the Submittal Review Period for each submittal listed
6. FBP will insert who the vendor is required to submit the submittal to within the FBP organization
 - PROC – Procurement
 - DC – Document Control
7. FBP will insert the Submittal Purpose code
 - APP – Approved
 - ACC – Accepted
 - INF – Information
 - Other – As Identified
8. FBP will insert the Submittal Reviewers (**Internal Use**)
 - DESIGN – Engineer of Record
 - QA – Quality
 - CONST – Construction
 - PROC – Procurement

- HSE – Health, Safety, Environmental
 - Other – As identified
9. FBP will insert the Submittal Approver (**Internal Use**)
- DESIGN – Engineer of Record
 - QA – Quality
 - CONST – Construction
 - PROC – Procurement
 - HSE – Health, Safety, Environmental
 - Other – As Identified
 -
10. FBP will insert the Submittal Distribution Requirements (i.e., once an approved or accepted submittal, who Document Control needs to distribute a controlled or certified copy to)
- DESIGN – Engineer of Record
 - QA – Quality
 - CONST – Construction
 - PROC – Procurement
 - HSE – Health, Safety, Environmental
 - Other – As identified



FLUOR-B&W PORTSMOUTH LLC

REQUEST FOR INFORMATION (RFI)

To: COMPANY – DOCUMENT CONTROL	Contractor:												
Cc: CONTRACT ADMINISTRATION	Contract No.:												
	RFI No:												
Reference Documents:													
ISSUE DESCRIPTION AND REASON FOR RFI:													
CONTRACTOR'S INTERPRETATION AND PROPOSED RESOLUTION:													
Originator (Sign) & (Print Name) Date	Received (Sign) & (Print Name) Date												
RESPONSE: 1) Information contained in Contract 2) Information contained on Drawing 3) Information contained in Spec/Doc 4) RFI form is incorrect. Use _____ 5) Contractor's interpretation agreed. Proceed accordingly 6) Detailed response other than 1 –5	<table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%; padding: 5px;">Yes</th> <th style="width:50%; padding: 5px;">No</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> </tr> </tbody> </table>	Yes	No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yes	No												
<input type="checkbox"/>	<input type="checkbox"/>												
<input type="checkbox"/>	<input type="checkbox"/>												
<input type="checkbox"/>	<input type="checkbox"/>												
<input type="checkbox"/>	<input type="checkbox"/>												
<input type="checkbox"/>	<input type="checkbox"/>												
Contract Site Instruction (CSI) Number (if Applicable):													
CSI# _____ <input type="checkbox"/> Not Applicable													
Responders Signature & Name	Date returned to Contractor: Cc: Contracts Administrator												

NOTE: Company's response to this RFI does not constitute authorization to perform a change to the Contract. Contractor may proceed in accordance with the response only on the basis that Contractor agrees that it is not a change. If Contractor believes that the response does constitute a change, Contractor shall await receipt of the Site Instruction indicated above. Where no CSI is indicated, Contractor shall notify Company and shall not proceed until authorized in writing by the Company.

Attachment J-16

FBP Subcontractor Quality Assurance Requirements

Requisition/Purchase Order Number/Project Title: _____

Required √	Requirement Description	Comments – Explanation/Justification
<input type="checkbox"/>	J-16 No additional requirements required.	
<input type="checkbox"/>	1.0 Program (If checked, all lines are required)	
<input type="checkbox"/>	1.1 Subcontractor shall submit a project Quality Assurance Plan (QAP) that incorporates the elements stated herein. The QAP (includes implementing work documents) shall be submitted as specified in the Submittal Register J-8.	
<input type="checkbox"/>	1.2 Subcontractor shall provide an organization chart that identifies and describes responsibilities, levels of authority, and interfaces for those managing, performing, and assessing the adequacy of work.	
<input type="checkbox"/>	1.3 Subcontractor shall designate a QA/QC representative (must be independent of directing and performing work) who will provide interface for quality related work and any stop work actions by the subcontractor or FBP. The subcontractor shall submit the resume of the QA/QC representative showing Knowledge, Skills and Ability (KSA) related to QA activities for FBP QA approval as specified on the Submittal Register J-8.	
<input type="checkbox"/>	1.4 Subcontractor shall identify National Consensus Standards for applicability to their Quality Program Requirements as selected below:	
	<input type="checkbox"/> ASME/NQA-1 2008/2009 Part 1-Nuclear Quality Assurance Program Requirements	
	<input type="checkbox"/> ASME/NQA-1 2008/2009 Part 2 (as selected)	
	<input type="checkbox"/> 2.4 Power, Instrumentation and Control Equip.	
	<input type="checkbox"/> 2.7 Software	
	<input type="checkbox"/> 2.14 CGD	
	<input type="checkbox"/> 2.18 Maintenance	
	<input type="checkbox"/> Other: _____	
<input type="checkbox"/>	2.0 Personnel Training and Qualifications	
	2.1 Subcontractor personnel performing work requiring special skills or abilities shall be trained and have documented qualifications or certifications prior to performing work and will submit as specified in the Submittal Register J-8.	
<input type="checkbox"/>	3.0 Quality Improvement (If checked, all lines are required)	
<input type="checkbox"/>	3.1 Subcontractor shall assign the responsibility for identification and authority to the designed QA/QC representative to stop unsatisfactory work and control further processes, installation or use of nonconforming items.	

Note: FBP assigned QA personnel have right of access to enter all work areas and request documentation to be provided in a timely manner to conduct oversight of activities and to resolve identified problems.

Attachment J-16

FBP Subcontractor Quality Assurance Requirements

Requisition/Purchase Order Number/Project Title: _____

Required √	Requirement Description	Comments – Explanation/Justification
<input type="checkbox"/>	3.2 Subcontractors shall provide requirements for the identification, reporting, and disposition of project non-conformances. Non-conformances including S/CI require notification of FBP representative for review and concurrence of proposed corrective actions prior to commencing corrective action implementation.	
<input type="checkbox"/>	4.0 Documents and Records (If checked, all lines are required)	
<input type="checkbox"/>	4.1 Subcontractor shall have a program which identifies and controls project records. The program should identify how the subcontractor reviews and approves changes, issues revisions, and stores records.	
<input type="checkbox"/>	4.2 The document control program shall describe how FBP controlled documents and drawings are maintained ensuring current revisions are used for field work and will submit as specified in the Submittal Register J-8. Superseded and cancelled controlled documents shall be marked “VOID” and removed from the field or work area.	
<input type="checkbox"/>	4.3 Subcontractor shall describe how revisions to final design (As-Built drawings, Use-As-Is, Repair, nonconformance disposition) are subjected to a design control process for review and approval.	
<input type="checkbox"/>	4.4 Subcontractor shall routinely review documents used in the work area to ensure that current, approved, controlled documents are in use in the field.	
<input type="checkbox"/>	4.5 Project records must be maintained in compliance with ASME NQA-1 Requirement 17 Quality Assurance Records Section 600 Storage.	
<input type="checkbox"/>	4.6 Subcontractor shall maintain a continuous record of all field changes and shall incorporate all such changes on the "As Built" drawings and other engineering data.	
<input type="checkbox"/>	4.7 Subcontractor shall maintain receipt/acceptance testing/inspection records; records shall be traceable to systems, components, specifications, or activities and will submit as specified in the Submittal Register J-8.	
<input type="checkbox"/>	5.0 Work Processes (If checked, all lines are required)	
<input type="checkbox"/>	5.1 Subcontractor shall identify the methods used to verify work completion via daily logs, process inspections, or acceptance testing for work performed; includes sub-tier contractor's work.	

Note: FBP assigned QA personnel have right of access to enter all work areas and request documentation to be provided in a timely manner to conduct oversight of activities and to resolve identified problems.

Attachment J-16

FBP Subcontractor Quality Assurance Requirements

Requisition/Purchase Order Number/Project Title: _____

Required √	Requirement Description	Comments – Explanation/Justification
<input type="checkbox"/>	5.2 Subcontractor's QAP and approved work control documents must describe how daily work is verified by supervision. Daily work documentation should include at a minimum: applicable testing, startup requirements, maintenance, special processes, field changes, and safety or quality concerns.	
<input type="checkbox"/>	5.3 Subcontractor shall ensure procedures or work instructions to accomplish tasks necessary to execute the work are developed and approved prior to use.	
<input type="checkbox"/>	5.4 Subcontractor shall submit a project Work Plan. The work plan shall be submitted as specified in the Submittal Register J-8.	
<input type="checkbox"/>	6.0 Design (If checked, all lines are required)	
<input type="checkbox"/>	6.1 A program for the design of items and processes shall be established and implemented using sound engineering/scientific principles and appropriate standards (when design is required).	
<input type="checkbox"/>	6.2 When design calculations are required, the QAP must describe a calculation verification process which includes software quality assurance including software and hardware and operating system validation.	
<input type="checkbox"/>	6.3 Design change control process shall be established such that FBP Engineering reviews adequacy of change and impact to original design that include controls to incorporate modifications or field changes for final designs.	
<input type="checkbox"/>	7.0 Procurement (If checked, all lines are required)	
<input type="checkbox"/>	7.1 Subcontractor shall identify subtier vendors and flow down contract requirements.	
<input type="checkbox"/>	7.2 Subcontractor/supplier project QAP shall describe how the receipt of specification procured materials will be inspected to ensure conformance to purchase requirements.	
<input type="checkbox"/>	7.3 When required, Certificates of Conformance (CoCs) shall meet applicable criteria from NQA-1 (2008/2009), Requirement 7, Section 503 (a) through (f).	
<input type="checkbox"/>	8.0 Inspection and Acceptance Testing (If checked, all lines are required)	
<input type="checkbox"/>	8.1 Subcontractor shall check items supplied to their work processes to ascertain that items are correct and suitable for use.	

Note: FBP assigned QA personnel have right of access to enter all work areas and request documentation to be provided in a timely manner to conduct oversight of activities and to resolve identified problems.

Attachment J-16

FBP Subcontractor Quality Assurance Requirements

Requisition/Purchase Order Number/Project Title: _____

Required √	Requirement Description	Comments – Explanation/Justification
<input type="checkbox"/>	8.2 When work requires specific standard implementation (NOTE: testing, ASME/AWS codes, geotechnical testing, welding), work documents shall be developed to detail how the Contractor will implement special processes (welding, heat treating, brazing, soldering, and non-destructive examination) to established standards and will submit as specified in the Submittal Register J-8.	
<input type="checkbox"/>	8.3 For inspection and testing activities, the project QAP or Work Plan shall identify the program controls necessary for calibration, maintenance, accountability, and use of equipment. Item or process test requirements shall include acceptance criteria. Subcontractor shall identify subtier testing vendors.	
<input type="checkbox"/>	8.4 Subcontractor shall document the ability of an item or process to satisfactorily perform its intended function. Test records shall include as a minimum: item/process tested, tester, type of observation, results and acceptability, any corrective actions to deviations, and name of authorized evaluator.	
<input type="checkbox"/>	8.5 Subcontractor shall submit an acceptance/test plan. The plan shall be submitted as specified in the Submittal Register J-8.	
<input type="checkbox"/>	8.6 Measuring and Test Equipment (M&TE): Subcontractor shall have M&TE controls established to ensure M&TE equipment is labeled and tagged to indicate calibration status. M&TE identification includes ability to provide traceability to calibration and test data.	
<input type="checkbox"/>	9.0 Assessments	
	Subcontractor shall conduct field documented observations and assessments, and report deficiencies.	
<input type="checkbox"/>	10.0 Suspect Counterfeit Items (If checked, all lines are required)	
<input type="checkbox"/>	10.1 If subcontractor is ordering and receiving items, they are required to comply with DOE O 414.1D Attachment 3 Suspect/Counterfeit Items Prevention and will complete FBP training module EC7001 Suspect/Counterfeit Items Awareness or FBP approved subcontractor training prior to ordering/receiving items.	

Note: FBP assigned QA personnel have right of access to enter all work areas and request documentation to be provided in a timely manner to conduct oversight of activities and to resolve identified problems.

Attachment J-16

FBP Subcontractor Quality Assurance Requirements

Requisition/Purchase Order Number/Project Title: _____

Required √	Requirement Description	Comments – Explanation/Justification
<input type="checkbox"/>	10.2 Subcontractor shall include the following S/CI requirements in subcontractor work documents for items purchased that are listed on the SUSPECT/COUNTERFEIT ITEM COMPONENT AND PRODUCT INFORMATION listing:	
	<p>A. Notwithstanding any other provisions of this agreement, the Contractor warrants that all items provided to FBP shall be genuine, new and unused unless otherwise specified in writing by the subcontractor. Contractor further warrants that all items used by the subcontractor during the performance of work at the Portsmouth Gaseous Diffusion Plant, include all genuine, original, and new components, or are otherwise suitable for the intended purpose. Furthermore, the subcontractor shall indemnify FBP, its agents, and third parties for any financial loss, injury, or property damage resulting directly or indirectly from material, components, or parts that are not genuine, original, and unused, or not otherwise suitable for the intended purpose. This includes, but is not limited to, materials that are defective, suspect, or counterfeit; materials that have been provided under false pretenses; and materials or items that are materially altered, damaged, deteriorated, degraded, or result in product failure.</p>	
	<p>B. Types of material, parts, and components known to have been misrepresented include (but are not limited to) fasteners; hoisting, rigging, and lifting equipment; cranes; hoists; valves; pipe and fittings; electrical equipment and devices; plate, bar, shapes, channel members, and other heat treated materials and structural items; welding rod and electrodes; and computer memory modules. The Subcontractor's warranty also extends to labels and/or trademarks or logos affixed, or designed to be affixed, to items supplied or delivered to the Contractor. In addition, because falsification of information or documentation may constitute criminal conduct, the Contractor may reject and retain such information or items, at no cost, and identify, segregate, and report such information or activities to cognizant Department of Energy officials.</p>	
<input type="checkbox"/>	10.3 Equipment purchase requisitions that may contain high strength bolts and/or circuit breakers shall be reviewed for Suspect/Counterfeit Items and/or NRTL.	

Note: FBP assigned QA personnel have right of access to enter all work areas and request documentation to be provided in a timely manner to conduct oversight of activities and to resolve identified problems.

Attachment J-16

FBP Subcontractor Quality Assurance Requirements

Requisition/Purchase Order Number/Project Title: _____

Required √	Requirement Description	Comments – Explanation/Justification
<input type="checkbox"/>	11.0 Software Quality Assurance	
	The subcontractor project QAP shall describe how the Software is controlled to meet the requirements contained in DOE O 414.1D Attachment 4, <i>Safety Software Quality Assurance Requirements</i> .	
<input type="checkbox"/>	Other:	

Attachment:

QA Prepared by: _____

Date: _____

Print Name/Signature

QA Reviewed by: _____

Date: _____

Print Name/Signature

Note: FBP assigned QA personnel have right of access to enter all work areas and request documentation to be provided in a timely manner to conduct oversight of activities and to resolve identified problems.



FLUOR-BWXT PORTSMOUTH, LLC

ESO# 9007

Specification: TFR-DE-2024-0022

TECHNICAL AND FUNCTIONAL REQUIREMENTS

for

X-785 Maintenance Building (X-785-MB)

Revision 0

Quality Level 3

APPROVED BY:

T&FR Preparer Aaron Mosley / Date
(Print & Sign Name)

Maintenance Building
End User/Owner Jo Morrow / Date
(Print & Sign Name)

System Engineer Ellen Stone / Date
(Print & Sign Name)

Responsible Design Wayne Hacker / Date
Authority (Print & Sign Name)

Revision	Summary of Revision	Date
0	Approved for Issue	

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1. GENERAL SCOPE OF WORK

The scope of work for the *On-Site Waste Disposal Facility Full Scale Operations* includes a maintenance building for heavy equipment. The building will be located East of Tank 2 and North of the Internal Haul road in the Impacted Materials Transfer Area (IMTA) of the OSWDF footprint. This facility, also known as the West Heavy Equipment Maintenance Building (WHEMB), will serve as a space to perform maintenance on government owned and leased over the road haul trucks, articulating trucks, and earth moving equipment. The facility number is X-785-MB. The WHEMB will provide protection from the weather for personnel performing minor maintenance on vehicles and equipment used to support OSWDF waste placement operations. The detailed scope of work is contained in Section C – Statement of Work.

This Technical and Functional Requirements (T&FR) document is to provide requirements for design and construction of a metal building system and appurtenances. This scope of work will be performed as a design/build action. This T&FR document is intended to provide minimum performance requirements for a design/build contractor to design and construct the WHEMB.

The Contractor shall prepare a complete set of design documents specifically for the WHEMB. The Company shall approve the design documents prior to the Contractor being permitted to start procurement. The Company will provide an existing set of design documents to the Contractor for an existing Heavy Equipment Maintenance Building to be utilized as a base. The Company is looking for an identical building as the same one already constructed on site.

2. TECHNICAL AND FUNCTIONAL REQUIREMENTS

Per DOE O 420.1C, all design and construction, at a minimum, must comply with the most current versions of applicable national consensus industry codes and standards, the International Building Code (IBC), the Ohio Building Code (OBC), and other requirements as documented in DOE O 420.1C. Structure and other components shall comply with the regulations as stated in the codes/regulations referenced in this document where applicable. If codes differ, the more stringent requirement(s) shall be followed.

DOE-STD-1020-2016 states that for facilities other than Hazard Category 1, 2, and 3 Nuclear Facilities, the criteria and guidelines given in ASCE/SEI 7-10 shall be used. As designated by ASCE 7, the Occupancy Category of the structure for flood, wind, snow, earthquake, and ice loads is Occupancy Category II.

2.1. General

- Metal building system shall include all required openings, closures and escutcheons for metal building systems to accommodate items such as sleeves, hoods, supports, fasteners and all items required for a complete assembly.
- Extent and basic layout of metal building systems work is shown on the Drawings.
- Types of products required include the following:
 - Primary framing system.
 - Secondary framing system.
 - Metal roof panel system.
 - Metal wall panel system.
 - Glass-fiber blanket roof and wall insulation.

- Doors, hardware, and trim.
- Other auxiliary system components and miscellaneous accessories, fasteners, trim, framed openings, flashing closures, base moldings, gutters, downspouts, vapor retarders and all other items required to provide a completely watertight and functioning building.
- The overall dimensions of the building are as shown on the Drawings.

2.2. Building Utilization

The WHEMB will serve as a space to perform maintenance on over the road haul trucks, articulating trucks, and earth moving equipment. The WHEMB will provide protection from the weather (heated in the winter, ventilated during other seasons) for personnel performing maintenance on vehicles and equipment used to support OSWDF waste placement. Maintenance may include oil changes, brake, repair, tire repair, welding, and other work that could also be done in a field setting. Therefore, the building will not include overhead hoists, cranes, built-in air compressors, or oil change/maintenance pits. Oil or fuel is not planned to be stored inside this facility. Restrooms are not included because portable restroom facilities will be made available. Site computer networks and phone systems, public address system, building evacuation system, and fire alarm system will be by others.

2.3. Civil (By Others)

- The WHEMB will be constructed in the approximate location shown on the drawings. The final location will be established during the review of the design submittal.
- Soil classification:
 - The area where the WHEMB will be constructed in is a filled area. The average depth of the fill above original grade is 12'. The design for the building shall allow the installation of the building in areas up to 30' of fill, as well as natural ground (cut) areas for flexibility in the final location of the building.
 - The fill material is classified as CL material in accordance with Unified Soil Classification System (USCS). Fines content less than 75 percent and plasticity index less than 12.
 - Fill Material was placed in 8 inch loose lifts, visible rock particles larger than half the lift thickness were removed, and prior to placing fill material over previously compacted soil, the previous lift was scarified approximately 2 inches.
 - Material was compacted to at least 95 percent of its standard proctor maximum dry density as determined by ASTM D698 at a moisture content within +/- 3 percentage points of the standard Proctor optimum moisture content as determined by ASTM D698.
 - The area will have a nominal 12 inch 304.02 (ODOT) aggregate base surface (compacted to 98 percent of its standard Proctor maximum dry density as determined by ASTM D698) with 8 oz. geotextile separator between the compacted fill and aggregate base.
- Finish slab elevation will be as shown on the drawings.
- Soil adjacent to the WHEMB and concrete aprons are to slope away from the building as shown on the drawings.
- Contractor shall excavate for building foundations, footings, and concrete slabs. The Company will provide the contractor with a source of structural fill as needed.
- Place fill material in 8 inch (+/- 1 inch) loose lifts. In areas where compaction is to be performed by using hand operated equipment, place in 4 inch (+/- 1 inch) loose lifts. Continuously remove rock particles greater than half the lift thickness. Unless the metal building system manufacturer's

requirements are more stringent, compact fill material to at least 95 percent of its standard proctor as determined by ASTM D698. Compact fill material at moisture content within +/- 3 percentage points of the standard proctor optimum moisture content as determined by ASTM D698.

- Place a minimum 6 inch additional aggregate base beneath the building slab. Aggregate base shall conform to ODOT Item 304.
- Construct concrete step-off pads which comply with NFPA 101 at the exterior of all personnel doors.
- Construct concrete aprons at the exterior of all vehicle doors. Concrete aprons shall be at least 12" wider than the roll-up door openings on each side of the door frame.
- Install four pipe bollards at each vehicle door, two inside and two outside. Bollards shall be steel pipe filled with concrete and extend a minimum of 4 ft below finished concrete and a minimum of 4 ft above finished concrete and painted yellow. Bollards may be covered with plastic covers, with prior Company approval.
- Provide gutters and downspouts. Downspouts shall have appropriate splash blocks or other measures to prevent erosion where downspouts discharge to ground surface.

2.4. Concrete (By Others)

- Design slab for heavy equipment loading. Slab concrete: 4,000 (minimum) pounds per square inch (psi) @ 28 day concrete mix in accordance with ASTM C94. If utilized, mud mat shall be minimum 1,000 psi mix
- Sampling and testing of concrete shall be in accordance ASTM C172, ASTM C31, and ASTM C39.
- Mix and place concrete and mud mats when temperature is within the limits of ACI 305 and ACI 306.
- Furnish flowable, non-shrink, 5,000 psi, non-metallic grout as required, mixed and placed as recommended by the manufacturer and in accordance with ASTM C1107
- Admixtures for concrete shall conform to ASTM C260 for air-entraining agent and ASTM C494, Type A, for water-reducing admixtures
- Reinforcing steel shall be ASTM A615, grade 60 in accordance with ACI 318; detailing, bolsters, chairs, and accessories shall conform to ACI 315.
- Place reinforcing steel in accordance ACI 318.
- Form release shall be a non-staining colorless mineral oil or similar liquid product that imparts a waterproof film to prevent concrete from adhering to formwork and will not impair natural bonding characteristics of subsequent coating.
- Trowel-finish concrete floor surfaces in accordance with ACI 301, 5.3.4.2.c. Exterior concrete traffic surfaces shall have a non-slip broom finish as described in ACI 301, 5.3.4.2.d.
- Curing compound conforming to the requirements of ASTM C309 that does not impair the natural bonding characteristics of subsequent coatings.
- Bonding agent shall be moisture-insensitive, epoxy-resin and used in accordance manufacturer's instructions.
- Epoxy for resin for anchor bolts or fasteners to concrete shall conform to ASTM C881.
- Concrete sealer shall be clear, transparent, acrylic sealing compound with 30 percent minimum solids conforming to ASTM C309: SuperRez Seal by Euclid Chemical, CS-309-30 by WR Meadows, or approved equal.

2.5. Metal Building System/Structural

- **Design Criteria:**
 - General:
 - Provide metal building systems capable of withstanding controlling effects of gravity and lateral loads in accordance with basic load and load combinations in accordance with Laws and Regulations. Comply with applicable standards, recommendations and specified publications of MBMA, AISC, and ASCE 7, except to the extent more stringent requirements are specified or required by governing authorities having jurisdiction at the Site.
 - Structural steel members and their connections shall be designed in accordance with AISC 360 for design requirements and allowable stresses.
 - Structural cold-formed steel framing members and their connections shall be designed in accordance with AISI S100, for design requirements and allowable stresses.
 - Dead Load:
 - Dead load shall consist of the weight of the structural frame and all other materials of the metal building system.
 - Live Loads:
 - Roof live loads shall be determined and applied in accordance with the minimum applicable Building Code requirements, but shall not be lower than a non-reducible minimum of 20 pounds per square foot.
 - In addition to the loads indicated above, the roof decking shall be designed to withstand a 300 pound concentrated load at midspan on a 24.0-inch wide section of deck.
 - Roof Snow Loads:
 - Loads induced by the weight of snow, including, but not limited to, balanced, unbalanced, drift, sliding loads, rain-on-snow loads, as determined in accordance with minimum applicable Building Code requirements and the Drawings for the roof slope indicated.
 - Rain Loads:
 - Rain loads shall be computed and applied in accordance with the minimum applicable Building Code requirements.
 - Collateral loads:
 - Collateral load consisting of 2 pounds per square foot shall be applied to the entire structure to account for the weight of additional permanent materials other than the building system, including, but not limited to, mechanical systems, electrical systems, and ceilings.
 - Wind Loads:
 - Wind loads on main lateral force resisting systems and components and cladding shall be computed and applied in accordance with the minimum applicable Building Code requirements and the Drawings.
 - Overhead Coiling Door Frame Loads:
 - Design shall include superimposed loads resulting from overhead coiling doors. Manufacturer's framing design shall consider all vertical and lateral loads imposed by the doors, including catenary forces.
 - Seismic Performance: Provide metal building systems capable of withstanding the effects of seismic forces determined in accordance with the applicable Building Code using seismic design factors shown on the Drawings.
 - Load Combinations:
 - The load combinations contained in the applicable Building Code shall be used in the

- design of the metal building system.
 - Collateral loads shall be treated as non-reducible live loads.
- Foundation Design Requirements:
 - Pinned connections shall be assumed at all column bases.
- **Performance Criteria:**
 - Primary Frame Type:
 - Rigid Clear Span: Solid member structural framing system without interior columns
 - End Wall Framing:
 - Provide manufacturer's standard primary frame, capable of supporting one half of a bay design load, and end wall wind columns.
 - Secondary Frame Type: Manufacturer's standard rafters and exterior framed (bypass) girts.
 - Eave Height: As indicated in the Drawings.
 - Roof Slope: Gable, as indicated in the Drawings.
 - Roof System: Manufacturer's standard metal roof panels, with insulation.
 - Exterior Wall System: Manufacturer's standard wall panels.
 - Provide vapor barrier conforming to ASTM E96/E96M.
 - Deflection Limits: Design component assemblies to withstand design loads with deflections no greater than the following:
 - Roof elements not supporting ceilings: Vertical live load deflection of $L/180$ of the span.
 - Steel framing above and along the sides of framed door openings shall be limited to $L/360$ of the opening width.
 - Girts: Horizontal deflection of $L/180$ of the span.
 - Roof Panels: Vertical deflection of $L/180$ of the span. The design analysis shall establish that the roof, when deflected under applicable load combinations, will not result in a negative slope.
 - Wall Panels: Horizontal deflection of $L/180$ of the span.
 - Drift limits:
 - Lateral deflections, or drift, at the roof level in relation to the finished floor elevation shall be calculated based on a 50-year mean recurrence interval and shall not exceed $H/200$ or the working limits of the architectural and mechanical components.
 - Design secondary framing system to accommodate deflection of primary structure, construction tolerances, and to maintain clearances at openings.
 - Thermal Movements: Provide metal roof and wall panel systems designed for thermal movements.
 - Air Infiltration:
 - Roof Panels: Provide roof panel assemblies with permanent resistance to air leakage through assembly of not more than 0.09 cfm/sq. ft. of fixed roof area when tested according to ASTM E1680 at a static air pressure difference of 4 pounds per square foot.
 - Wall Panels: Provide wall panel assemblies with permanent resistance to air leakage through assembly of not more than 0.09 cfm/sq. ft. of fixed wall area when tested according to ASTM E283 at a static air pressure difference of 4 pounds per square foot.
 - Water Penetration:
 - Roof Panels: Provide roof panel assemblies with no water penetration as defined in the test method when tested according to ASTM E1646 at a minimum differential pressure of 20 percent of inward-acting, wind load design pressure of not less than 6.24 pounds per square foot and not more than 12 pounds per square foot.

- Wall Panels: Provide wall panel assemblies with no water penetration as defined in the test method when tested according to ASTM E331 at a minimum differential pressure of 20 percent of inward-acting, wind load design pressure of not less than 6.24 pounds per square foot and not more than 12 pounds per square foot.
- Wind Uplift Resistance: Provide metal building systems capable of withstanding the effects of wind forces determined in accordance with the governing codes using wind design factors shown on the Drawings. Provide roof panel assemblies that meet the requirements of UL 580 for the following wind uplift resistance:
 - Class 90.

2.6. Architectural

- Outer covering of roof and wall panels to be metal with inner covering to be of sufficient construction to properly protect and support insulation.
- Roof and wall panels to have R ratings as required by IBC and IECC.
- Roof to have snow guards above personnel and roll-up doors for snow and ice protection.
- Interior building color to be white or light colored to reflect interior lighting.
- Flashings/sealant to seal penetrations in walls and roof.
- Complete trim package provided (including but not limited to rake trim, corner trim, base trim, formed metal eave trim, jamb trim, jamb covers, full cover trim, etc.).
- Personnel doors and overhead roll-up doors as shown on Drawings. Personnel doors, including hardware, shall comply with NFPA 101. Overhead roll-up doors shall have electric operators with manual chain operation backup.
- Office space to be constructed with metal studs all four sides and ceiling, with gypsum wallboard both sides.
 - Walls and ceilings to be insulated.
 - Interior ceiling height to be 8 ft clear.
 - All exposed drywall to be painted, color as selected by The Company.
 - Non-Loadbearing Framing System Components: ASTM C645; galvanized sheet steel, of size and properties necessary to comply with ASTM C754 for the spacing indicated, with maximum deflection of wall framing of L/240 at 5 psf (L/240 at 240 Pa).
 - Studs: "C" shaped with flat or formed webs with knurled faces.
 - Runners: U shaped, sized to match studs.
 - Design: Calculate structural characteristics of cold-formed steel framing members according to AISI S100.
 - Provide completed gypsum board assemblies complying with ASTM C840 and GA-216.
 - Glass mat faced gypsum panels as defined in ASTM C1658/C1658M, suitable for paint finish: Vertical Surfaces: 5/8 inch; Ceilings: 5/8 inch
- Provide interior signs to meet applicable codes/regulations.

2.7. Mechanical (By Others)

- The Contactor shall utilize a licensed Mechanical Engineer to design the heating, ventilation, and air conditioning (HVAC) systems for the building
- Exhaust fans and motorized dampers shall be provided for the high bay areas of the building and provide a minimum of 10 air exchanges per hour.
- Provide a thermostatically controlled electric radiant heating system for the high bay areas of the building designed to maintain a minimum 50 degrees F during winter conditions.

- Provide a HVAC system (heat and air conditioning) with programmable thermostat for the office area independent of the high bay areas of the building.
- All thermostats shall be mounted 4'-5' above the finished floor.

2.8. Electrical (By Others)

- Service Side Electrical components and material shall have a mark indicating acceptance by UL or another Nationally Recognized Testing Laboratory (NRTL) as recognized by OSHA.
- Electrical installation shall be coordinated with NEC Code Inspector throughout construction.
- 13.8kV primary surge-arrester Hubbell CP70112 or 114 / fuse protection cut-outs Hubbell Ohio Brass 2172597324, w/ Slo-Fast fuses sized appropriately,.
- 13.8kV/480V pole-mounted transformer bank, 3-phase, sized at 75% of secondary panel or next standard size. Contractor shall make final connection from 13.8 kV service to transformer.
- 1-480V Service Rated Enclosed Breaker disconnect mounted to base of transformer pole.
- 1-480V Service Entrance rated Power Distribution Panel, including Eaton IQ-150 smart meter (or approved equal); 3-phase, sized appropriately for structure, 22kAIC minimum; equipped with surge protection device; allow 20% spares
- 1-480V/120-208V lighting transformer (dry type); 3-phase, sized appropriately
- 1-208V/120V lighting distribution panel; 3-phase, sized appropriately for structure, allow and install 20% spares
- Six welding receptacles, 460Vac, 3-phase, 60 amp, no more than two installed per circuit breaker
- Duplex 120V wall/column mounted receptacles with GFCI protection per NFPA 70
- Ground shall be provided in accordance with and NFPA 70 (NEC) for the structure.
- Bonding per NFPA 70 (NEC) of the columns and building is required. Concrete reinforcement must also be tied to the grounding electrode system and indicated on final drawings.
- LED interior lighting and emergency egress lighting for office and high bay areas shall be provided in accordance to NFPA 101 and NFPA 70 (NEC).
- Lighting fixtures in high bay area shall be attached to the underside of structural framing to maintain maximum internal clearance for height.
- Lighting in high bay areas shall be individually controlled such that bays 1, 2, 3, or 4 operate independently of one another.
- LED surface mounted strip lights in office space are acceptable.
- A minimum of 30 foot-candles (FC) is required in high bay area (Per the lighting resource book of "Illuminating Engineering Society of North America").
- A minimum of 5 FC is required at active exterior entrances (Per the lighting resource book of "Illuminating Engineering Society of North America").

2.9. Communications (By Others)

Communications equipment shall be procured and installed by the contractor. WHEMB will require the following communications equipment, at a minimum:

- SRW12US- 12U Wallmount Rack Enclosure
- Cisco 8 Port Switch-POE
- Smartnet for Switch
- FCO1U-P- 1U Fiber Patch Panel
- GBSC-6SMDU- 12F SC-Duplex Single Mode Adapters
- 95-200-41- Unicam Singlemode SC Connectors
- N252-024- Cat 6 Patch Panel- 24 Port- Tripp Lite

2.10. Life Safety/Communication (By Others)

- Fire alarm system installed in accordance with NFPA 72. Fire alarm system shall communicate with plant emergency response group through current established fire alarm communication network. Fire alarm shall be equipped with Notification Appliance Circuit (NAC) to alert occupants of fire and/or emergencies in the facility and alert emergency responders. Fire pull alarms; indoor, Edwards MPSR1-S45W or equivalent (within 5 feet of each personnel egress door)
 - Ruby lights to indicate pull station location; 120Vac, Hubbell VW2-141, VRGP-100, 30 WT3 CFL Lamp & VCG-15 Guard (at each personnel door)
 - Smoke detection shall be installed inside the office and provide detection for the Fire Alarm Control Panel (FACP)
 - Heat detection installed in the Mechanic/Service area of facility.
 - Notification Appliance Circuit (NAC) shall activate audible and visual (fire horns and strobe lights) upon activation of any interior initiating devices (smoke detectors, heat detectors, interior manual fire boxes, etc.).
- LED exterior wall mounted luminaire, 120V: Lithonia Cat. No. TWS LED 1 50K 120 PE or approved equal.
- LED emergency/exit combination unit, 120V: Lithonia Cat. No. ECR LED HO M6 ELA LED T M12, or approved equal.
- LED emergency remote fixture with adjustable LED lamp head, 9.6V, Lithonia Cat No. ELA QWP L0309
- Building evacuation pushbuttons are to be mounted at each doorway and shall activate the public address system's 'evac' tone
- Public Address (PA) system speakers and evacuation pushbuttons will be extended to the new building from the PA cabinet and wiring in X-785-T1.
 - Note: PA system is an AQ system and as such the PA's commercial grade dedication shall be completed by The Company. The contractor is responsible to coordinate with The Company and a certified PA system components vendor to provide detailed design, factory testing, installation of an operational system and site acceptance testing.
 - Four speakers are to be mounted inside the building on the bottom flange of a structural truss using beam clamps, near the corners of the structure.
 - Install PA slave hardware, conduit, and cabinets on exterior of office wall. PA cabinet shall be Newtech Systems slave PA cabinet, Type A
 - PA wiring, speakers, and pushbuttons to be provided by The Company and installed by contractor. The final connection at the PA Amplifier located in the X-785-MB facility will be by The Company.
 - Install media converters necessary for fiber connections.
 - Operational testing of the PA system shall include verification of audibility coverage for the areas as well as ability to activate the system as required.
 - The final tie-ins to the plant site PA system and acceptance testing shall be performed by The Company.

2.11. Warranties

- Warranties:
 - Metal building system

- Building shall be warranted in writing against defects in materials and workmanship for a period of one year from date of final acceptance of project
- Minimum of 40 year warranty on the wall panels – no chipping, cracking, peeling or blistering
- Roof panels shall be warranted in writing against perforation due to corrosion for a period of twenty-five (25) years from date of installation.
- Metal building roofs shall be warranted in writing for weather tightness for a period of ten years from date of shipment
- Lifetime warranty on all fasteners
- Provide manufacturers standard warranties for electrical, mechanical, communications, and architectural components

2.12. Work by The Company

- The Company will provide soil and concrete testing services.

2.13. Performance Verification and Acceptance Testing

- Electrical installations for this facility shall be inspected and approved by The Company Electrical Authority Having Jurisdiction (Electrical AHJ) or designee prior to energizing.

3. QUALITY ASSURANCE

Refer to Section C – Statement of Work for Quality Assurance requirements.

- Welding:
 - Each welder employed on or to be employed for the Work must have current AWS certification in the welding process with which welder will be working. Certifications shall be current and valid throughout the Work
 - Welding procedure specifications, procedure qualification records and welder certifications shall include documented continuity according to AWS D1.1, paragraph 4.2.3.1, must be approved and documented by The Company prior to the start of welding
 - Qualify procedures and personnel according to AWS D1.1/D1.1M and AWS D1.3/D1.3M, as applicable.
 - Welds to be inspected by a Certified Welding Inspector (CWI) in accordance with per AWD D.1.1
- Component Supply and Compatibility:
 - Obtain all metal building system components through a single source and from a single manufacturer.
 - Metal building system manufacturer shall review and approve, or prepare all shop drawings and other submittals for all components furnished.
 - All components shall be specifically constructed for the specified service conditions and shall be integrated into the overall assembly by metal building system manufacturer.

4. REFERENCE INFORMATION

4.1. Codes and Standards

The following codes and standards are provided for reference. The Contractor is responsible to evaluate the following codes and standards for applicability and identify others that may apply.

- ACI 301-10 Specifications for Structural Concrete
- ACI 318-11 Building Code Requirements for Structural Concrete and Commentary
- AISC 360-10 – Specification for Structural Steel Buildings
- ASCE 7-11 - Minimum Design Loads for Buildings and Other Structures
- ANSI/AISC 360-10 - 2010 Specification for Structural Steel Buildings
- AISC Steel Construction Manual – 14th Edition
- AWS D1.1 – Structural Welding Code - Steel
- DOE O 420.1 C – Facility Safety
- DOE-STD-1020-2016, DOE Standard for Natural Phenomena Hazards Analysis and Design Criteria for DOE Facilities
- DOE-STD-1090-2020, DOE Standard for Hoisting and Rigging
- 2012 International Building Code
- 2012 International Energy Conservation Code
- 2012 Metal Building Systems Manual
- OSHA
- Ohio Building Code
- NFPA 101 – Life Safety Code
- NFPA 70 – National Electric Code, 2020 Edition
- NFPA 70E – Standard for Electrical Safety in the work place, 2018 Edition
- NFPA 72 – National Fire Alarm and Signaling Code
- NFPA 780-2011 – Standard for the Installation of Lightning Protection Systems
- Specification for Structural Joints Using ASTM A325 or A490 Bolts
- “Illuminating Engineering Society of North America” Resource Book

4.2. Drawings

Drawing No.	Revision	Title
X-785-A-14290	A	WEST HEAVY EQUIPMENT MAINTENANCE BUILDING FLOOR PLAN
X-785-A-14291	A	WEST HEAVY EQUIPMENT MAINTENANCE BUILDING EXTERIOR ELEVATION
X-785-A-14292	A	WEST HEAVY EQUIPMENT MAINTENANCE BUILDING SECTIONS
X-785-S-14293	A	WEST HEAVY EQUIPMENT MAINTENANCE BUILDING ROOF FRAMING PLAN

4.3. Submittals

The Contractor shall prepare complete shop drawings, erection drawings, and other drawings and submittals as required for the metal building system and other components of construction. Drawings and other documents shall be submitted to The Company for review and approval. Section C – Statement of Work contains the requirements for correspondence, submittal submission, review, and approval, and communication requirements. Submittals shall include the following:

- Product Data:
 - Manufacturer's complete product information, specifications and installation instructions for metal building components and accessories. Include material descriptions, dimensions and profiles of individual system components.
 - Manufacturer's complete product information for transformers, panelboards and

other electrical equipment. (By Others)

- Shop Drawings:
 - Submit foundations loads and anchor bolt plans in advance of erection drawings.
 - Drawings showing all vertical and horizontal reactions on foundation. Include direction and location of each load application.
 - Include diameter, projection, and a plan showing location relative to column center line of all anchor bolts required to attach metal building to foundation. Column center line numbering shall be as shown on the Drawings.
 - Drawings shall be on Company supplied Title blocks, in accordance with Company drafting standards, with Company Supplied drawing numbers.
 - Drawings shall be stamped by a Professional Engineer licensed in the State of Ohio.
 - Submit drawings to include plans, elevations and cross-sections of the metal building system, size, weight, or gauge, fully dimensioned, and to scale and include the following:
 - Complete erection drawings showing structural framing system including sidewall, end wall, and roof support framing, and the center lines of the bottom of all columns.
 - Drawings shall show complete fabrication of primary and secondary framing. Indicate standard designation, configuration, sizes, spacing, and location of girts and purlins, including framing around all door and window openings.
 - Drawings shall show the location, size, and connection details for diagonal bracing or portal frames for walls and roof. Include transverse cross sections.
 - Erection Plan must demonstrate how members are temporarily tied/supported to adequately withstand wind or resist other movement during erection or prior to final completion.
 - Provide details, including location, of all standard and modified steel connections indicating all shop welded, field welded, and bolted connections.
 - Drawings shall show layouts of wall, roof and liner panels on support framing, details of edge conditions, joints, panel profiles, corners, custom profiles, supports, anchorages, trim, wall and roof penetrations, flashings, closures, and special details to clearly indicate the proper assembly of building components.
 - Drawings shall distinguish between factory and Site assembled Work.
 - Drawings shall be on Company supplied Title blocks, in accordance with Company drafting standards, with Company Supplied drawing numbers.
 - Drawings shall be stamped by a Professional Engineer licensed in the State of Ohio.
 - Mechanical PE approved HVAC design including details on envelope U-value and Insulation R-value. COMCheck shall be provided to show that energy codes are satisfied
 - Vapor-retarders.
 - Furnish schedule of doors and frames including finish hardware sets, using the same reference numbers as shown. Include details of reinforcement and installation requirements for finish hardware.
 - Details of ventilators, gutters and downspouts and other accessory system components.
 - Contractor shall note Work not supplied by metal building systems manufacturer and who is to supply such Work.
 - CAD files for all drawings submitted.

- Samples:
 - Provide one sample of each type of flashing, trim, closure, cap, and similar items. Size shall be sufficient to show construction and configuration.
 - Roof and Wall covering:
 - Manufacturer's full selection of standard and custom colors showing the full range of colors available for each type of product included in the metal building system that incorporates a factory-applied color finish, for color selection by the Company.
 - Include all auxiliary system components such as clips, caps, battens, fasteners, closures, and other exposed panel accessories. The sample for factory color finished covering shall be accompanied by certified laboratory test reports showing that the sheets to be furnished are produced under a continuing quality control program and that a representative sample consisting of no less than 5 pieces has been tested and has met the quality standards specified for factory color finish.
 - The Company's review will be for color and profile, only. Compliance with all other requirements is the responsibility of Contractor.

- Design Calculations:
 - Complete calculations for the building framing including cold formed members, roofing and siding, as one package with the Shop Drawings. Structural calculations shall include all specified performance criteria, required load cases and load combinations used in the design and resulting member forces, reactions, deflections, story drift, and other anticipated movements in the metal building system. The magnitude of maximum column reactions on foundations from all critical load combinations shall be tabulated separately. Critical load combinations used in the final sizing of members shall be emphasized.
 - Design calculations shall be stamped by a Professional Engineer licensed in the State of Ohio.

- Certificates:
 - Certification by a Professional Engineer that metal building system design is in accordance with performance and design criteria stated in the Contract Documents, the approved shop drawings, and that design conforms to applicable local, state, and federal Laws and Regulations, and to prevailing standards of practice. Certificates shall state the following:
 - Name and location of Project.
 - Order number/contract number.
 - Name of manufacturer.

- Test and Evaluation Reports:
 - Material Test Reports shall be from a qualified testing laboratory indicating and interpreting material test results of structural steel bolts, structural steel, wall and roof panels, for compliance with requirements specified.
 - Product Test Reports shall be based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing laboratory, indicating the following current products comply with requirements:
 - Insulation and Vapor-Retarders shall include reports for thermal resistance, fire test response characteristics, water vapor transmission, and water absorption.
 - Post installation Electrical Tests (by others) shall include: insulation integrity tests on

transformers, cables and panelboards; ground resistance tests; phase rotation checks at welding receptacles and other industry standard tests.

- Manufacturer's Instructions shall include the following:
 - Preparation requirements and assembly sequence.
 - Installation data.
 - Instructions for handling, start-up, and troubleshooting.

- Contractor shall submit qualifications for the following:
 - Manufacturer:
 - MBMA certificate verifying membership and accreditation per IAS AC472.
 - Installer (by others):
 - Welding procedure specifications, procedure qualification records and welder certifications documenting continuity according to AWS D1.1, paragraph 4.2.3.1
 - Provide certification that all welders employed on the erection of the metal building systems have satisfactorily passed AWS qualification tests within the previous twelve months. Manufacturer shall ensure that all certifications are kept current.

- Drawing Package for 90% Completeness Review

- Drawing Package for "Certified for Construction" (100% final design)

- Test Plans for testing emergency egress lighting, evacuation buttons, fire alarm pull stations, welding receptacles. (The Company will be responsible for providing the Contractor the Post Maintenance Testing requirements for the PA system.) (by others)

- As-built drawings depicting completed work. Contractor shall submit a hard copy (PDF) and AutoCAD versions of the as-built drawings. (by others)