

**NAVFAC
SPECIFICATION**

**1564839
P-766, F-35B Lift Station
Repair Facility**

**MCAS Cherry Point, NC
AMENDMENT #0002**

IMPORTANT

This amendment should be acknowledged when your proposal is submitted. Failure to acknowledge the amendment may constitute grounds for rejection of the proposal.

If your proposal has been submitted prior to the receipt of this amendment, acknowledgement should be made by telegram, which should state whether the price contained in your proposal is to remain unchanged, is to be decreased by an amount, or is to be increased by an amount. The acknowledgement must be received prior to proposal opening time.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE	PAGE 1	OF PAGES 4
2. AMENDMENT/MODIFICATION NO. 0002	3. EFFECTIVE DATE 09/05/2018	4. REQUISITION/PURCHASE REQ. NO. 1564839	5. PROJECT NO. (If applicable)			
6. ISSUED BY CG MCAS Cherry Point FACILITIES, ROICC B-163, CURTIS ROAD PSC BOX 8006 CHERRY POINT, NC 28533		7. ADMINISTERED BY (If other than item 6.)		Code		
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) AMENDMENT MUST BE ACKNOWLEDGED WITH YOUR PROPOSAL				<input checked="" type="checkbox"/>	9A. AMENDMENT OF SOLICITATION P-766 – F-35B Lift Station Repair Facility	
					9B. DATED (SEE ITEM 11)	
				<input type="checkbox"/>	10A. MODIFICATION OF CONTRACT/ORDER NO.	
					10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE				
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS						
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input checked="" type="checkbox"/> is extended <input type="checkbox"/> is not extended . Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning 1 copy of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.						

12. ACCOUNTING AND APPROPRIATION DATA (if required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS,
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

<input type="checkbox"/>	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14. ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATION CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).
<input type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
<input type="checkbox"/>	D. OTHER: (specify type of modification and authority)
E. IMPORTANT: Contractor <input type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return original to the issuing office.	

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

1564839 – F-35B Lift Station Repair Facility, Marine Corps Air Station Cherry Point, NC

This amendment is being issued to provide the attached information.

The deadline to submit RFIs has passed. Any RFIs submitted past the RFI deadline may not be answered.

The proposal due date is extended to 12 September 2018 by 1200 local time.

See Attached

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR (Same as Item 8)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY	16C. DATE SIGNED
(Signature of person authorized to sign)		(Signature of Contracting Officer)	

CONTINUATION SHEET

SECTION 00 01 15 – LIST OF DRAWINGS

Paragraph 1.2

CONTRACT DRAWINGS

The following Drawings are revised as of 08.31.2018

NAVFAC Dwg No.	Title
12771493, A-110	B4630 DEMOLITION PLAN (08.31.2018)
12771494, A-111	B4630 FLOOR PLAN – CONSTRUCTION (08.31.2018)

These revise Drawings accompany this Amendment.

On Project drawings change any reference of "Bridge Crane by Others" to "Bridge Crane to be provided by Contractor"

SECTION 01 11 00 SUMMARY OF WORK

Paragraph 1.5

OCCUPANCY OF PREMISES

Add the following paragraphs:

Building 4630: Sheet A-111 provides a temporary wall in Rack Storage 102. The Government will occupy all areas of the building to the north of the temporary wall. The Government will remove all stored equipment and materials from inside the construction areas prior to the start of construction.

Building 4224: The Government will occupy all areas of the building outside the Construction Limits. Government access through the construction area will likely be required periodically and will have to be coordinated with construction activities. Government will remove all stored equipment and materials from inside the construction areas prior to the start of construction at each phase of work.

SECTION 01 14 00, WORK RESTRICTIONS

This section has been revised and accompanies this Amendment.

SECTION 01 20 00.00 20 PRICE AND PAYMENT PROCEDURES

Paragraph 1.3.1

DATA REQUIRED

Delete references to "Network Analysis Schedule (NAS)" and replace with "traditional Schedule of Values (SOV)". All other requirements remain unchanged.

SECTION 01 45 00.00 20, QUALITY CONTROL

This section has been revised and accompanies this Amendment.

RFI Responses:

1. Does the Government want 6 Utility Pits and increase trench size at each Pit or only 4 Pits and keep trench configuration as shown on Pg A-110? (See attached “RFI Q1 attachment.pdf”)
Response: Refer to revised drawings 12771493 and 12771494. Submit proposals in accordance with RFP, specifications, drawings, and all amendments.
2. Spec sec 01.35.26 Para. 1.61.1.1 states in part that the QC CANNOT be SSHO. However, Spec Sec 01.45.00.00.20, Para 1.5.1.1 states in part that the QC manager CAN serve as SSHO. Please clarify.
Response: Refer to revised Specification 01 45 00.00 20, QUALITY CONTROL. Submit proposals in accordance with RFP, specifications, drawings, and all amendments.
3. Amendment 0001 “In all locations where contract document states that the jib and/or bridge crane are to be provided by the government the contractor is to delete Government and replace with Contractor. Pg S-110 shows- “Bridge Crane Column By Others” Will the Bridge Crane in this instance be provided by someone other than the Government and Contractor?
Response: Refer to Continuation Sheet. Submit proposals in accordance with RFP, specifications, drawings, and all amendments
4. Section 01 11 00: Summary of Work, para. 1.5 indicates that Building(s) will be occupied during the performance of work under this Contract. Section 01 14 00: Work Restrictions, para. 1.2.a indicates the nearby buildings and utilities will remain in operation. Work Scheduled for Bldg. 4630 will conflict with some of the items currently in storage in that Building. Work at Bldg. 4224 will affect and displace certain activities within that work area. Can additional clarification be given as the occupancies within the various spaces scheduled for work.
Response: Refer to Continuation Sheet. Submit proposals in accordance with RFP, specifications, drawings, and all amendments.
5. Section 01 20 00.00 20: Price and Payment Procedures, para. 1.3.1 requires the use of a cost-loaded Network Analysis Schedule. Past history has indicated that the use of a traditional Schedule of Values is preferred over a Cost Loaded NAS in reviewing / approving pay applications. Please confirm if the Cost Loaded NAS will be required in this project
Response: Refer to Continuation Sheet. Submit proposals in accordance with RFP, specifications, drawings, and all amendments.
6. Section 01 30 00: Administrative Requirements, para. 1.10 is calling for Formal Partnering, with a Facilitator and a initial offsite Partnering Session. It indicates a list of Partnering Facilitators is available from the Contracting Officer. Can that list be obtain so we can solicit proposals from facilitators included from that list.
Response: List of Partnering Facilitators Attached. Submit proposals in accordance with RFP, specifications, drawings, and all amendments.
7. Section 01 35 26: Government Safety Requirements, para. 1.6.1.1.1 indicates that the QC Manager cannot be the SSHO. Section 01 45 00.00 20: Quality Control indicates that the QC Manager can serve as the SSHO. Please verify which of these is the appropriate interpretation. In addition, no mention is made as to whether either of these positions is collateral to the Project Superintendent.

Please verify the requirements for the Supt. / SSHO / QC Mgr. and if duly qualified which positions can be collateral.

Response: Refer to revised Specification 01 45 00.00 20, QUALITY CONTROL. Submit proposals in accordance with RFP, specifications, drawings, and all amendments.

8. Section 01 45 00.00 20, para. 1.4.1 discusses Commissioning. It discussed Cx Plans, etc. but makes no reference to a CxA (Commissioning Authority). There is no Specification Section on Commissioning. Provided all requirements of the QC Specifications are met, please confirm no separate / independent Commissioning Authority is required on this project.

Response: Correct. Submit proposals in accordance with RFP, specifications, drawings, and all amendments.

9. Section 01 45 00.00 20: Quality Control, para. 1.5.4.1 is calling for a Electrical Systems QC Specialists with various qualifications including a "Master Electrician licensed in North Carolina." North Carolina does not have a Master Electrician license designation. Can the licensure requirement be removed if 10 years minimum experience can be shown?

Response: Refer to revised Specification 01 45 00.00 20, QUALITY CONTROL. Submit proposals in accordance with RFP, specifications, drawings, and all amendments.

10. The specs show the Allowable load capacity at 20KIPS with at a safety factor of 3.0. That is 60KIPS ULTIMATE LOAD CAPACITY. NOTE on sheet S101 Shows ULTIMATE Load- at 38 KIPS, (helix 12"-14"-14"), Is the Ultimate compression load 60KIPS or 38KIPS?

Response: Per Sheet S-001 the design capacity for the helical piers is 38k Ultimate per the "General Sheet Notes" with a safety factor of 3 for a design allowable capacity of 12.7k. We assume the 20kips capacity that is being questioned is the 20kips/0.5in deflection requirement on the Helical Pier notes on sheet S-101. That's a general deflection limitation, not the actual design capacity of the anchors, so the 38k Ultimate is correct. Submit proposals in accordance with RFP, specifications, drawings, and all amendments.

11. Sheet S-110 shows "Bridge Crane Column by others typ. (6) places". There are (4) Helical Piers embedded in the bridge crane column pad, does this mean there are (4) helical piers x 6 locations or (24) HELICAL PIERS?

Response: Per Sheet S-110 three (3) 12"x12" bridge crane column footings in Building 4630 at grids XB/X1, XC/X1 & XD/X1. There are no footings required at the bridge crane columns adjacent to gridline X2. Also reference Detail A1/S-110.

Per Sheet S-101 one (1) jib crane footing in Building 4224 which requires four (4) helical piers. Also reference Detail A3/S-101.

Submit proposals in accordance with RFP, specifications, drawings, and all amendments.

List of Professional Partnering Facilitators

Company	Name	Phone	e-mail	Address	Web Site	Remarks
Achievement Associates	Robert Mumford, Jr.	301-948-1283		Darnstown, MD		
Aegis Building Concepts, Inc.	Carl E. DeVilbiss	615-604-0929	aegisbc@earthlink.net	Nashville, TN	http://aegisbc.com	
Alsop & Associates	Bill Alsop	505-887-3609		AZ		96 IWTC
AM Sist Consulting, Inc.	Angela Sist	407-581-2575	amsist@kua.net	Orlando, FL		
ATI Systems	Dennis Eriksen	818-347-3280	eriksen@ati-sys.com	West Hills, CA	www.ati-sys.com	NAVFAC Const/FSC/PPV Partnering experience
Bogert Consulting	Richard "Dick" Bogert, P.E.	619-462-8640	bogertp@worldnet.att.net	Spring Valley, CA		Retired SWESTNAVFAC
Campana Consulting	Jean L. Campana	407-352-3687	jcampana@aol.com	Orlando, FL		
Carr, Swanson and Randolph	Frank Carr	410-418-9816	frankcarr1@earthlink.net	Washington, DC		Principal author "Partnering in Construction"; retired USACE Chief Trial Attorney
Cartwright Consultation	Jeanne Cartwright	601-982-5467	cartcon@cartcon.com	Jackson, MS		
Center of Excellence and Leadership, LLC	Charles D. Markert, PE, CPF	540-338-1255	markert@facilitationcenter.com	Washington, DC		Retired NAVFACHQ; Co-author "Partnering in Construction"; 14 years facilitating
Dispute Prevention & Resolution	Keith Hunter	808-523-1234		Honolulu, HI		00 Navy Seal Facility
Chock & Associates; Herbert	Herbert Chock	808-526-9399		Honolulu, HI		95 Ft.Kam WWTP&97 Berthing Pier
Cobwebs Removed	Ruben Yuriar	253-839-2913	cobwebs@attbi.com	Auburn, WA		
Cornerstone Consultants, LLC	R. Lawrence Whipple, P.E.	860-388-9633	rwhipple@consultcornerstone.com	Old Saybrook, CT		Receipient of AGC's Marvin M. Black Excellence in Partnering Award, March 2000
David Dunning & Co.	David Dunning	206-522-7095		Seattle, WA		
DeMott Co., The J.	Joann DeMott	541-990-0395	jdemott@charter.net	Otter Rock, OR		Many sessions throughout NAVFAC
Dispute Prevention & Resolution	Keith Hunter	808-523-1234		Honolulu, HI		00 Navy Seal Facility
Executive Consultants' Network	Ray Dupont	513-233-3444	exconsult@aol.com	Cincinnati, OH		DOD experience
Farrell, Charlie	Charlie Farrell					See U of S Carolina
Gary W. Mackey, Inc.	Gary Mackey	757-639-6996	garywmackey@aol.com	Norfolk, VA		Former LANTDIV Director of Construction
Geldner Group	Linda Geldner	858/578-1076	linda@geldner.com	San Diego, CA		Forme NAVFAC SW Employee
Greenhorne & O'Mara, Inc.	Peter T. Quinn	301-982-2800		Greenbelt, MD		
Harmony Incorporated	Lewis E. Frees, Pres.	301-654-2505		Bethesda, MD		
Hartnett Partnering Consultants	Joe & Jeff Hartnett	321-452-4316	hpc@greater.net	Merritt Island, FL		
Katz, Jerry	Jerry Katz	415-563-6302	katzeny@earthlink.net	San Francisco, CA		Former WESTDIV employee
Laurel Company, The	Laurel Boucher, P.E.	906-387-4272	lboucher@up.net	Westmore, MI		Former LANTDIV
LEAD Psychology, Inc.	Dr. Brian Bienn	404-880-3387	bienn@leadpsych.com	Atlanta, GA		BRAC III & PACOM HQ
Management Edge, The	Susan Dubuque	207-799-1255	dubuque@javanet.com:mgtdge@aol.com	Cape Elizabeth, ME		
Management Edge, The	Judy Morris-Hardy	813-253-3805	jmornhardy@aol.com	Tampa, FL		
Martin-Frankel Associates	Christine A. Timchek	336-768-5466	christine@martinfrankel.com	Winston-Salem, NC		Over 20 years Partnering experience, primarily in construction, seven facilitators.
Pacific Connection, The	Chip Wanner	602-837-0455		Fountain Hills, AZ		94-96 Ford Island Bridge
Peters & Co.and Mgmt & Engrg	Don Mattson	317-873-0086	dmattson@projectleader.com	Zionsville, IN		
Pitzrick & Associates, Inc.	Jerry Pitzrick	952-944-1132	jerry@pitzrick.com	Eden Prairie, MN		
Potential Development, Unlim.	Loren Lasher	808-239-6155	ld4u@worldnet.att.net	Kaneohe, HI		Numerous (used most often now)
Psychology for Business	Dr. Robin Wentworth	404-578-4862		Birmingham, AL		Y2 Berthing Pier
R.H. and Assoc.	Renee L. Hoekstra-Chilton	602-493-1947	rhpartnering@earthlink.net	Phoenix, AZ		
Resolution Management Consultants, Inc.	Todd L. Smith, PMP	843-849-8003	t.smith@resmagt.com	Charleston, SC		Former NAVFAC employee
Rocky Mountain Resource Ctr.	Jack Taylor	970-513-4491	rmmc@earthlink.net	Dillon, CO		
Scherer Associates, Inc.	William "Bill" Scherer	949-768-1940	schererassociates@earthlink.net	Mission Viejo, CA		In business since 1977
Schmitt & Leslie, Inc.	Linda Schmitt, Vice President	202-244-9292	linda@schmittleslie.com	Washington, DC		founded 1991, services provided in the greater Wash. DC area and across country
Stevens Construction Institute, Inc.	Matt Stevens, President	407-678-0730	mstevens@stevensci.com	Winter Park, FL		Experience with GSA, DOT, etc.
Synergistic Group, Inc.	Don Mosley	334-341-0493		Mobile, AL		95 DRMO Warehouse
Trauner Consulting Services	Theodore J. Trauner, Jr.	407-345-0366	orlando@traunerconsulting.com	Orlando, FL		
Tutor, Valerie and Assoc.	Valerie Tutor	386-738-7101	tutors@bellsouth.net	Deland, FL		
University of South Carolina	Steve Garriss	803-777-4443	garriss@moore.sc.edu	Columbia, SC		Can provide different facilitators
Ventura Consulting Group	Jim Eisenhart	805-650-8040	http://www.venturaconsulting.com	Ventura, CA		97 Moanalua Housing
Volkert, David and Assoc.	Ken Roberts, VP	813-875-1365		Tampa, FL		
Weihnacht, Conrad	Conrad Weihnacht	904-262-4065	whynot@tdn.com	Jacksonville, FL		
Wentworth, Robin Dr.	Dr. Robin Wentworth	601-544-3072	robinwent@aol.com	Hattiesburg, MS		EFANE recommend
Whatley & Assoc.	Earl Whatley					See U of S Carolina
Win Win Resolution	Rich Fisher	206-282-7895	rich@winwinresolution.com	Seattle, WA		
Winn & Associates, LLC	Joy Winn	801-572-0788	joywinn@aol.com	Sandy, UT		EFANE recommend
Win-Win Creations	Richmond Risher	602-852-0365		Phoenix, AZ		97 Pearl City Housing

SECTION 01 14 00

WORK RESTRICTIONS

07/16

PART 1 GENERAL

1.1 SUBMITTALS

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

SD-01 Preconstruction Submittals

List of Contact Personnel; G

1.2 SPECIAL SCHEDULING REQUIREMENTS

- a. The nearby buildings and utilities will remain in operation during the entire construction period. The Contractor must conduct his operations so as to cause the least possible interference with normal operations of the activity.
- b. Permission to interrupt any Activity roads, railroads, or utility service must be requested in writing a minimum of 21 calendar days prior to the desired date of interruption, as required by FRCE.
- c. Government Telecommunications Contractor Access: The Government Telecommunications Contractor must be allowed access to the facility towards the end of construction (finishes 90 percent complete, rough-in 100 percent complete, Inside Plant (ISP)/Outside Plant (OSP) infrastructure in place) to provide equipment in the telecommunications rooms and make final connections. The Contractor will be required to coordinate their efforts with the Government Telecommunications contractor to facilitate joint use of building spaces during the final phases of construction and work the coordination effort into the construction schedule. Requirements for Government Telecommunications are specified in the contract documents.
- d. The work under this contract requires special attention to the scheduling and conduct of the work in connection with existing operations. Identify on the construction schedule each factor which constitutes a potential interruption to operations.

1.3 CONTRACTOR ACCESS AND USE OF PREMISES

1.3.1 Activity Regulations

Ensure that Contractor personnel employed on the Activity become familiar with and obey Activity regulations including safety, fire, traffic and security regulations. Keep within the limits of the work and avenues of ingress and egress. Wear hard hats in designated areas. Do not enter any restricted areas unless required to do so and until cleared for such entry. Mark Contractor equipment for identification.

1.3.1.1 Subcontractors and Personnel Contacts

Provide a [list of contact personnel](#) of the Contractor and subcontractors including addresses and telephone numbers for use in the event of an emergency. As changes occur and additional information becomes available, correct and change the information contained in previous lists.

1.3.1.2 Identification Badges and Installation Access

Obtain access to Navy installations through participation in the Defense Biometrics Identification System (DBIDS). Requirements for Contractor employee registration, and transition for employees currently under Navy Commercial Access Control System (NCACS), are available at <https://www.cnlic.navy.mil/om/dbids.html>. No fees are associated with obtaining a DBIDS credential. Participation in the DBIDS is not mandatory, and Contractor personnel may apply for One-Day Passes at the Base Visitor Control Office to access an installation

1.3.1.2.1 Registration for DBIDS

Registration for DBIDS is available at <https://www.cnlic.navy.mil/om/dbids.html>. Procedure includes:

- a. Present a letter or official award document (i.e. DD Form 1155 or SF 1442) from the Contracting Officer, that provides the purpose for access, to the base Visitor Control Center representative.
- b. Present valid identification, such as a passport or Real ID Act-compliant state driver's license.
- c. Provide completed SECNAV FORM 5512/1 to the base Visitor Control Center representative to obtain a background check. This form is available for download at <https://www.cnlic.navy.mil/om/dbids.html>
- d. Upon successful completion of the background check, the Government will complete the DBIDS enrollment process, which includes Contractor employee photo, finger prints, base restriction and several other assessments
- e. Upon successful completion of the enrollment process, the Contractor employee will be issued a DBIDS credential, and will be allowed to proceed to worksite

1.3.1.2.2 Eligibility Requirements

DBIDS Eligibility Requirements-Throughout the length of the contract, the Contractor employee must continue to meet background screen standards. Periodic background screenings are conducted to verify continued DBIDS participation and installation access privileges. DBIDS access privileges will be immediately suspended or revoked if at any time a Contractor employee becomes ineligible. An adjudication process may be initiated when a background screen failure results in disqualification from participation in the DBIDS, and Contractor employee does not agree with the reason for disqualification. The Government is the final authority.

1.3.1.2.3 Lost or Stolen Badges

Immediately report instances of lost or stolen badges to the Contracting Officer- Immediately collect DBIDS credentials and notify the Contracting

Officer in writing under the following circumstances: (1) An employee has departed the company without having properly returned or surrendered their DBIDS credentials. (2) There is a reasonable basis to conclude that an employee, or former employee, might pose a risk, compromise, or threat to the safety or security of the Installation or anyone therein.

1.3.1.2.4 One-Day Pass

Personnel applying for One-Day passes at the Base Visitor Control Office are subject to daily mandatory vehicle inspection, and will have limited access to the installation. The Government is not responsible for any cost or lost time associated with obtaining daily passes or added vehicle inspections incurred by non-participants in the DBIDS.

1.3.1.3 No Smoking Policy

Smoking is prohibited within and outside of all buildings on installation, except in designated smoking areas. This applies to existing buildings, buildings under construction and buildings under renovation. Discarding tobacco materials other than into designated tobacco receptacles is considered littering and is subject to fines. The Contracting Officer will identify designated smoking areas.

1.3.2 Working Hours

Regular working hours must consist of an 8 1/2 hour period established by the Contractor Officer, Monday through Friday, excluding Government holidays.

1.3.3 Work Outside Regular Hours

Work outside regular working hours requires Contracting Officer approval. Make application 15 calendar days prior to such work to allow arrangements to be made by the Government for inspecting the work in progress, giving the specific dates, hours, location, type of work to be performed, contract number and project title. Based on the justification provided, the Contracting Officer may approve work outside regular hours. During periods of darkness, the different parts of the work must be lighted in a manner approved by the Contracting Officer. Make utility cutovers after normal working hours or on Saturdays and Sundays.

1.3.4 Occupied Buildings

The Contractor shall be working in an existing building and around existing buildings which are occupied. Do not enter the buildings without prior approval of the Contracting Officer.

The existing buildings and their contents must be kept secure at all times. Provide temporary closures as required to maintain security as directed by the Contracting Officer.

Provide dust covers or protective enclosures to protect existing work that remains and Government material located in the buildings during the construction period.

Relocate movable furniture approximately 6 feet away from the Contractor's working areas required to perform the work, protect the furniture, and replace the furniture in its original locations upon completion of the work.

The Government will remove and relocate other Government property in the areas of the buildings scheduled to receive work.

1.3.5 Utility Cutovers and Interruptions

- a. Make utility cutovers and interruptions after normal working hours or on Saturdays, Sundays, and Government holidays. Conform to procedures required paragraph WORK OUTSIDE REGULAR HOURS.
- b. Ensure that new utility lines are complete, except for the connection, before interrupting existing service.
- c. Interruption to water, sanitary sewer, storm sewer, telephone service, electric service, air conditioning, heating, fire alarm, compressed air, are considered utility cutovers pursuant to the paragraph WORK OUTSIDE REGULAR HOURS.
- d. Operation of Station Utilities: The Contractor must not operate nor disturb the setting of control devices in the station utilities system, including water, sewer, electrical, and steam services. The Government will operate the control devices as required for normal conduct of the work. The Contractor must notify the Contracting Officer giving reasonable advance notice when such operation is required.
- e. Connection to Existing Sanitary Sewer Line: Provide positive verification that the existing line conveys sanitary sewer; verify line is not incorrectly connected to a storm drain. Obtain Installation's Sanitary Sewer Connection Permit 2 weeks prior to connection and in accordance with Section 33 30 00 SANITARY SEWERS.

1.4 SECURITY REQUIREMENTS

Contract Clause "FAR 52.204-2, Security Requirements and Alternate II," "FAC 5252.236-9301, Special Working Conditions and Entry to Work Area," and the following apply:

1.4.1 Contractor Access to MCAS Cherry Point and Outlying Areas

No employee or representative of the Contractor will be admitted to the work site without an Identification Badge unless specifically authorized admittance to the worksite by the Contracting Officer.

Documentation requirements for granting access to MCAS Cherry Point for commercial and contract and employers and employees. This document is an aid in meeting ASO 5500.14_ requirements and is not a substitute for the order.

- a. Provide a list of employees (prime and/or sub-contractor) that require Station access on company letterhead and include the contract number and a copy of the "base access table" outlined in your contract. NOTE: This list should include employee names ONLY. Do NOT include other personally identifiable information (PII) such as Social Security Number, Date of Birth, etc.. Contractors who are hired for a period more than 30 days will be issued a contractor's badge after the conditions outlined in this document are met. The badge must be carried in plain view or readily accessible at all times while on Station. All badges will be issued for a period **NOT TO EXCEED ONE YEAR**

regardless of the length of the contract. Upon the expiration of the badge, the company/employee will provide a new 50 state/national criminal records check and LRC prior to being re-badged.

For any access from 1 day to less than 30 days, employers will provide the same documentation as stated above. In place of a badge a copy of this letter with the worker's name highlighted, stamped with the "Pass & ID" stamp, "Criminal Records Check (CRC) Sighted", and we will also annotate below the stamps the following statement: "Valid until (expiration date) then date and initial it." This document will be issued to each worker and IS their authorization to be aboard the installation. This letter must be carried on their person or readily accessible at all times while on Station.

- b. Contractor personnel requesting access to MCAS Cherry Point must complete and sign the attached Local Records Check (LRC) Form.
- c. Contractor personnel requesting access to MCAS Cherry Point can personally deliver the (original) LRC and the national background check to MCAS Pass & ID 2 full work days prior to requiring a badge or you may send the completed LRC (original) form to include the national background check in via **U.S. Mail only** to arrive 2 to 5 days prior to your arrival. Address: Provost Marshal, Attn: Pass & ID Office, Marine Corps Air Station, Cherry Point, NC 28533-0035 or Provost Marshal's Office, Postal Service Center Box 8035, Marine Corps Air Station, Cherry Point, North Carolina 28533-0035. SSN and photo ID will be verified at this time. NOTE: Due to the sensitivity of the personal information contained in the LRC Release, these documents CAN NOT be faxed or e-mailed to MCAS Pass & ID per Air Station Order 5500.14.

In order to get a badge, you must be present, as it is photo badge.

If the vetting process works correctly, we should have your approved paperwork on hand pending your arrival.

- d. MCAS Pass & ID will complete the local records check prior to contractor arriving for badging. If negative results are found, the sponsoring company (prime contractor) will be notified. NOTE: LRC's are only valid for 15 days, therefore the contractor must receive their badge within 15 days or they will have to resubmit the paperwork.
- e. Individual Contractor Personnel report to Pass & ID for badging according to the following schedule:

LRC & Background Check Submitted:	Earliest Badging Opportunity:
Monday	Thursday
Tuesday	Friday
Wednesday	Monday (the following week)
Thursday	Tuesday (the following week)
Friday	Wednesday (the following week)

- f. Individual Contractor Personnel MUST bring the following documents when reporting to Pass & ID for badging:

- Copy of LRC release previously submitted above.
- Picture ID (typically a driver's license).
- Social Security Card or official document listing SSN.

- Birth Certificate or Passport to verify citizenship.
- If NOT US citizen, provide proof of immigration status.
- Copy of 50-State Background Check (must be less than 30-days old).

IMPORTANT NOTE:

FEAD personnel (Construction Managers, Engineering Techs, or Contract Specialists) and FSC personnel (Contract Surveillance Reps) will not receive, process, re-transmit or otherwise handle in any way PII information related to the badging process. Do NOT forward any of this information to FEAD or FSC.

- g. All employers/employees must provide a CRC from any Internet investigative service or any other investigative service company that provides a 50 state/national criminal records check and a check of the Sexual Offenders List. (Local county/state checks are not authorized and will not be accepted.) This records check must be a "complete" check covering the period from at the minimum their 18th birthday to present. The CRC must also have a statement in the records check that this is a "national records check" or the terminology the agency uses to indicate such. Please be sure of what you are requesting. If it is anything less than a national check, it will be rejected. The CRC can not be more than 30 days old at the time it is presented to Pass & ID personnel. CRCs may be obtained from, but not limited to the following sources (*):

1. www.sentrylink.com
2. www.integrascan.com
3. www.criminalwatchdog.com
4. www.intellicorp.net
5. www.castlebranch.com
6. www.peoplescanner.com
7. www.krollbackgroundscreening.com
8. www.backgroundchecks.com
9. www.instantpeoplecheck.com
10. www.americanbackground.com
11. www.lexisnexis.com

Cost of a background check can vary anywhere from \$19 to \$60 based on the type or amount of services requested. Minimum information required for a background check is the individual's last name, first name, middle name (optional) and date of birth, which must match exactly with your name and DOB on your driver's license or state ID. A social security number verification is also available at an additional cost.

- h. In accordance with ASO 5500.14_ (not an all inclusive list), access will be denied if the individual:
1. Is on the National Terrorist Watch List.
 2. Is illegally present in the United States.
 3. Is currently debarred or banned from military installations.
 4. Is a registered sex offender or been convicted of any child abuse or related offense(s).
 5. Is a convicted felon within the past 5 years.
 6. Convicted of any drug offense within the past 5 years.
 7. Is subject to an outstanding warrant or is currently pending trial.
 8. Has knowingly submitted a false/fraudulent employment questionnaire.

9. Any reason the Installation Commander deems reasonable for good order & discipline.
10. Individuals convicted of a DUI/DWI within the past year will be allowed aboard but not be permitted to drive.
- i. Picture ID from a state or federal agency (i.e., valid driver's license or state identification card).
- j. **Social Security Card** or any official document listing the SSN (letter from Social Security Administration listing the SSN, W-2 (tax form), DD-214, pay stub listing complete SSN). An additional source may be through the Internet with E-Verify.
- k. Birth certificates and passports are used when necessary to verify citizenship and are never used as a means to verify social security numbers.
- l. If the employee is not a U.S. Citizen, **PROOF OF IMMIGRATION STATUS** must be provided and carried on their person or be readily accessible at all times while on station. Proof must also be provided if an individual is a naturalized U.S. citizen.
- m. **Due to recent changes with Privacy laws, please do not include social security numbers in the company letters being sent to this office. Additionally, all criminal record checks must be hand carried by the individual worker or brought in by the supervisor.**
- n. As of 19 December 2007 security clearances are no longer valid as a means for requesting access to the installation. All personnel hired as commercial or contractor employees to work for a company aboard the installation will be required to provide a 50 state/national criminal check.
- o. The changes in this document are effective as of 29 February 2012.

Note: Until further notice, ID cards and vehicle passes issued to contractors at Camp Lejeune and New River are not valid at Cherry Point without a 50 state/national CRC in their possession at the time they are requesting access at MCAS Cherry Point.

(*) The United States Government and the United States Marine Corps does not endorse nor are they affiliated with any of the screening services mentioned above. We must be able to verify/validate the information contained in the CRC via telephone. If we are unable to validate the CRC the clearance information will not be accepted.

(**) Due to recent developments concerning the screening services of **Criminal CBS** (also DBA **US Criminal Checks, INC**), **Net Detective**, and **ABI (Accurate Background Investigations)**, they are no longer authorized as a means for entry at MCAS Cherry Point.

Questions on these revised procedures should be addressed directly with Pass & ID personnel at CHPT_PASS-ID_OMB@USMC.MIL or 252-466-4683/5921.

1.4.1.1 Motor Vehicle Operation

Ingress and egress of personnel will be subject to the security regulations of the Station.

- a. All personnel must be made aware of the base speed limits:
 - Housing areas 5 mph
 - Parking areas 10 mph
 - All other areas 25 mph (unless otherwise posted)
- b. Parking is in designed areas only, between two white lines. No parking is permitted in fire lanes, on grass or planted areas, in parking slots reserved for general officers and handicapped personnel.
- c. Traffic accidents should be reported immediately to the Station Security Department by calling 252-466-4366.
- d. All personnel entering the installation are subject to random vehicle inspections. The purpose of these inspections is to detect the theft of Government and private property, and to detect weapons, contraband or illegal drugs.
- e. Vehicle Passes/Required Information on Privately Owned Vehicles - Advise company employees who desire to use their privately owned vehicles to personally bring the vehicle, vehicle registration, copy of vehicle insurance policy, valid state inspection documentation, and driver's license to the Main Gate Vehicle Pass Office, Building B-250, telephone 252-466-5921.
- f. Access to Restricted Areas - Base entry passes allow access to designated areas on the installation only. Entry into off limits areas is prohibited unless the contract requires it.
- g. Current Information - Contractors will be responsible for keeping the vehicle and employee lists current, and for securing and returning identification cards belonging to terminated employees to the Contracting Officer.
- h. Station Entry/Visitor Passes - Contractor station entry passes will be valid for each entry aboard Marine Corps Air Station, Cherry Point from 6:00 a.m. to 6:00 p.m., Monday through Friday only, unless prior arrangements have been made with the Facilities Engineering and Acquisition Division (FEAD) Cherry Point, and the Provost Marshall Officer (PMO), Marine Corps Air Station, Cherry Point, has been notified. The passes are the property of the station and are to be returned to Visitors Control at the Main (East) Gate upon completion of the contract or termination of employment. Replacement passes must be requested in writing and be accomplished by written authorization from the Contracting Officer. Visitor Passes will be issued from the Main Gate Visitor Pass Office, Building B-250, telephone 252-466-3330.
- i. Providing Information to Subcontractors - Prime Contractors are responsible for ensuring that subcontractors receive security information. Failure to comply with the specified requirements will result in prime contractors and subcontractors being denied access to the construction site.

1.4.1.2 Security Of Contractor-Owned Equipment And Materials

The Contractor is responsible for control and security of Contractor-owned equipment and materials at the work site. Report immediately, missing/lost/stolen property to the Station Security Department as each

case occurs.

1.4.2 Fleet Readiness Center East (FRC East), Cherry Point, North Carolina

Contractor personnel are required to obtain personnel identification badges. Submit, in triplicate, a list of his subcontractors and the work each is to perform. On this listing shall appear the names of the key personnel of the Contractor and subcontractors. A copy of the list of key personnel shall be forwarded to the Fleet Readiness Center East (FRC East) Cherry Point Security Department and MCAS Cherry Point Provost Marshall Officer (PMO) by the Contracting Officer. The key personnel shall be responsible for identifying other Contractor and subcontractor personnel for the purpose of obtaining identification badges. Contractors working in restricted work areas shall also be required to obtain special identification badges for personnel requiring access to the restricted work areas. Immediately after award, the submit a letter to the Contracting Officer with the following information for each employee: Company name, employee's name, birthplace (city/state/country), birth date, Social Security number, height, and weight. Also, indicate the names of persons authorized to vouch for additional employees requiring badges.

All Contractor and subcontractor personnel are required to be legal resident citizens of the United States of America in order to gain access into the secure Fleet Readiness Center East (FRC East) compound, and proof of citizenship may be required for persons whose submitted personal data contains any discrepancies. Legal resident alien (non-citizens) personnel may be permitted access inside the secure Fleet Readiness Center East (FRC East) compound if, in addition to aforementioned personal data, legal documentation (work visas, green card) are furnished for prior Fleet Readiness Center East (FRC East) Cherry Point Security Department review. Such persons may be barred from entering the secure Fleet Readiness Center East (FRC East) compound for any reason at the discretion of the Fleet Readiness Center East (FRC East) Cherry Point Security Department.

Additional requirements include:

- a. Contractor responsibility for employees. The Contractor is responsible for employees under his employment. Ensure that employees are familiar with and obey station traffic, safety, and security regulations, as well as all security and area access procedures inside the Fleet Readiness Center East (FRC East) Complex. Special security measures to be obeyed inside the Fleet Readiness Center East (FRC East) complex are available from:

Fleet Readiness Center East (FRC East) Security Department
Attention: Security Chief
PSC Box 8021
Cherry Point, NC 28533-0021

Tel. (252) 464-8018
Fax: (252) 464-7843

- b. Motor Vehicle Operation - Ingress and egress of personnel will be subject to the security regulations of the Station.
- c. Foreign Object Damage (FOD) Control: Demolition, alteration and construction operations under this contract will be performed in proximity to the Cherry Point airstrip, access runways, and airstrip

access streets. Exercise due care at all times for entire duration of this contract to prevent materials, debris, trash or other items from creating hazards to aircraft and vehicles. Inspect all exterior grade surfaces areas and streets accessible to the airstrip and access runways within the security perimeter of this project.

- d. Safety glasses with side-shields and safety shoes are the minimum personal protective equipment (PPE) required in all industrial shops unless it is specifically exempted on the Shop Hazard Assessment available on the Safety Intranet web page. Sunglasses, even if ANSI approved, are not to be worn inside. The requirement for safety shoes and glasses is "at all times" not just when employees are doing hazardous processes. Hearing protection is required at all times in the shops designated 100 percent hearing protection and whenever noise hazards are encountered. These requirements apply to all personnel entering the industrial shops. The only exempted areas are the main transportation aisles in buildings 133 and 137 that non-industrial workers must travel through to get to their work stations, payroll, and the eatery. Aisles that cut through industrial shops are included in the PPE requirement. These safety requirements are applicable only to the extent that they exceed requirements specified elsewhere in this specification. The most stringent requirement shall prevail.

1.4.2.1 Additional Security Requirements

- a. The Contractor is hereby notified that several areas of MCAS Cherry Point are designated hazardous, dangerous, or secure due to ongoing military and aircraft operations. These areas are clearly identified by security fencing, warning signs or other means. The Contractor will bear full responsibility for Contractor's and subcontractors' personnel remaining clear of, and not entering, such areas at all times.
- b. Photography is prohibited on-board the Marine Corps Air Station Cherry Point, and is illegal (a serious, punishable offense) inside the secure Fleet Readiness Center East (FRC East) Cherry Point Compound. Cameras, video recording devices, and cell phones of any kind are strictly prohibited within the secure Fleet Readiness Center East (FRC East) compound at all times. Radios of certain type may be permitted within certain areas of the secure Fleet Readiness Center East (FRC East) compound, but only for use on specific frequencies approved by Fleet Readiness Center East (FRC East) and MCAS Cherry Point. Radio use within electronically sensitive areas of the secure Fleet Readiness Center East (FRC East) compound shall be prohibited at all times.
- c. When operationally required, submit a written request containing specific justification and details to the Contracting Officer for review by the Fleet Readiness Center East (FRC East) Security Officer at least three working days prior to needed photography. Photography, when justified, shall be performed only by the official Fleet Readiness Center East (FRC East) Cherry Point photographer during regular business hours.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

-- End of Section --

SECTION 01 45 00.00 20

QUALITY CONTROL

09/15

PART 1 GENERAL

1.1 REFERENCES

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

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS (ASHRAE)

ASHRAE 52.2 (2017) Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size

ASTM INTERNATIONAL (ASTM)

ASTM D6245 (2012) Using Indoor Carbon Dioxide Concentrations to Evaluate Indoor Air Quality and Ventilation

ASTM D6345 (2010) Selection of Methods for Active, Integrative Sampling of Volatile Organic Compounds in Air

INTERNATIONAL CODE COUNCIL (ICC)

ICC IBC (2012) International Building Code

SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION (SMACNA)

ANSI/SMACNA 008 (2007) IAQ Guidelines for Occupied Buildings Under Construction, 2nd Edition

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2014) Safety and Health Requirements Manual

1.2 SUBMITTALS

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

SD-01 Preconstruction Submittals

Construction Quality Control (QC) Plan; G

Submit a Construction QC Plan prior to start of construction.

Indoor Air Quality (IAQ) Management Plan; G

SD-06 Test Reports

Acceptance Testing of Critical Systems Checklist

SD-07 Certificates

ICC IBC Special Inspections Certification; G

1.3 INFORMATION FOR THE CONTRACTING OFFICER

Prior to commencing work on construction, the Contractor can obtain a single copy set of the current report forms from the Contracting Officer. The report forms will consist of the Contractor Production Report, Contractor Production Report (Continuation Sheet), Contractor Quality Control (CQC) Report, (CQC) Report (Continuation Sheet), Preparatory Phase Checklist, Initial Phase Checklist, Rework Items List, and Testing Plan and Log.

Deliver the following to the Contracting Officer during Construction:

- a. CQC Report: Mail or hand-carry the original (wet signatures) and one copy by 10:00 AM the next working day after each day that work is performed and for every seven consecutive calendar days of no-work.
- b. Contractor Production Report: Mail or hand-carry the original (wet signatures) and one copy by 10:00 AM the next working day after each day that work is performed and for every seven consecutive calendar days of no-work, attached to the CQC Report.
- c. Preparatory Phase Checklist: Original attached to the original CQC Report and one copy attached to each QC Report copy.
- d. Initial Phase Checklist: Original attached to the original CQC Report and one copy attached to each QC Report copy.
- e. Field Test Reports: Mail or hand-carry the original within two working days after the test is performed, attached to the original CQC Report and one copy attached to each QC Report copy.
- f. Monthly Summary Report of Tests: Mail or hand-carry the original attached to the last QCReport of the month.
- g. Testing Plan and Log: Mail or hand-carry the original attached to the last CQC Report of each month and one copy attached to each CQC Report copy. A copy of the final Testing Plan and Log shall be provided to the OMSI preparer for inclusion into the OMSI documentation.
- h. Rework Items List: Mail or hand-carry the original attached to the last CQC Report of each month and one copy attached to each CQC Report copy.
- i. CQC Meeting Minutes: Mail or hand-carry the original within two working days after the meeting is held, attached to the original CQC Report and one copy attached to each CQC Report copy.
- j. QC Certifications: As required by the paragraph entitled "QC Certifications."

1.4 QC PROGRAM REQUIREMENTS

Establish and maintain a QC program as described in this section. This QC program is a key element in meeting the objectives of NAVFAC Commissioning. The QC program consists of a QC Organization, QC Plan, QC Plan Meeting(s), a Coordination and Mutual Understanding Meeting, QC meetings, three phases of control, submittal review and approval, testing, completion inspections, and QC certifications and documentation necessary to provide materials, equipment, workmanship, fabrication, construction and operations which comply with the requirements of this Contract. The QC program must cover on-site and off-site work and be keyed to the work sequence. No construction work or testing may be performed unless the QC Manager is on the work site. The QC Manager must report to an officer of the firm and not be subordinate to the Project Superintendent or the Project Manager. The QC Manager, Project Superintendent and Project Manager must work together effectively. Although the QC Manager is the primary individual responsible for quality control, all individuals will be held responsible for the quality of work on the job.

1.4.1 Commissioning

Commissioning (Cx) is a systematic process of ensuring that all building systems meet the requirements and perform interactively according to the Contract. The QC Program is a key to this process by coordinating, verifying and documenting measures to achieve the following objectives:

- a. Verify and document that the applicable equipment and systems are installed in accordance with the design intent as expressed through the Contract and according to the manufacturer's recommendations and industry accepted minimum standards.
- b. Verify and document that equipment and systems receive complete operational checkout by the installing contractors.
- c. Verify and document proper performance of equipment and systems.
- d. Verify that Operation and Maintenance (O&M) documentation is complete.
- e. Verify the Training Plan and training materials are accurate and provide correct instruction and documentation on the critical elements of the products, materials, and systems in the constructed facility. Verify that all identified Government operating personnel are trained.
- f. Provide acceptance testing for critical systems as identified by NAVFAC Engineering & Construction Bulletin ECB issue 2008-03 dated 9/25/2008, attached. Provide the requirements identified under the "Ktr" column for all applicable project elements. The requirements identified are minimum requirements and do not reduce the requirements contained in the technical sections. Provide Acceptance Testing of Critical Systems Checklist showing compliance for all applicable elements for approval by the Contracting Officer.

1.4.2 Acceptance of the Construction Quality Control (QC) Plan

Acceptance of the QC Plan is required prior to the start of construction. The Contracting Officer reserves the right to require changes in the QC Plan and operations as necessary, including removal of personnel, to ensure the specified quality of work. The Contracting Officer reserves

the right to interview any member of the QC organization at any time in order to verify the submitted qualifications. All QC organization personnel are subject to acceptance by the Contracting Officer. The Contracting Officer may require the removal of any individual for non-compliance with quality requirements specified in the Contract.

1.4.3 Preliminary Construction Work Authorized Prior to Acceptance

The only construction work that is authorized to proceed prior to the acceptance of the QC Plan is mobilization of storage and office trailers, temporary utilities, and surveying.

1.4.4 Notification of Changes

Notify the Contracting Officer, in writing, of any proposed changes in the QC Plan or changes to the QC organization personnel, a minimum of 10 work days prior to a proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

1.5 QC ORGANIZATION

1.5.1 QC Manager

1.5.1.1 Duties

Provide a QC Manager at the work site to implement and manage the QC program. The only duties and responsibilities of the QC Manager are to manage and implement the QC program on this Contract, however, the QC manager cannot serve as the SSHO. The QC Manager is required to attend the partnering meetings, QC Plan Meetings, Coordination and Mutual Understanding Meeting, conduct the QC meetings, perform the three phases of control, perform submittal review and approval, ensure testing is performed and provide QC certifications and documentation required in this Contract. The QC Manager is responsible for managing and coordinating the three phases of control and documentation performed by testing laboratory personnel and any other inspection and testing personnel required by this Contract. The QC Manager is the manager of all QC activities.

1.5.1.2 Qualifications

An individual with a minimum of 10 years combined experience in the following positions: Project Superintendent, QC Manager, Project Manager, Project Engineer or Construction Manager on similar size and type construction contracts which included the major trades that are part of this Contract. The individual must have at least two years experience as a QC Manager. The individual must be familiar with the requirements of EM 385-1-1, and have experience in the areas of hazard identification, safety compliance, and sustainability.

1.5.2 Construction Quality Management Training

In addition to the above experience and education requirements, the QC Manager must have completed the course entitled "Construction Quality Management (CQM) for Contractors." If the QC Manager does not have a current certification, they must obtain the CQM for Contractors course certification within 90 days of award. This course is periodically offered by the Naval Facilities Engineering Command and the Army Corps of Engineers. Contact the Contracting Officer for information on the next scheduled class.

1.5.3 Alternate QC Manager Duties and Qualifications

Designate an alternate for the QC Manager at the work site to serve in the event of the designated QC Manager's absence. The period of absence may not exceed two weeks at one time, and not more than 30 workdays during a calendar year. The qualification requirements for the Alternate QC Manager must be the same as for the QC Manager.

1.5.4 QC Specialists Duties and Qualifications

Provide a separate QC Specialist at the work site for each of the areas of responsibilities, specified in Part 3, Execution, of the technical sections, who shall assist and report to the QC Manager and who will have no duties other than their assigned quality control duties. QC Specialists are required to attend the Coordination and Mutual Understanding Meeting, QC meetings and be physically present at the construction site to perform the three phases of control and prepare documentation for each definable feature of work in their area of responsibility at the frequency specified below.

1.5.4.1 Electrical Systems QC Specialists

Provide ICC IBC Special Inspections Certification from the following specialist(s):

<u>Qualification/Experience in Area of Responsibility</u>	<u>Area of Responsibility</u>	<u>Frequency</u>
Electrical Inspector Crew supervision for 10 years minimum Master Electrician licensed in North Carolina	Electrical Systems, All Division 26 Sections, and Division 33 Elec. Sections	Full time during installation and testing all systems

1.6 QUALITY CONTROL (QC) PLAN

1.6.1 Construction Quality Control (QC) Plan

1.6.1.1 Requirements

Provide, for acceptance by the Contracting Officer, a Construction QC Plan submitted in a three-ring binder that includes a table of contents, with major sections identified with tabs, with pages numbered sequentially, and that documents the proposed methods and responsibilities for accomplishing commissioning activities during the construction of the project:

- a. QC ORGANIZATION: A chart showing the QC organizational structure.
- b. NAMES AND QUALIFICATIONS: Names and qualifications, in resume format, for each person in the QC organization. Include the CQM for Contractors course certifications for the QC Manager and Alternate QC Manager as required by the paragraphs entitled "Construction Quality Management Training" and "Alternate QC Manager Duties and Qualifications".
- c. DUTIES, RESPONSIBILITY AND AUTHORITY OF QC PERSONNEL: Duties, responsibilities, and authorities of each person in the QC organization.

- d. OUTSIDE ORGANIZATIONS: A listing of outside organizations, such as architectural and consulting engineering firms, that will be employed by the Contractor and a description of the services these firms will provide.
- e. APPOINTMENT LETTERS: Letters signed by an officer of the firm appointing the QC Manager and Alternate QC Manager and stating that they are responsible for implementing and managing the QC program as described in this Contract. Include in this letter the responsibility of the QC Manager and Alternate QC Manager to implement and manage the three phases of control, and their authority to stop work which is not in compliance with the Contract.
- f. SUBMITTAL PROCEDURES AND INITIAL SUBMITTAL REGISTER: Procedures for reviewing, approving, and managing submittals. Provide the name(s) of the person(s) in the QC organization authorized to review and certify submittals prior to approval. Provide the initial submittal of the Submittal Register as specified in Section 01 33 00 SUBMITTAL PROCEDURES.
- g. TESTING LABORATORY INFORMATION: Testing laboratory information required by the paragraphs entitled "Accreditation Requirements", as applicable.
- h. TESTING PLAN AND LOG: A Testing Plan and Log that includes the tests required, referenced by the specification paragraph number requiring the test, the frequency, and the person responsible for each test. Use Government forms to log and track tests.
- i. PROCEDURES TO COMPLETE REWORK ITEMS: Procedures to identify, record, track, and complete rework items. Use Government forms to record and track rework items.
- j. DOCUMENTATION PROCEDURES: Use Government form.
- k. LIST OF DEFINABLE FEATURES: A Definable Feature of Work (DFOW) is a task that is separate and distinct from other tasks and has control requirements and work crews unique to that task. A DFOW is identified by different trades or disciplines and is an item or activity on the construction schedule. Include in the list of DFOWs, but not be limited to, all critical path activities on the NAS. Include all activities for which this specification requires QC Specialists or specialty inspection personnel. Provide separate DFOWs in the Network Analysis Schedule for each design development stage and submittal package.
- l. PROCEDURES FOR PERFORMING THE THREE PHASES OF CONTROL: Identify procedures used to ensure the three phases of control to manage the quality on this project. For each DFOW, a Preparatory and Initial phase checklist will be filled out during the Preparatory and Initial phase meetings. Conduct the Preparatory and Initial Phases and meetings with a view towards obtaining quality construction by planning ahead and identifying potential problems for each DFOW.
- m. PERSONNEL MATRIX: Not Applicable
- n. PROCEDURES FOR COMPLETION INSPECTION: Not Applicable Procedures for identifying and documenting the completion inspection process.

Include in these procedures the responsible party for punch out inspection, pre-final inspection, and final acceptance inspection.

- o. TRAINING PROCEDURES AND TRAINING LOG: Procedures for coordinating and documenting the training of personnel required by the Contract.
- p. ORGANIZATION AND PERSONNEL CERTIFICATIONS LOG: Procedures for coordinating, tracking and documenting all certifications on subcontractors, testing laboratories, suppliers, personnel, etc. QC Manager will ensure that certifications are current, appropriate for the work being performed, and will not lapse during any period of the contract that the work is being performed.

1.7 QC PLAN MEETINGS

Prior to submission of the QC Plan, the QC Manager will meet with the Contracting Officer to discuss the QC Plan requirements of this Contract. The purpose of this meeting is to develop a mutual understanding of the QC Plan requirements prior to plan development and submission and to agree on the Contractor's list of DFOWs.

1.8 COORDINATION AND MUTUAL UNDERSTANDING MEETING

After submission of the QC Plan, and prior to the start of construction, the QC Manager will meet with the Contracting Officer to present the QC program required by this Contract. When a new QC Manager is appointed, the coordination and mutual understanding meeting shall be repeated.

1.8.1 Purpose

The purpose of this meeting is to develop a mutual understanding of the QC details, including documentation, administration for on-site and off-site work, design intent, Cx, environmental requirements and procedures, coordination of activities to be performed, and the coordination of the Contractor's management, production, and QC personnel. At the meeting, the Contractor will be required to explain in detail how three phases of control will be implemented for each DFOW, as well as how each DFOW will be affected by each management plan or requirement as listed below:

- a. Waste Management Plan.
- b. IAQ Management Plan.
- c. Procedures for noise and acoustics management.
- d. Environmental Protection Plan.
- e. Environmental regulatory requirements.
- f. Cx Plan.

1.8.2 Coordination of Activities

Coordinate activities included in various sections to assure efficient and orderly installation of each component. Coordinate operations included under different sections that are dependent on each other for proper installation and operation. Schedule construction operations with consideration for indoor air quality as specified in the IAQ Management Plan. Coordinate prefunctional tests and startup testing with Cx.

1.8.3 Attendees

As a minimum, the Contractor's personnel required to attend include an officer of the firm, the Project Manager, Project Superintendent, QC Manager, CA, Environmental Manager, and subcontractor representatives. Each subcontractor who will be assigned QC responsibilities shall have a principal of the firm at the meeting. Minutes of the meeting will be prepared by the QC Manager and signed by the Contractor and the Contracting Officer. Provide a copy of the signed minutes to all attendees and shall be included in the QC Plan.

1.9 QC MEETINGS

After the start of construction, conduct QC meetings once every two weeks by the QC Manager at the work site with the Project Superintendent, the CA, and the foremen who are performing the work of the DFOWs. The QC Manager is to prepare the minutes of the meeting and provide a copy to the Contracting Officer within two working days after the meeting. The Contracting Officer may attend these meetings. As a minimum, accomplish the following at each meeting:

- a. Review the minutes of the previous meeting.
- b. Review the schedule and the status of work and rework.
- c. Review the status of submittals.
- d. Review the work to be accomplished in the next two weeks and documentation required.
- e. Resolve QC and production problems (RFI, etc.).
- f. Address items that may require revising the QC Plan.
- g. Review Accident Prevention Plan (APP).
- h. Review environmental requirements and procedures.
- i. Review Waste Management Plan.
- j. Review IAQ Management Plan.
- k. Review Environmental Management Plan.
- l. Review the status of training completion.
- m. Review Cx Plan and progress.

1.10 THREE PHASES OF CONTROL

Adequately cover both on-site and off-site work with the Three Phases of Control and include the following for each DFOW.

1.10.1 Preparatory Phase

Notify the Contracting Officer at least two work days in advance of each preparatory phase meeting. The meeting will be conducted by the QC Manager and attended by the Project Superintendent, the CA, and the

foreman responsible for the DFOV. When the DFOV will be accomplished by a subcontractor, that subcontractor's foreman shall attend the preparatory phase meeting. Document the results of the preparatory phase actions in the daily Contractor Quality Control Report and in the Preparatory Phase Checklist. Perform the following prior to beginning work on each DFOV:

- a. Review each paragraph of the applicable specification sections.
- b. Review the Contract drawings.
- c. Verify that field measurements are as indicated on construction and/or shop drawings before confirming product orders, in order to minimize waste due to excessive materials.
- d. Verify that appropriate shop drawings and submittals for materials and equipment have been submitted and approved. Verify receipt of approved factory test results, when required.
- e. Review the testing plan and ensure that provisions have been made to provide the required QC testing.
- f. Examine the work area to ensure that the required preliminary work has been completed.
- g. Coordinate the schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- h. Arrange for the return of shipping/packaging materials, such as wood pallets, where economically feasible.
- i. Examine the required materials, equipment and sample work to ensure that they are on hand and conform to the approved shop drawings and submitted data.
- j. Discuss specific controls used and construction methods, construction tolerances, workmanship standards, and the approach that will be used to provide quality construction by planning ahead and identifying potential problems for each DFOV.
- k. Review the APP and appropriate Activity Hazard Analysis (AHA) to ensure that applicable safety requirements are met, and that required Material Safety Data Sheets (MSDS) are submitted.
- l. Review the Cx Plan and ensure all preliminary work items have been completed and documented.

1.10.2 Initial Phase

Notify the Contracting Officer at least two work days in advance of each initial phase. When construction crews are ready to start work on a DFOV, conduct the initial phase with the Project Superintendent, and the foreman responsible for that DFOV. Observe the initial segment of the DFOV to ensure that the work complies with Contract requirements. Document the results of the initial phase in the daily CQC Report and in the Initial Phase Checklist. Repeat the initial phase for each new crew to work on-site, or when acceptable levels of specified quality are not being met. Perform the following for each DFOV:

- a. Establish the quality of workmanship required.
- b. Resolve conflicts.
- c. Ensure that testing is performed by the approved laboratory.
- d. Check work procedures for compliance with the APP and the appropriate AHA to ensure that applicable safety requirements are met.
- e. Review the Cx Plan and ensure all preparatory work items have been completed and documented.

1.10.3 Follow-Up Phase

Perform the following for on-going work daily, or more frequently as necessary, until the completion of each DFOW and document in the daily CQC Report:

- a. Ensure the work is in compliance with Contract requirements.
- b. Maintain the quality of workmanship required.
- c. Ensure that testing is performed by the approved laboratory.
- d. Ensure that rework items are being corrected.
- e. Assure manufacturers representatives have performed necessary inspections if required and perform safety inspections.
- f. Review the Cx Plan and ensure all work items, testing, and documentation has been completed.

1.10.4 Additional Preparatory and Initial Phases

Conduct additional preparatory and initial phases on the same DFOW if the quality of on-going work is unacceptable, if there are changes in the applicable QC organization, if there are changes in the on-site production supervision or work crew, if work on a DFOW is resumed after substantial period of inactivity, or if other problems develop.

1.10.5 Notification of Three Phases of Control for Off-Site Work

Notify the Contracting Officer at least two weeks prior to the start of the preparatory and initial phases.

1.11 SUBMITTAL REVIEW AND APPROVAL

Procedures for submission, review and approval of submittals are described in Section 01 33 00 SUBMITTAL PROCEDURES.

1.12 TESTING

Except as stated otherwise in the specification sections, perform sampling and testing required under this Contract.

1.12.1 Accreditation Requirements

Construction materials testing laboratories must be accredited by a laboratory accreditation authority and will be required to submit a copy

of the Certificate of Accreditation and Scope of Accreditation. The laboratory's scope of accreditation must include the appropriate ASTM standards (E 329, C 1077, D 3666, D 3740, A 880, E 543) listed in the technical sections of the specifications. Laboratories engaged in Hazardous Materials Testing shall meet the requirements of OSHA and EPA. The policy applies to the specific laboratory performing the actual testing, not just the Corporate Office.

1.12.2 Laboratory Accreditation Authorities

Laboratory Accreditation Authorities include the National Voluntary Laboratory Accreditation Program (NVLAP) administered by the National Institute of Standards and Technology at <http://ts.nist.gov/ts/htdocs/210/214/214.htm>, the American Association of State Highway and Transportation Officials (AASHTO) program at <http://www.transportation.org/aashto/home.nsf/frontpage>, International Accreditation Services, Inc. (IAS) at <http://www.iasonline.org>, U. S. Army Corps of Engineers Materials Testing Center (MTC) at <http://www.wes.army.mil/SL/MTC/>, the American Association for Laboratory Accreditation (A2LA) program at <http://www.a2la.org/>, the Washington Association of Building Officials (WABO) at <http://www.wabo.org/> (Approval authority for WABO is limited to projects within Washington State), and the Washington Area Council of Engineering Laboratories (WACEL) at <http://www.wacel.org/labaccred.html> (Approval authority by WACEL is limited to projects within Facilities Engineering Command (FEC) Washington geographical area).

1.12.3 Capability Check

The Contracting Officer retains the right to check laboratory equipment in the proposed laboratory and the laboratory technician's testing procedures, techniques, and other items pertinent to testing, for compliance with the standards set forth in this Contract.

1.12.4 Test Results

Cite applicable Contract requirements, tests or analytical procedures used. Provide actual results and include a statement that the item tested or analyzed conforms or fails to conform to specified requirements. If the item fails to conform, notify the Contracting Officer immediately. Conspicuously stamp the cover sheet for each report in large red letters "CONFORMS" or "DOES NOT CONFORM" to the specification requirements, whichever is applicable. Test results must be signed by a testing laboratory representative authorized to sign certified test reports. Furnish the signed reports, certifications, and other documentation to the Contracting Officer via the QC Manager. Furnish a summary report of field tests at the end of each month, per the paragraph entitled "INFORMATION FOR THE CONTRACTING OFFICER".

1.12.5 Test Reports and Monthly Summary Report of Tests

Furnish the signed reports, certifications, and a summary report of field tests at the end of each month to the Contracting Officer. Attach a copy of the summary report to the last daily Contractor Quality Control Report of each month. Provide a copy of the signed test reports and certifications to the OMSI preparer for inclusion into the OMSI documentation.

1.13 QC CERTIFICATIONS

1.13.1 CQC Report Certification

Contain the following statement within the CQC Report: "On behalf of the Contractor, I certify that this report is complete and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge, except as noted in this report."

1.13.2 Invoice Certification

Furnish a certificate to the Contracting Officer with each payment request, signed by the QC Manager, attesting that as-built drawings are current, coordinated and attesting that the work for which payment is requested, including stored material, is in compliance with Contract requirements.

1.13.3 Completion Certification

Upon completion of work under this Contract, the QC Manager shall furnish a certificate to the Contracting Officer attesting that "the work has been completed, inspected, tested and is in compliance with the Contract." Provide a copy of this final QC Certification for completion to the OMSI preparer for inclusion into the OMSI documentation.

1.14 COMPLETION INSPECTIONS

1.14.1 Punch-Out Inspection

Near the completion of all work or any increment thereof, established by a completion time stated in the Contract Clause entitled "Commencement, Prosecution, and Completion of Work," or stated elsewhere in the specifications, the QC Manager and the CA must conduct an inspection of the work and develop a "punch list" of items which do not conform to the approved drawings, specifications and Contract. Include in the punch list any remaining items on the "Rework Items List", which were not corrected prior to the Punch-Out Inspection. Include within the punch list the estimated date by which the deficiencies will be corrected. Provide a copy of the punch list to the Contracting Officer. The QC Manager, or staff, must make follow-on inspections to ascertain that all deficiencies have been corrected. Once this is accomplished, notify the Government that the facility is ready for the Government "Pre-Final Inspection".

1.14.2 Pre-Final Inspection

The Government and QCM will perform this inspection to verify that the facility is complete and ready to be occupied. A Government "Pre-Final Punch List" will be documented by the CQM as a result of this inspection. The QC Manager will ensure that all items on this list are corrected prior to notifying the Government that a "Final" inspection with the Client can be scheduled. Any items noted on the "Pre-Final" inspection must be corrected in a timely manner and be accomplished before the contract completion date for the work, or any particular increment thereof, if the project is divided into increments by separate completion dates.

1.14.3 Final Acceptance Inspection

Notify the Contracting Officer at least 14 calendar days prior to the date

a final acceptance inspection can be held. State within the notice that all items previously identified on the pre-final punch list will be corrected and acceptable, along with any other unfinished Contract work, by the date of the final acceptance inspection. The Contractor must be represented by the QC Manager, the Project Superintendent, the CA, and others deemed necessary. Attendees for the Government will include the Contracting Officer, other FEAD/ROICC personnel, and personnel representing the Client. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the Contract Clause entitled "Inspection of Construction."

1.15 DOCUMENTATION

Maintain current and complete records of on-site and off-site QC program operations and activities.

1.15.1 Construction Documentation

Reports are required for each day that work is performed and must be attached to the Contractor Quality Control Report prepared for the same day. Maintain current and complete records of on-site and off-site QC program operations and activities. The forms identified under the paragraph "INFORMATION FOR THE CONTRACTING OFFICER" will be used. Reports are required for each day work is performed. Account for each calendar day throughout the life of the Contract. Every space on the forms must be filled in. Use N/A if nothing can be reported in one of the spaces. The Project Superintendent and the QC Manager must prepare and sign the Contractor Production and CQC Reports, respectively. The reporting of work must be identified by terminology consistent with the construction schedule. In the "remarks" sections of the reports, enter pertinent information including directions received, problems encountered during construction, work progress and delays, conflicts or errors in the drawings or specifications, field changes, safety hazards encountered, instructions given and corrective actions taken, delays encountered and a record of visitors to the work site, quality control problem areas, deviations from the QC Plan, construction deficiencies encountered, meetings held. For each entry in the report(s), identify the Schedule Activity No. that is associated with the entered remark.

1.15.2 Quality Control Validation

Establish and maintain the following in a series of three ring binders. Binders shall be divided and tabbed as shown below. These binders must be readily available to the Contracting Officer during all business hours.

- a. All completed Preparatory and Initial Phase Checklists, arranged by specification section.
- b. All milestone inspections, arranged by Activity Number.
- c. An up-to-date copy of the Testing Plan and Log with supporting field test reports, arranged by specification section.
- d. Copies of all contract modifications, arranged in numerical order. Also include documentation that modified work was accomplished.
- e. An up-to-date copy of the Rework Items List.

- f. Maintain up-to-date copies of all punch lists issued by the QC staff to the Contractor and Sub-Contractors and all punch lists issued by the Government.
- g. Commissioning documentation including Cx checklists, schedules, tests, and reports.

1.15.3 Testing Plan and Log

As tests are performed, the CA and the QC Manager will record on the "Testing Plan and Log" the date the test was performed and the date the test results were forwarded to the Contracting Officer. Attach a copy of the updated "Testing Plan and Log" to the last daily CQC Report of each month, per the paragraph "INFORMATION FOR THE CONTRACTING OFFICER". Provide a copy of the final "Testing Plan and Log" to the OMSI preparer for inclusion into the OMSI documentation.

1.15.4 Rework Items List

The QC Manager must maintain a list of work that does not comply with the Contract, identifying what items need to be reworked, the date the item was originally discovered, the date the item will be corrected by, and the date the item was corrected. There is no requirement to report a rework item that is corrected the same day it is discovered. Attach a copy of the "Rework Items List" to the last daily CQC Report of each month. The Contractor is responsible for including those items identified by the Contracting Officer.

1.15.5 As-Built Drawings

The QC Manager is required to ensure the as-built drawings, required by Section 01 78 00 CLOSEOUT SUBMITTALS are kept current on a daily basis and marked to show deviations which have been made from the Contract drawings. Ensure each deviation has been identified with the appropriate modifying documentation (e.g. PC No., Modification No., Request for Information No., etc.). The QC Manager must initial each revision. Upon completion of work, the QC Manager will furnish a certificate attesting to the accuracy of the as-built drawings prior to submission to the Contracting Officer.

1.16 NOTIFICATION ON NON-COMPLIANCE

The Contracting Officer will notify the Contractor of any detected non-compliance with the Contract. Take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders will be made the subject of claim for extension of time for excess costs or damages by the Contractor.

1.17 CONSTRUCTION INDOOR AIR QUALITY (IAQ) MANAGEMENT PLAN

Submit an IAQ Management Plan within 15 days after Contract award and not less than 10 days before the preconstruction meeting. Revise and resubmit Plan as required by the Contracting Officer. Make copies of the final plan available to all workers on site. Include provisions in the Plan to

meet the requirements specified below and to ensure safe, healthy air for construction workers and building occupants.

1.17.1 Requirements During Construction

Provide for evaluation of indoor Carbon Dioxide concentrations in accordance with [ASTM D6245](#). Provide for evaluation of volatile organic compounds (VOCs) in indoor air in accordance with [ASTM D6345](#). Use filters with a Minimum Efficiency Reporting Value (MERV) of 8 in permanently installed air handlers during construction.

1.17.1.1 Control Measures

Meet or exceed the requirements of [ANSI/SMACNA 008](#), Chapter 3, to help minimize contamination of the building from construction activities. The five requirements of this manual which must be adhered to are described below:

- a. HVAC protection: Isolate return side of HVAC system from surrounding environment to prevent construction dust and debris from entering the duct work and spaces.
- b. Source control: Use low emitting paints and other finishes, sealants, adhesives, and other materials as specified. When available, cleaning products shall have a low VOC content and be non-toxic to minimize building contamination. Utilize cleaning techniques that minimize dust generation. Cycle equipment off when not needed. Prohibit idling motor vehicles where emissions could be drawn into building. Designate receiving/storage areas for incoming material that minimize IAQ impacts.
- c. Pathway interruption: When pollutants are generated use strategies such as 100 percent outside air ventilation or erection of physical barriers between work and non-work areas to prevent contamination.
- d. Housekeeping: Clean frequently to remove construction dust and debris. Promptly clean up spills. Remove accumulated water and keep work areas dry to discourage the growth of mold and bacteria. Take extra measures when hazardous materials are involved.
- e. Scheduling: Control the sequence of construction to minimize the absorption of VOCs by other building materials.

1.17.1.2 Moisture Contamination

- a. Remove accumulated water and keep work dry.
- b. Use dehumidification to remove moist, humid air from a work area.
- c. Do not use combustion heaters or generators inside the building.
- d. Protect porous materials from exposure to moisture.
- e. Remove and replace items which remain damp for more than a few hours.

1.17.2 Requirements after Construction

After construction ends and prior to occupancy, conduct a building flush-out or test the indoor air contaminant levels. Flush-out must be a

minimum two-weeks with MERV-13 filtration media as determined by ASHRAE 52.2 at 100 percent outside air. Air contamination testing must be consistent with EPA's current Compendium of Methods for the Determination of Air Pollutants in Indoor Air. After building flush-out or testing and prior to occupancy, replace filtration media. Filtration media must have a MERV of 13 as determined by ASHRAE 52.2.

PART 2 PRODUCTS

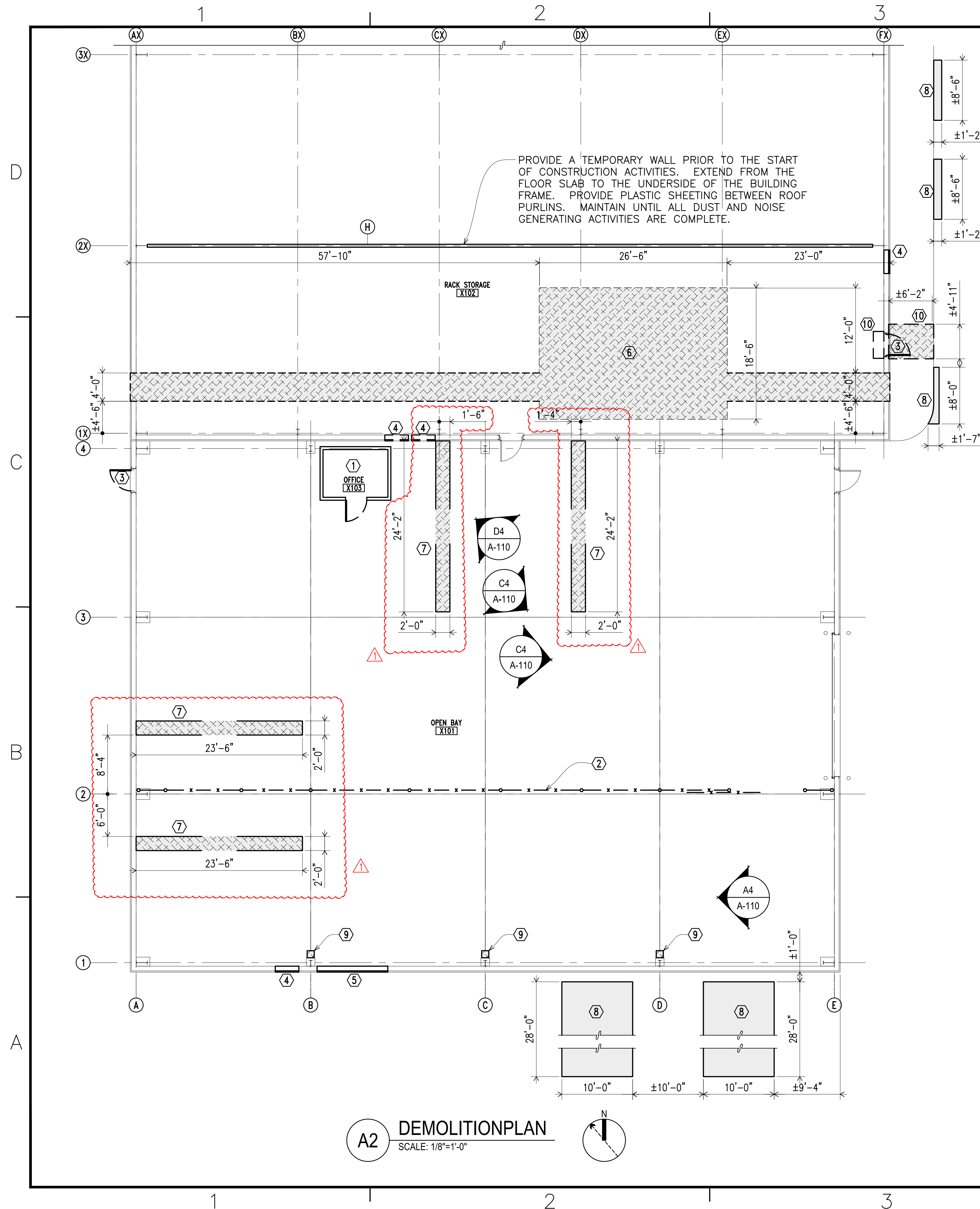
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PART 3 EXECUTION

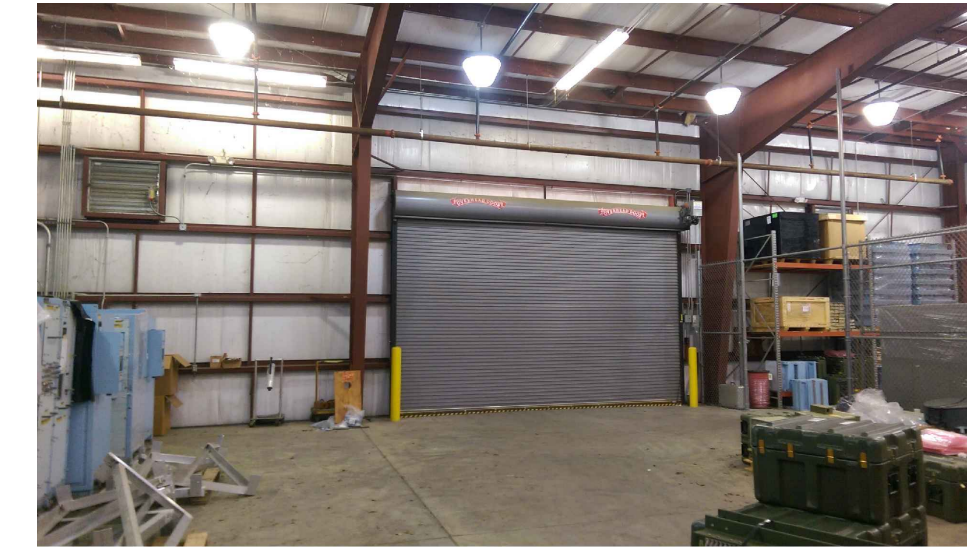
3.1 PREPARATION

Designate receiving/storage areas for incoming material to be delivered according to installation schedule and to be placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication. Store and handle materials in a manner as to prevent loss from weather and other damage. Keep materials, products, and accessories covered and off the ground, and store in a dry, secure area. Prevent contact with material that may cause corrosion, discoloration, or staining. Protect all materials and installations from damage by the activities of other trades.

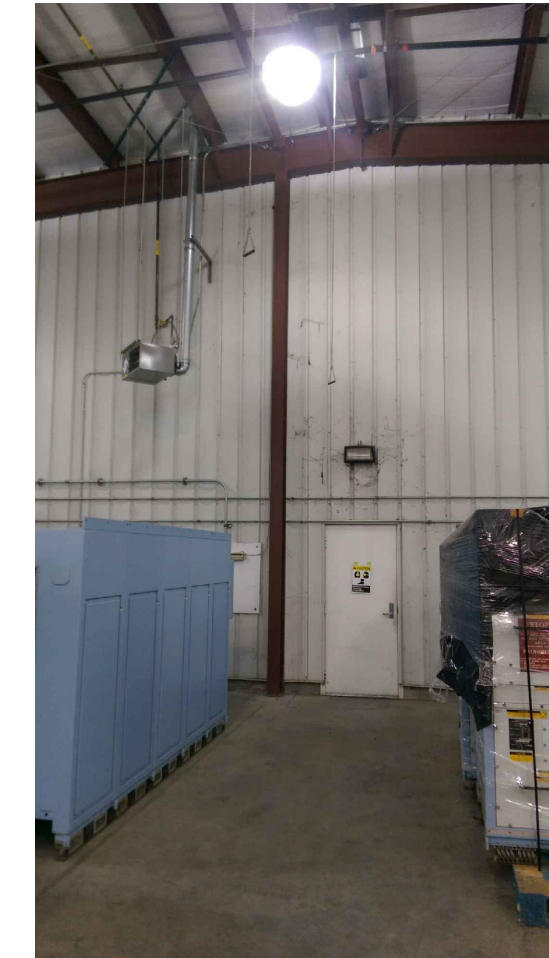
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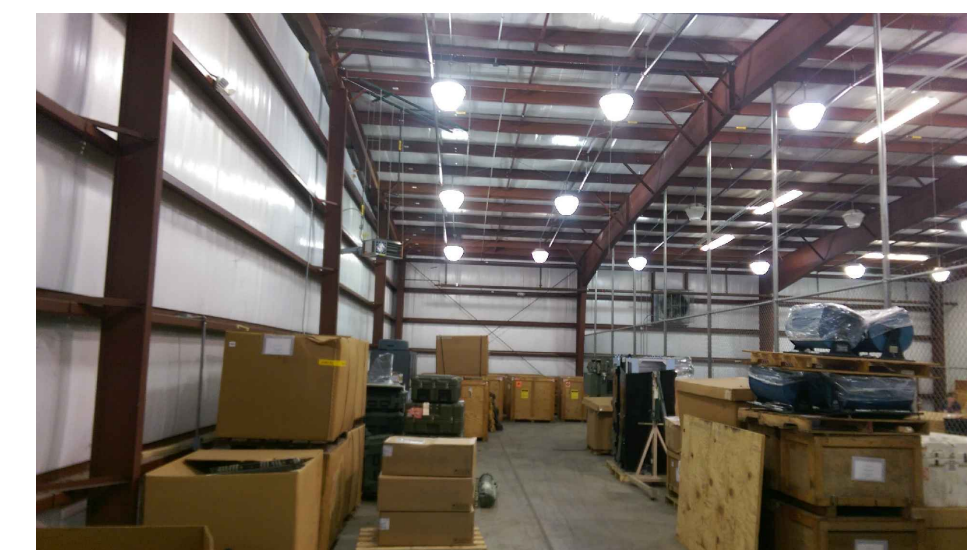
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C4 PHOTO OF EXISTING
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B4 PHOTO OF EXISTING
NOT TO SCALE



A4 PHOTO OF EXISTING
NOT TO SCALE

DEMOLITION PLAN LEGEND

- | | |
|---|---|
|  | EXISTING WALLS, DOORS, FRAMES, MILLWORK AND EQUIPMENT TO REMAIN |
|  | WALLS, DOORS, FRAMES, MILLWORK AND EQUIPMENT TO BE REMOVED |
|  | LIMITS OF FLOOR SLAB DEMOLITION |
|  | LIMITS OF ASPHALT PAVING DEMOLITION |

GENERAL DEMOLITION NOTES

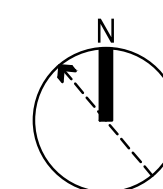
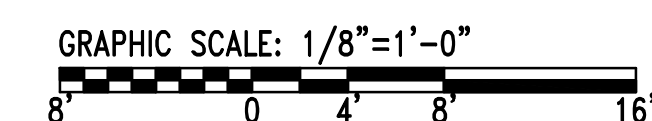
1. REFERENCE SHEET G-002 FOR SYMBOL LEGEND
2. WHERE EXISTING LOAD BEARING ELEMENTS ARE TO BE REMOVED CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING OF EXISTING STRUCTURE UNTIL NEW LOAD BEARING ELEMENT IS IN PLACE
3. EXISTING FURNITURE AND EQUIPMENT WITHIN WORK AREAS WILL BE REMOVED AND STORED BY THE GOVERNMENT
4. REFERENCE THE LIFE SAFETY DRAWINGS FOR LOCATIONS OF RATED WALLS AND SMOKE PARTITIONS




DEMOLITION KEY NOTES

- ① REMOVE THE SELF-CONTAINED MODULAR OFFICE. REFERENCE THE PLUMBING, MECHANICAL, ELECTRICAL AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS
- ② REMOVE APPROXIMATELY 98 LF OF CHAIN LINK FENCE PARTITION. THE HEIGHT OF THE CHAIN LINK FENCE PARTITION IS APPROXIMATELY 9'-0". REMOVAL INCLUDES BUT IS NOT LIMITED TO CHAIN LINK FABRIC, POSTS, BASE PLATES, FASTENERS, BRACING, TRIM, BRACKETS, SLIDING GATE AND HARDWARE. REMOVE ALL FASTENERS AND ANCHORS FROM THE FLOOR SLAB AND FILL HOLES WITH EPOXY CONCRETE FILLER. POSTS EXTEND TO THE STRUCTURE ABOVE.
- ③ REMOVE STEEL DOOR AND FRAME. REMOVAL INCLUDES BUT IS NOT LIMITED THRESHOLD, HARDWARE AND TRIM. PREPARE OPENING FOR INFILL. REFERENCE THE PLUMBING, MECHANICAL, ELECTRICAL AND FIRE ALARM DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS
- ④ SAW CUT AND PARTIALLY REMOVE PRE-ENGINEERED METAL BUILDING ELEMENTS AND PREPARE A NEW OPENING TO RECEIVE NEW STEEL PERSONNEL DOOR AND FRAME
- ⑤ SAW CUT AND PARTIALLY REMOVE PRE-ENGINEERED METAL BUILDING ELEMENTS AND PREPARE A NEW OPENING TO RECEIVE NEW COILING OVERHEAD DOOR
- ⑥ SAW CUT AND REMOVE APPROXIMATELY 820 SF OF EXISTING 6" CONCRETE SLAB. DO NOT DAMAGE EXISTING GRADE BEAMS AND COLUMN FOOTINGS. REFERENCE THE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS
- ⑦ SAW CUT AND REMOVE EXISTING 6" CONCRETE SLAB TO CREATE UTILITY TRENCHES. SEE DETAIL C1/A-505. DO NOT DAMAGE EXISTING GRADE BEAMS AND COLUMN FOOTINGS. REFERENCE THE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS
- ⑧ SAW CUT AND REMOVE ASPHALT PAVING TO ACCOMMODATE CONCRETE EQUIPMENT PAD. REFERENCE THE PLUMBING AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION
- ⑨ SAW CUT AND REMOVE EXISTING 6" CONCRETE SLAB IN 1'-0"x1'-0" SECTIONS TO ACCOMMODATE NEW CONCRETE PEDESTALS FOR FUTURE BRIDGE CRANE. REFERENCE THE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS
- ⑩ REMOVE EXISTING CONCRETE STEP AND EXTERIOR CONCRETE WALK



A5 BUILDING 4630 KEY PLAN
SCALE: 1"=60'-0"



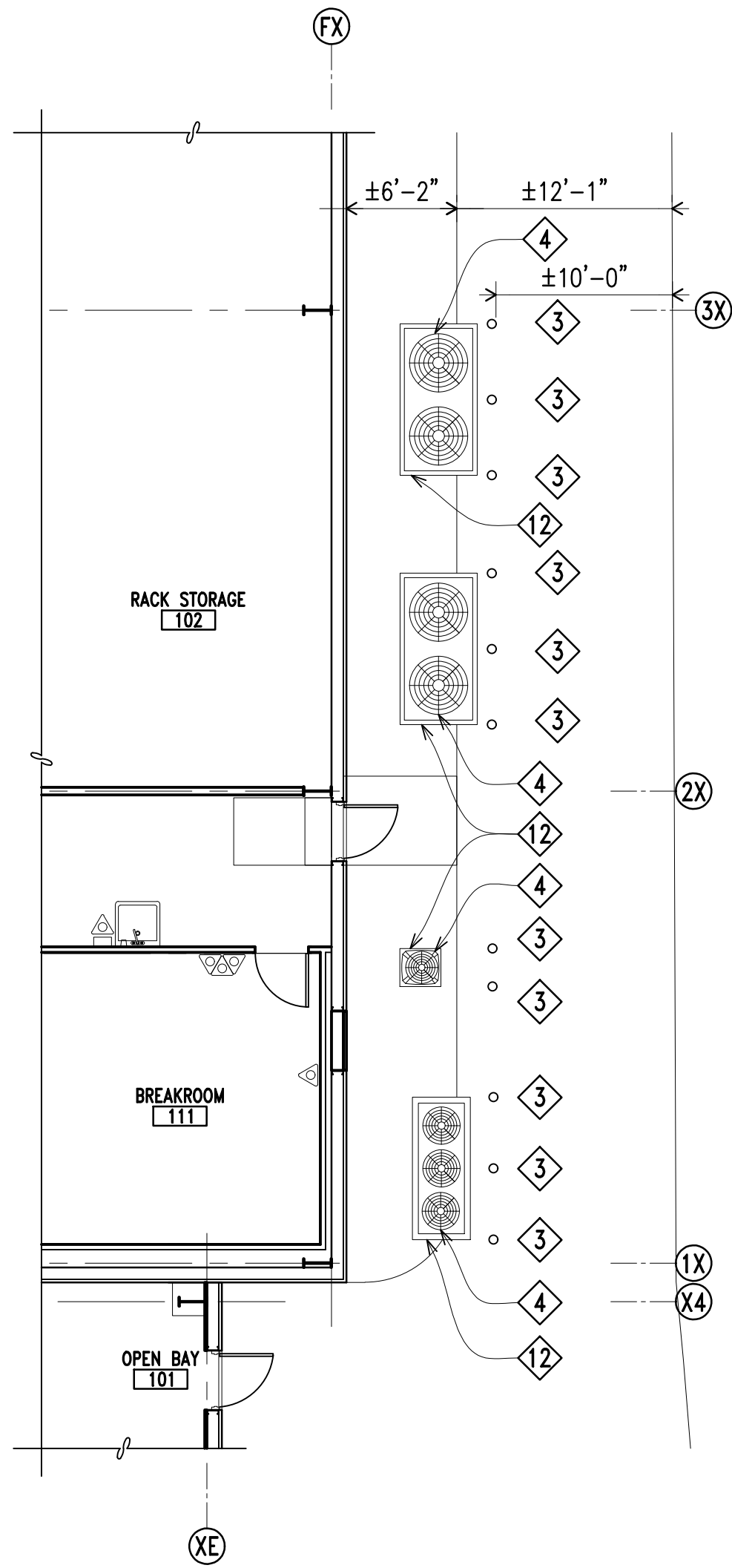
1		SLAB DEMO DIMENSIONS		08.31.18	REL
					
					
					
<small>317-C Pollock Street New Bern, NC 28560 757-637-6373 mbfarchitects.com</small>					
<small>A/E: MBF</small>					
APPROVED					
FOR COMMANDER NAVFAC					
ACTIVITY					
STEPHEN DEMIANCZYK (BY EMAIL)					
SATISFACTORY TO		DATE		06/20/18	
DES	REL	DRW	REL	CHK	DJE, III
PM/DM	E. HOWARD / R. SILVA				
BRANCH MANAGER					
M. DURANT					
CHIEF ENG/ARCH					
RISK PROTECTION					
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<div> P766 F-35B LIFT SYSTEM REPAIR FACILITY </div>					
<div> BUILDING 4630 DEMOLITION PLAN </div>					
SCALE:					
EPROJECT NO.:		1564839			
CONSTR. CONTR. NO.					
NAVFAC DRAWING NO.					
12771493					
SHEET	23	OF	112		
A-110					
DRAWING REVISION: 10 MARCH 2009					

GENERAL CONSTRUCTION NOTES

- REFERENCE SHEET G-002 FOR SYMBOL LEGEND
- REFERENCE SHEET A-501 FOR WALL TYPE
- REFERENCE THE LIFE SAFETY DRAWINGS FOR LOCATIONS OF RATED WALLS AND SMOKE PARTITIONS
- DIMENSIONS ORIGINATE FROM THE FACE OF STEEL STUDS AND FACE OF CONCRETE MASONRY UNITS
- REFERENCE SHEET A-610 FOR DOOR AND FRAME SCHEDULE
- PROVIDE FULL STAINLESS STEEL CORNER GUARDS AT EXPOSED CORNERS OF GYPSUM PARTITIONS
- PROVIDE 2 X 10 FIRE TREATED WOOD BLOCKING IN STEEL STUD WALLS AT LOCATIONS TO RECEIVE WALL HUNG ACCESSORIES AND/OR FIXTURES INCLUDING BUT NOT LIMITED TO TOILET ACCESSORIES, SMART BOARDS, MARKER BOARDS, TACK BOARDS, WALL CABINETS, ETC.
- PROVIDE CONCRETE SPLASH BLOCKS AT ALL DOWNSPOUT LOCATIONS WHERE NOT CONNECTED TO STORM DRAIN PIPING

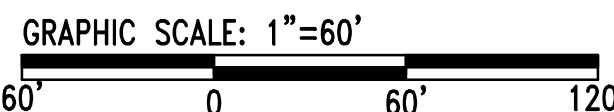
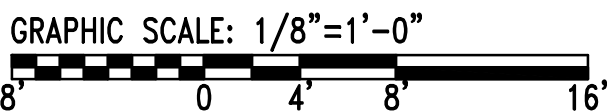
CONSTRUCTION KEY NOTES

- PRE-ENGINEERED METAL BUILDING CANOPY COLUMNS. SEE STRUCTURAL DRAWINGS
- EXISTING BOLLARD. PREPARE, PRIME AND PAINT
- BOLLARD. SEE DETAIL C1/A-504
- MECHANICAL UNIT. SEE MECHANICAL DRAWING FOR ADDITIONAL INFORMATION
- METAL RACK SHELVING UNITS. REFERENCE SHEET A-613
- UTILITY PIT AND COVER. SEE DETAIL C4/A-505
- FOLLOWING COMPLETION OF ROUGH-INS, PROVIDE NEW CONCRETE SLAB AT AREAS OF CONCRETE SLAB REMOVE
- PROVIDE NEW WIRE MESH PARTITIONS TO CREATE PARTS 113. THE HEIGHT OF THE WIRE MESH PARTITION IS APPROXIMATELY 9'-0". SEE DETAIL A3/A-503. REFERENCE THE PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS
- PAIR OF WIRE MESH PARTITION DOORS 6'-0"W x 7'-0"H
- RELOCATE THE SANDING BOOTH FROM THE MEZZANINE IN BUILDING 4224 TO BUILDING 4630. COORDINATE EXACT LOCATION WITH THE CONTRACTING OFFICER. REFERENCE THE SPECIFICATIONS FOR DISSASSEMBLY/REASSEMBLY INSTRUCTIONS. RECONNECT TO NEW UTILITY DISTRIBUTION (FIRE PROTECTION AND ELECTRICAL)
- SEMI-RECESSED FIRE EXTINGUISHER CABINET. SEE DETAIL C3/A-504
- 6" THICK CAST-IN-PLACE CONCRETE EQUIPMENT PAD. REINFORCE WITH A MAT OF NO. 4 REBAR AT 1'-0" EACH WAY. REFERENCE THE PLUMBING AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION. CONFIRM EXACT SIZE REQUIRED BY GFGI AIR COMPRESSORS
- 1'-0"x1'-0" CAST-IN-PLACE CONCRETE PEDESTAL FOR BRIDGE CRANE. TOP OF PEDESTAL IS FLUSH WITH FLOOR SLAB. REFERENCE THE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
- THE CONTRACTOR IS RESPONSIBLE FOR FINAL INSTALLATION OF A 1 TON BRIDGE CRANE POST SUPPORTED TO BE PROVIDED BY THE GOVERNMENT. INCLUDES STRUCTURAL AND ELECTRICAL CONNECTIONS
- HEAVY DUTY RECESSED GALVANIZED TIE DOWN LOOP. TYPICAL OF 8 LOCATIONS. COORDINATE EXACT LOCATIONS WITH GOVERNMENT FURNISHED AIR COMPRESSORS
- GOVERNMENT FURNISHED AIR COMPRESSORS. FINAL ELECTRICAL AND AIR CONNECTIONS BY THE CONTRACTOR



A4 BOLLARD PLAN
SCALE: 1/8"=1'-0"

A5 BUILDING 4630 KEY PLAN
SCALE: 1"=60'-0"



GROSS SQUARE FOOTAGE TABULATION

EXISTING BUILDING	25,047 SF
NEW OCCUPIED SPACE (OUTSIDE EXISTING FOOTPRINT)	0 SF
NEW COVERED EXTERIOR AREAS (/2)	1,258 SF/2 = 629 SF
TOTAL	25,676 SF

A2 FLOOR PLAN - CONSTRUCTION
SCALE: 1/8"=1'-0"

REL	06.31.18	DATE	APPR
1	UTILITY TRENCH REVISIONS	SYN	DESCRIPTION
APPROVED FOR COMMANDER NAVFAC			
ACTIVITY			
STEPHEN DEMIANCZYK (BY EMAIL)			
SATISFACTORY TO DATE 06/20/18			
DES	REL	DRW	REL
PM/DM	E. HOWARD / R. SILVA		
BRANCH MANAGER			
CHIEF ENG/ARCH			
M. DURANT			
FIRE PROTECTION			
NAVAL FACILITIES ENGINEERING COMMAND			
NAVAL FACILITIES ENGINEERING COMMAND ~ MIDATLANTIC			
NAVAL STATION - NORFOLK VA			
MARINE CORPS AIR STATION			
CHERRY POINT, NC			
P766 F-35B LIFT SYSTEM REPAIR FACILITY			
BUILDING 4630			
FLOOR PLAN - CONSTRUCTION			
SCALE:			
PROJECT NO.: 1564839			
CONSTR. CONTR. NO.			
NAVFAC DRAWING NO. 12771494			
SHEET 24 OF 112			
A-111			
DRAWING REVISION: 10 MARCH 2009			