AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES	
J	1	19

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO.(If applicable)
0003	01-Apr-2015		

6. ISSUED BY	CODE	7. ADMINISTERED BY (If other than item 6)	CODE
NAVFAC NORTHWEST 1101 TAUTOG CIRCLE SILVERDALE WA 98315-1101	N44255	**See Item 6**	

8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)			
		X	9A. AMENDMENT OF SOLICITATION NO. N44255-15-R-6002
		X	9B. DATED (SEE ITEM 11) 06-Feb-2015
			10A. MOD. OF CONTRACT/ORDER NO.
			10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[X] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer [X] is extended, [ ] is not extended.

Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

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

[ ] A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

[ ] B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).

[ ] C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

[ ] D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor [ ] is not, [ ] is required to sign this document and return _____ copies to the issuing office.

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

Subject: RM09-1471 Repair Machine Shop Building 431, Naval Base Kitsap, Bremerton, WA

Description continues on page two.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) TEL: EMAIL:	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY (Signature of Contracting Officer)	16C. DATE SIGNED 01-Apr-2015

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

SECTION SF 30 - BLOCK 14 CONTINUATION PAGE

The following have been added by full text:

AMENDMENT 0003

1. The following PPIs were received in response to the RFP:

PPI 0004
Plan Sheet EL-003 is missing from the plan set. Sheet EL-001 is included in its designated space.

Response
There are no "EL" drawings in this project.

PPI 0010
Plan Volume 3: Missing sheet AD-141B – Partial Fourth Floor Demo Plan – Area B
If you look at the volume 3 index, you will see sheet AD-151B listed after AD-141A. However, AD-151B shows up again 3 sheets later correctly named as Partial 5th Floor Demo Plan – Area B. Physically in the plan set, sheet A-141B is placed between AD-141A and AD-141C. A-141B is a duplicate, and shows up again later in the plan set. It appears we are missing sheet AD-141B Partial Fourth Floor Demo Plan – Area B.

Response
Revised sheets G-005 and G-032 are provided. Remove AD-151B and replace with AD-141B.

PPI 0012
Section 31 62 16.17 Micropiles Plan Sheet S-501 Detail M Detail M indicates the use of non-shrink grout for the micropiles. The use of non-shrink grout is not an industry standard due to the expense of this product. Please confirm or clarify your intent for the use of non-shrink grout for the micropiles.

Response
Revised S-501 is provided to eliminate the reference to non-shrink grout.

PPI 0013
Section 31 62 16.17 Micropile Plan Sheet S-003 Structural Note - Micropiles 1) Please confirm the quantity of micropile verification and proof tests that are required. 2) Can production piles be use for the verification load tests? 3) Please clarify the verification and proof load test acceptance criteria. As currently specified in the notes the acceptance criteria for the verification and proof tests are different (verification tests =0.75" @ 1.00 DL and proof tests - 0.5" @ 1.5DL). 4) Is the contractor able to upsize the proof load test threadbar similar to the verification load test?

Response
Revised sheet S-003 is provided to revise the notes.

PPI 0017
Section 31 62 17.2.1.2.4 states that no additives should be added to the grout mix. The industry standard is to use fly-ash as part of the grout mix design to reduce cost and increase ease of pumping. Please clarify if the use of fly-ash will be allowed for the compaction grout mix design.

Response
Fly ash would be considered a supplementary cementitious material, not an additive. It would be acceptable to use fly ash in the mix.

PPI 0018
Specification SECTION 01 30 00 / 1.3, PROGRESS AND COMPLETION PICTURES, describes extensive photographic documentation requirements. SECTION 01 14 00 / 1.5.5 Prohibited Items (1) indicates that personal photographic equipment of any kind is prohibited.
How is the contractor expected to comply with this requirement?

Response
Contractor will arrange monthly with Building Manager (Al Tisthammer) or his designated representative to take photos on site. Building Manager will then submit to PSNS Camera Shop for clearance of photos before release back to contractor. Contractor can then add to photo documentation disc.

PPI 0019
Specification SECTION 01 30 00 / 1.6, SUPERVISION QUALIFICATIONS, contains the following requirement for a CQC role, "Contractor Quality Control (CQC) representative is required on the contract, must hold a Professional Engineer's License". Is this a separate individual than the QCM? The QCM, whose qualifications are specified in SECTION 01 45 00.00 20 / 1.5.1.2 QC Manager Qualifications, and do not require a professional engineer's license.

Response
The CQC and QCM shall be separate persons under their own qualifications.

PPI 0020
Specification SECTION 01 45 00.00 20 / 1.5.7, Submittal Reviewer Duties and Qualifications indicates that "Each submittal must be reviewed by a registered architect or professional engineer." It would be out of the ordinary for a contractor to retain the services of a registered architect for the purposes of reviewing submittals. Is this really the intent of this requirement?

Response
Yes. It is the intent of the Specification to have a qualified professional review and sign-off on each submittal.

PPI 0021
Work Restriction 3-2 from Sheet number Q-011, indicates, "Prior to starting work in the work zone, contractor must pre-commission the shop equipment to document functionality and deficiencies. Once work is complete in the work zone, contractor must re-commission the shop equipment to demonstrate functionality and deficiencies. Contractor is responsible for maintaining existing equipment functionality."

Is the intention that the Building Commissioning agent specified in Section 01 45 00.00 20 / 1.5.2.1 and 1.5.2.2 perform this work and include it in the building commissioning plan?

If not, what are the qualifications required for the individual commissioning the shop equipment?

What specifically is the scope of commissioning and re-commissioning the equipment? Is the intent to assess the overall performance and functionality of the equipment or limited to confirmation that the equipment is "as operational" as it was prior to relocation?

Response
Please see PERFORMANCE WORK STATEMENT (PWS) FOR EQUIPMENT MOVEMENT.

PPI 0022
Please inform Lock-Up Device type at grid intersection 18 / AA, Drawing S-131J

Please inform Detail drawing for LUD location at Grid 18 / B , Drawing S-131J

Please inform Detail drawing for LUD locations at Grid 18 / B.5 , Drawing S-131J

Please inform Detail drawing for LUD location at Grid 27 / A , Drawing S-121F

Please inform Detail drawing for LUD location at Grid 18 / A , Drawing S-121J

Please inform Detail drawing for LUD location at Grid 7 / F , Drawing S-121N

Please inform Detail drawing for LUD location at Grid 7 / A , Drawing S-121Q

Please inform Detail drawing for LUD location at Grid 27 / D.5 , Drawing S-131E

Response
1. S-131J has been revised to identify the type of lock-up devices.

2. See revised S-131J and S-567.

3. See revised S-131J.

4. This condition is the same as the other conditions referenced on Grid 27. Use detail M/S-565.

5. This condition is the same as the other conditions referenced on Grid 18. Use detail M/S-565.

6. See revised S-121N.

7. This condition is the same as the other conditions referenced on Grid 7. Use detail M/S-565.

8. Detail reference on plan (J/S-578) is correct.

Sheets S-131F, S-131Q, and S-566 have also been revised for consistency with these responses.

PPI 0023
Will there be an additional site visit for the project for those contractors that did not attend the meeting on March 2?

Response
No.

PPI 0024
Please confirm if any of the existing steel has lead paint applied to it that would require abatement?

Response
All structural steel in Bldg 431 is painted with lead and/or chromium-containing paint. Means and methods for dealing with that paint should be addressed in the Hazardous Metals Compliance Plan (Section 02 83 13.00 20, Sub-section 1.5.2.2). Welding/cutting on steel coated with hazardous metals containing paint (HMCP) would require establishment of HMCP control areas and require compliance with OSHA regulations for worker training, respiratory protection and exposure monitoring. Abatement would require establishment of HMCP Control Areas and other controls required by the same specification. Lead levels on structural steel in the main building range for 2% to 27% by weight. Levels of lead on structural steel in the south addition and the NDT building are slightly lower, but will still require similar controls for either approach.

PPI 0025
Is there a schedule or drawing that indicates where existing lead paint needs to be removed prior to welding new seismic repair steel to the existing structure?

Response
No, there is not a separate schedule of where existing lead paint needs to be removed prior to welding new seismic repair steel to existing structure. Impacted structural steel areas are identified in structural design drawings. Refer to response to PPI 0024.

PPI 0026
Please indicate locations of the Fire Extinguishers and Cabinets. The current drawings show very few locations on where they need to be removed/ replaced.

Response
Locations where Fire Extinguishers and Cabinets are required are indicated on the drawings by keynote or by symbol. Refer to A-001 for symbols. Examples include A-111D at F.4/28 where existing fire extinguisher is reinstalled and A-111K at E/16 and H/14 for symbol indicating fire extinguisher and cabinet. It is the Contractor's responsibility to find all locations where they are indicated on the drawings.

PPI 0027
Please indicate location(s) of the Wire Mesh Partition(s) per Section 10 22 13.

Response
Section 10 22 13 applies where mesh or expanded metal fences and partitions are indicated on the drawings including AD111D Keynote 14, A-111D Keynote 8; AD111J Keynote #4, A-111J Keynote 2; AD131C Keynote #12, A-131C Keynote 1 and any other location where mesh partitions are indicated or modified.

PPI 0028
Section 14 21 00: Please explain in greater detail what needs to be modernized on the passenger and freight elevators. Most of the specifications list what will be retained instead of what needs to be modernized.

Response
Revised Section 14 21 00 is provided. Part 2.1 b indicates that new components are required unless the specification indicates "retain existing" for a component. The remainder of part 2 of Section 14 21 00 defines whether each existing elevator component will be retained or replaced with a new component as part of the modernization. For example, Part 2.3 provides the specific requirements related to the machines for each elevator. A new geared or gearless machine with an AC motor is specified for passenger elevator 5, along with the addition of an emergency brake device and necessary block up beams to locate deflector sheaves in the machine space. The specification indicates retaining and refurbishing the existing machine for freight elevator 7, providing the specific work for refurbishing the machine. Each part for the remainder of the specification identifies the required new components accordingly for all machine room, hoistway, cab and lobby elevator components. The scope of work matches the approved design reports.

PPI 0029
Section 12 24 13: Please indicate what windows the new roller shades will cover.

Response
Refer to A-141C Keynote 3. That is the only location roller shades are required.

PPI 0030
In light of the bid extension for Building 435 to April 1, 2015, we respectfully request that the proposal delivery date for this project be extended from April 10, 2014 to April 17, 2015. Many of the same subcontractors would be bidding on both of these projects and with the magnitude of coordination needed for both of these it would be greatly beneficial to provide enough time between the two to ensure the maximum volume of subcontractor/ suppliers are bidding and thus providing the best value to the government.

Response
The proposal due date is extended to April 17, 2015 at 2pm local time. Revised SF 1442 and Section 00100 is provided.

2. This amendment is hereby amended to revise drawings with trench drains and rails to match existing after other work is complete.

The following page changes are provided: S111P, S404, S411, S415, S541, S802, S842, S846, S856, PD111P, P-111P.

3. This amendment is hereby amended to provide various changes to Division 01 specifications.

Spec 01 11 00 Para 1.6 - Remove extra Period

Spec 01 33 29.00 20 - Replace Spec entirely with revised 01 33 29.00 20

Spec 01 35 26 Para 1.7.1.d.2.h - Remove "AND LAMPS CONTAINING POLYCHLORINATED BIPHENYLS (PCBs) AND MERCURY" as we are only talking about asbestos here.

Spec 01 35 26 Para 1.8 - Add after 15 calendar days "but no more than 30 calendar days"

Spec 01 45 00.00 20 Para 1.5.2 - Remove "LEED"

Spec 01 45 00.00 20 Para 1.5.2.2 - Change 2nd and 3rd Sentences to "A CA resume is required, providing education, experience and management capabilities on at least two similar size and type contracts. The CA may not have been involved with the project design, construction management, or supervision; and must be with a third-party firm that is not the Designer of Record or the Mechanical Contractor."

Spec 01 50 00 Para 3.3 - Remove orphan "S"

Spec 01 57 19.00 20 Para 1.6.2 - Remove extra blank lines

Spec 01 57 19.01 20 Para 1.4.5.1 - add at end of last paragraph "Bulk waste may not exceed four (4) feet in any dimension."

4. Summary of Revised Documents:

Specifications
Section 00100
SF1442
Section 01 11 00, Page 2
Section 01 33 29.00 20
Section 01 35 26, Pages 9 and 10
Section 01 45 00.00 20, Pages 4-6
Section 01 50 00, Page 5
Section 01 57 19.00 20
Section 01 57 19.01 20
Section 14 21 00 00 20
PWS for Machine Relocation

Drawings
G-005
G-032
S-003
S-111P
S-121N
S-131F
S-131J
S-131Q
S-404
S-411
S-415
S-501

S-541
S-566
S-567
S-802
S-842
S-846
S-856
AD-141B
PD-111P
P-111P

5. All other terms and conditions remain unchanged. The proposal due date is extended to April 17, 2015 at 2pm local time. Offerors are reminded to acknowledge receipt of this amendment in accordance with the RFP instructions when submitting proposals.

SECTION 00010 - SOLICITATION CONTRACT FORM

The required response date/time has changed from 10-Apr-2015 02:00 PM to 17-Apr-2015 02:00 PM.

SECTION 00100 - BIDDING SCHEDULE/INSTRUCTIONS TO BIDDERS

The following have been modified:

SECTION 00100

1. Pre-Proposal Inquiries. Offerors who determine that the technical and/or contractual requirements of this RFP require clarification(s) in order to permit submittal of a responsive proposal shall submit all questions in writing. The pre-proposal inquiry format is provided in Section 00100 **Attachment A**, Pre Proposal Inquiry Form. Pre-Proposal Inquiries shall be submitted via email to andrew.e.hart@navy.mil. Pre-proposal inquiries will be accepted **up to March 25, 2015**

2. Solicitation Information on NECO Website. The solicitation and all amendments will be available for viewing and downloading at https://www.neco.navy.mil and www.fbo.gov upon issuance. Prospective Offerors must register on the NECO website. This is the only method of distribution for the solicitation and amendments. It is the OFFEROR'S RESPONSIBILITY TO CHECK THE NECO AND/OR FBO WEBSITES PERIODICALLY FOR ANY AMENDMENTS ISSUED TO THE SOLICITATION. The Plan Holders List is available at the NECO website.

3. Proposal Format and Due Date. Proposals submitted in response to this solicitation shall be formatted as follows and furnished as stated herein:

3.1 Proposal Due Date, Submission Instructions, and Format. Offerors shall submit proposals in hard copy as follows:

Offerors shall affix their names and return addresses to the upper left corner of the proposal packages. Each package shall include the solicitation number and clearly identify the contents (i.e., "N44255-15-R-6002 ~ PROPOSAL – (Insert Company Name)"), and must be sealed.

Submit proposals to:

Naval Facilities Engineering Command, Northwest
Attn: Mr. Andy Hart

1101 Tautog Circle, Suite 313
Silverdale, WA 98315-1101

If the Offeror is mailing its proposal, mail to the address above. It is the Offeror's responsibility to ensure the package is delivered prior to the time specified. If the Offeror has access to Naval Base Kitsap-Bangor and is hand delivering its proposal to NAVFAC Northwest building 1101, **please call Andy Hart at (360) 396-1861** to make arrangements prior to your arrival, to be met at the lobby. Contractors shall not arrive at the building unannounced. **PLEASE NOTE:** The address listed above is within a controlled area (badge access). Allow yourself ample time for parking and security delays.

For Offerors who are hand-delivering its proposal and have not made prior arrangements, a NAVFAC Northwest employee will be at Pass & ID, Building 1033, Naval Base Kitsap-Bangor, one hour prior to the proposal submittal deadline, and will remain there until the proposal submittal deadline.

Whenever required by the factors, use the factor mandated attachments. For narratives aside from the required forms, the paper dimension shall be 8 ½ x 11". The font size shall be no smaller than 11 pitch. Each copy of the proposal shall be securely fastened/ bound. Tab and label all sections and attachments. Provide a table of contents. For recycling purposes, a soft cover or title sheet is sufficient.

- Technical Proposal: one (1) original with original signature and date, two (2) additional hardcopies copies, and one (1) copy on CD, of Factors 1, 2, 3, 4 and 5.
- Price Proposal: one (1) original with original signature and date, one (1) additional hardcopy.
- The original proposals shall be identified as "Original" on the cover.

CLOSING DATE AND LATE SUBMISSIONS. The closing date and time for receipt of Proposals shall be as follows:

Proposals shall be received no later than <u>2 p.m. local time on April 17, 2015</u>.

3.2 A cover letter shall accompany the technical and price proposals and shall include:

1. The solicitation number;
2. The names, addresses, telephone and facsimile numbers, and e-mail address of the Offeror;
3. Names, titles, phone numbers, facsimiles numbers, and e-mail addresses of persons authorized to negotiate on the Offeror's behalf with the Government in connection with this solicitation, and;
4. Name, title, and signature of person authorized to sign the proposal;
5. DUNS # as required by FAR 52.204-6;
6. Tax ID Number; and
7. Acknowledgement of all amendments.

4. Basis of Award

1. The Government reserves the right to eliminate from consideration for award any or all offers at any time prior to award of the contract; to negotiate with Offerors in the competitive range; and to award the contract to the Offeror submitting the proposal determined to represent the best value—the proposal most advantageous to the Government, price and other factors considered..

2. As stated in the solicitation, the Government intends to evaluate proposals and award a contract without discussions with Offerors (except clarifications as described in FAR 15.306(a)). The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. In addition, if the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.

3. The tradeoff process is selected as appropriate for this acquisition. The Government considers it to be in its best interest to allow consideration of award to other than the lowest priced offeror or other than the highest technically rated offeror.

4. All technical factors when combined are approximately equal in importance to the performance confidence assessment (past performance) rating; and all technical factors and the performance confidence assessment (past performance) rating, when combined are approximately equal to price.

4.1 Evaluation Factors for Award

1. The solicitation requires the evaluation of price and the following non-price factors:

Factor 1 – Experience
Factor 2 – Past Performance
Factor 3 – Safety
Factor 4 – Technical Solution
Factor 5 – Small Business Utilization

The distinction between experience and past performance is that experience pertains to the volume of work completed by a contractor that are comparable to the types of work described under the definition of recent, relevant projects, in terms of size, scope, and complexity. Past performance pertains to both the relevance of recent efforts and how well a contractor has performed on the contracts.

2. The relative order of importance of the non-price evaluation factors:

The relative order of importance of the non- price evaluation factors is that technical Factors 1, 3, 4 and 5 are approximately equal to each other and when combined are approximately equal in importance to the performance confidence assessment (past performance) Factor 2. The combined non- price factors are approximately equal to price.

The importance of price will increase if the Offerors' non-price proposals are considered essentially equal in terms of overall quality, or if price is so high as to significantly diminish the value of a non-price proposal's superiority to the Government. Award will be made to the responsible Offeror whose offer conforms to the solicitation and represents the best value to the Government, price and non-price factors considered.

4.2 Evaluation:

1. The price proposal shall be separate from the technical proposals.
2. Firms must demonstrate that they possess the proven competence and experience to perform the subject solicitation.
3. While the Government may elect to consider data obtained from other sources, the burden of providing detailed, current, accurate, and complete past performance, experience, safety, and management information rests with the Offeror.

4.3 Proposal Submittal Requirements and Basis of Evaluation for Each Factor:

1. Basis of Evaluation and Submittal Requirements for Each Factor.

a. Price:

(1) Submittal Requirements:

(a) Cover letter in accordance with FAR 52.215-1(c)(2), including DUNS number;
(b) Standard Form 1442 (Solicitation, Offer, and Award) – Blocks 14 through 20c completed;

(c) Complete Representations and Certifications in the RFP; including the supplemental certifications included in Section 00600, and ensure SAM is updated or current;
(d) Completed Section 00010, Attachment B, Schedule of Prices for CLINs 0001 -0002 shall be the entire work complete and in accordance with the solicitation; and
(e) Bid Bond in accordance with FAR 52.228-1; and
(f) Acknowledgement of all amendments.

(2) Basis of Evaluation:

The Government will evaluate price based on the total price. Total price consists of CLINs 0001 and 0002. Analysis will be performed by one or more of the following techniques to ensure a fair and reasonable price:

(a) Comparison of proposed prices received in response to the RFP;
(b) Comparison of proposed prices with the Independent Government Cost Estimate;
(c) Comparison of proposed prices with available historical information; and
(d) Comparison of market survey results.

Evaluation of the price proposal will determine the reasonableness of the Offeror's proposal in accordance with FAR 15.404. The total evaluated price will determine the Offeror's comprehension of the requirements of the RFP and the degree to which the proposed price accurately reflects proposed performance. A price found to be either unreasonably high or unrealistically low in relation to the proposed work may negatively impact the Offeror's ranking.

The Bid Bond will be evaluated for accuracy and completeness in accordance with FAR 28.101.

Representations and Certifications will be reviewed in SAM to ensure they are complete.

CLIN 0002 has a statutory cost limitation of $750,000.

b. Technical Factors:

(1) Factor 1 – Experience

(a) Solicitation Submittal Requirements:

The Offeror shall submit the following information:

Submit a minimum of two (2) and a maximum of five (5) construction projects for the Offeror that best demonstrates your experience on relevant projects that are similar in size, scope, and complexity to the RFP. Any projects submitted in excess of the five (5) will not be considered. For purposes of this evaluation, a relevant project is further defined as:

Size: See dollar values as specified under Scope.
Scope:
1) Renovation of large scale military or commercial facilities, including architectural, mechanical and electrical systems with a minimum project cost of $20,000,000 and 100,000 square feet
2) Major structural steel retrofits to meet current seismic standards with a minimum project cost of $20,000,000 and 100,000 square feet
3) HAZMAT remediation including Polychlorinated Biphenyls (PCBs) with a minimum remediation cost of $200,000.
Complexity: Construction within controlled industrial area (CIA) locations and/ or similar heightened security areas

i. Projects submitted for the Offeror shall be substantially complete within the past seven (7) years of the date of issuance of this RFP.

ii. A project is defined as a construction project performed under a single task order or contract. For multiple award and indefinite delivery/indefinite quantity type contracts, the contract as a whole shall not be submitted as a project for evaluation; rather Offerors shall submit the work performed under a task order as a project.

iii. The attached Construction Experience Project Data Sheet (Attachment C-DBB) is MANDATORY and SHALL be used to submit project information. Except as specifically requested, the Government will not consider information submitted in addition to this form. Individual blocks on this form may be expanded; however, total length for each project data sheet shall not exceed one (1) double-sided page (or two (2) single-sided pages).

iv. For all submitted projects, the description of the project shall clearly describe the scope of work performed and the relevancy to the project requirements of this RFP (i.e., unique features, area, construction methods).

v. If the Offeror is a Joint Venture (JV), relevant project experience should be submitted for projects completed by the Joint Venture entity or the Joint Venture partners. Offerors are still limited to a total of five (5) projects combined. Any projects submitted in excess of the five (5) will not be considered. If the Offeror is a joint venture with no combined experience, at least one project from each member shall be submitted.

vi. The Offeror may submit relevant experience from a subcontractor or any other entity they plan to use that will perform major or critical aspects of the requirement to demonstrate construction experience under this evaluation factor. A minimum of two projects must be submitted by the Offeror (matching the DUNS number on the Cover Letter).

vii. If an Offeror is utilizing experience as described in items v and vi, information of JV partner, subcontractor, or any other entity (name, DUNS, and/or address is not exactly as stated on the Cover Letter) they plan to use that will perform major or critical aspects of the requirement, the proposal shall include the following information in Box 10 of Attachment C:

- The proposal shall clearly demonstrate that the JV partner, subcontractor, or any other entity (name, DUNS, and/or address is not exactly as stated on the Cover Letter) will have meaningful involvement in the performance of the contract in order for the information of the JV partner, subcontractor, or any other entity to be considered.

-The proposal shall state specific commitments of technical resources (e.g. personnel, equipment) that the JV partner, subcontractor, or any other entity (name, DUNS, and/or address is not exactly as stated on the Cover Letter) commit to the performance of this contract. In particular, the proposal will clearly state the specific commitments of resources of the JV partner, subcontractor, or any other entity (name, DUNS, and/or address is not exactly as stated on the Cover Letter) member that will be located at the worksites and company offices in the city/area of the project.

-The proposal shall also describe specific roles of the JV partner, subcontractor, or any other entity(name, DUNS, and/or address is not exactly as stated on the Cover Letter) in terms of the work it will either self-perform or manage on behalf of the Offeror in performance of the contract.

-In addition to the narrative, the Offeror shall submit a signed copy of a JV agreement, partnership agreement, teaming agreement, approved mentor protégé agreement(MPA), or letter of commitment for each member of the Offeror’s team identified above (e.g., joint

venture member, partner, team member, subcontractor, parent company, sibling company, subsidiary, or other affiliated company, etc.).

-Failure to comply with these requirements will result in the project being considered not relevant and may result in lower ratings.

(b) Basis of Evaluation:

The basis of evaluation will include the Offeror's demonstrated experience and depth of experience in performing relevant construction projects as defined in the solicitation submittal requirements. The assessment of the Offeror's relevant experience will be used as a means of evaluating the capability of the Offeror to successfully meet the requirements of the RFP. The Government will only review up to five (5) construction projects. Any projects submitted in excess of the five (5) will not be considered.

Every project shall meet at least one scope element, and the corresponding minimum size (i.e. dollar value). Each of the scope and complexity elements must be demonstrated on at least one project. Failure to meet all of the stated criteria will result in lower ratings.

Higher ratings may be given if size, scope (all scope elements), and complexity are demonstrated in a single relevant project.

Higher ratings may be given for relevant projects that demonstrate experience performing construction activities in an occupied operational facility.

Higher ratings may be given if a single scope element is demonstrated on more than two relevant projects.
.
Higher ratings may be given for relevant projects that demonstrate renovation of high bay facilities including architectural, mechanical and electrical systems. A high bay facility is considered an open area of at least three stories and 50,000 square feet.

(2) Factor 2 – Past Performance:

(a) Solicitation Submittal Requirements:

If a completed Construction Contractor Appraisal Support System (CCASS) evaluation is available, it shall be submitted with the proposal for each project included in Factor 1 Experience. If there is not a completed CCASS evaluation then submit Past Performance Questionnaires (Attachment D) for each project included in Factor 2 for both Construction Experience in the proposal. Offerors shall not incorporate by reference into their proposal PPQs previously submitted for other RFPs. However, this does not preclude the Government from utilizing previously submitted PPQ information in the past performance evaluation. If the Offeror is unable to obtain a completed PPQ from a client for a project(s) before proposal closing date, the Offeror shall complete and submit with the proposal the first page of the PPQ, which will provide contract and client information for the respective project(s). The Government may make reasonable attempts to contact the client noted for that project(s) to obtain the PPQ information. However, Offerors shall follow-up with clients/references to help ensure timely submittal of questionnaires. If the client requests, questionnaires may be submitted directly to the Government's point of contact, Mr. Andy Hart, andrew.e.hart@navy.mil.

Offerors may provide any information on problems encountered and the corrective actions taken on projects submitted under Factor 1 – Experience. Offerors may also address any adverse past performance issues. Explanations shall not exceed two (2) double-sided pages (or four (4) single-sided pages) in total.

The Government reserves the right to contact references for verification or additional information. The Government's inability to contact any of the Offeror's references or the references unwillingness to provide the information requested may affect the Government's evaluation of this factor.

Performance award or additional information submitted will not be considered.

(b) Basis of Evaluation:

This evaluation focuses on how well the Offeror performed on the relevant projects submitted under Factor 1 – Experience and past performance on other projects currently documented in known sources. More emphasis will be placed on more relevant projects. In addition to the above, the Government reserves the right to obtain information for use in the evaluation of past performance from any and all sources including sources outside of the Government. Other sources may include, but are not limited to, past performance information retrieved through the Past Performance Information Retrieval System (PPIRS) using all CAGE/DUNS numbers of Contractors who are part of a partnership or joint venture identified in the Offeror's proposal, inquiries of owner representative(s), Federal Awardee Performance and Integrity Information System (FAPIIS), Electronic Subcontract Reporting System (eSRS), and any other known sources not provided by the Offeror.

The Government will consider the currency and relevance of the information, the source of the information, context of the data, and general trends in the Contractor's performance. This evaluation is separate and distinct from the Contracting Officer's responsibility determination. The assessment of the Offeror's past performance will be used as a means of evaluating the Offeror's probability to successfully meet the requirements of the RFP.

Offerors lacking relevant past performance history will not be evaluated favorably or unfavorably in past performance and will receive an Unknown Confidence rating.

(3) Factor 3 – Safety

(a) Submittal Requirements:

The Offeror shall submit the Past Performance Worksheet for Safety (Attachment E). The following data shall be completed on, or attached to the worksheet: (For a partnership or joint venture, the following submittal requirements are required for each contractor who is part of the partnership or joint venture; however, only one safety narrative is required. EMR and DART Rates shall not be submitted for subcontractors.)

i. OSHA Total Recordable Case (TRC) Rate:

For the five (5) [2013, 2012, 2011, 2010, 2009] previous complete calendar years, submit your OSHA Total Recordable Case (TRC) Rate, as defined by the U.S. Department of Labor, Occupational Safety and Health Administration. If you cannot submit an OSHA TRC Rate, affirmatively state so, and explain why. Any extenuating circumstances that affected the OSHA TRC Rate data should be addressed as part of this element. OSHA TRC rates above 4.0, in any of the previous five years, will be considered UNACCEPTABLE, unless an adequate explanation is provided to address the extenuating circumstances that affected the rate.

ii. OSHA Days Away from Work, Restricted Duty, or Job Transfer (DART) Rate:

For the five (5) [2013, 2012, 2011, 2010, 2009] previous complete calendar years, submit your OSHA Days Away from Work, Restricted Duty, or Job Transfer (DART) Rate, as defined by the U.S. Department of Labor, Occupational Safety and Health Administration. If you cannot submit an OSHA DART Rate, affirmatively state so, and explain why. Any extenuating circumstances that affected the OSHA DART Rate data should be addressed as part of this element. OSHA DART rates above 2.0, in any of the previous five years, will be considered UNACCEPTABLE, unless an adequate explanation is provided to address the extenuating circumstances that affected the rate.

iii. Technical Approach for Safety:

Describe the plan that the Offeror will implement to qualify, evaluate, select and oversee its potential subcontractors. The Safety narrative shall be limited to one page. Information in excess of one page will not be considered. Offerors must submit both (1) a plan to include the safety performance of subcontractors in the selection process for all levels of subcontractors and (2) a plan to monitor the safety of those subcontractors during contract performance, highlighting what specific management practices will be in place for providing deliberate safety program management and mishap prevention support to those sub-contractors whose EMR is greater than 1.0, whose TRC is greater than 4.0 and whose DART rate is greater than 2.0. Offerors who fail to submit either of these will be rated UNACCEPTABLE.

(b) Basis of Evaluation:

The Government is seeking to determine whether the Offeror has an acceptable safety record. The Government will evaluate the Offeror's overall safety record as evidenced by the TRC and DART rates, if the Offeror's plan includes safety in the evaluation and selection of subcontractors, and if the narrative includes a plan to monitor the safety performance of subcontractors during performance. The evaluation will collectively consider the following:

- OSHA Total Recordable Case (TRC) Rate
- OSHA Days Away from Work, Restricted Duty, or Job Transfer (DART) Rate
- Offeror Technical Approach to Safety

i. OSHA Days Away from Work, Restricted Duty, or Job Transfer (DART) Rate:

The Government will evaluate the OSHA TRC Rate to determine if the Offeror's OSHA TRC rate is above 4.0 and extenuating circumstances that impact the rates. OSHA TRC rates above 4.0, in any of the previous five years, will be considered UNACCEPTABLE, unless an adequate explanation is provided to address the extenuating circumstances that affected the rate.

ii. OSHA Days Away from Work, Restricted Duty, or Job Transfer (DART) Rate:

The Government will evaluate the OSHA DART Rate to determine if the Offeror's OSHA DART rate is above 2.0 and extenuating circumstances that impact the rates. OSHA DART rates above 2.0, in any of the previous five years, will be considered UNACCEPTABLE, unless an adequate explanation is provided to address the extenuating circumstances that affected the rate.

iii. Technical Approach to Safety:

The Government will evaluate the narrative to determine if subcontractor safety performance will be considered in the qualification, evaluation, selection, of all levels of subcontractors on the upcoming project, and both the plan to monitor the safety of those subcontractors during contract performance, highlighting what specific management practices will be in place for providing deliberate safety program management and mishap prevention support to those sub-contractors whose EMR is greater than 1.0, whose TRC is greater than 4.0 and whose DART rate is greater than 2.0. Offerors who fail to address either of these items (i.e. whether the safety performance of subcontractors will be evaluated in the selection process for all levels of subcontractors and whether the safety of those subcontractors will be monitored during contract performance) will be rated UNACCEPTABLE.

(4) Factor 4 – Technical Solution

(a) Solicitation Submittal Requirements:

Provide a narrative describing the technical solution to the project that meets the requirements of the RFP. The narrative shall not exceed three (3) double-side pages (or six (6) single sided pages) and shall be no smaller than 11 pitch font in 8 ½" and 11" format. The submission shall be in narrative form only. A project schedule in any form (e.g. Gantt Charts, Critical Path Method (CPM) schedules, etc.) will not be evaluated. The narrative shall include the following:

i. A description of the Offeror's approach to accomplishing the project's goals and requirements for completing the project within the required time frame. The narrative shall account for: the construction period (clearly identify the number of calendar days), inspection and testing, administrative submittals, project phasing, construction sequencing, and any critical path items including those submittals that must be accepted/ approved before repair and construction work can begin.

ii. The Offeror shall include a discussion of at least (3) elements that have a potential to negatively impact the critical path and what measures will be taken to mitigate impacts to time and resources.

(b) Basis of Evaluation:

Evaluation of this factor will be a subjective assessment of the Offeror's approach to accomplishing the project's goals and requirements for completing the project within the required timeframe to determine if it is realistic and demonstrates the ability to properly accomplish the requirements of the project. Failure to address any of the submission requirements may result in lower ratings. Restating the RFP requirements may result in lower ratings.

(5) Factor 5, Small Business Utilization

Definitions: "SB" as used herein, is intended to include Small Business concerns, Small Disadvantaged Business concerns (SDB), Women-Owned Small Business concerns (WOSB), Historically Underutilized Business Zone Small Business concerns (HUBZone), Veteran-Owned Small Business concerns (VOSB), and Service-Disabled Veteran-Owned Small Business concerns (SDVOSB). All small business programs are self-certifying programs with the exception of HUBZone certifications, see HUBZone SB Certifications below. Small Business Program requirements and definitions may be found in the Federal Acquisition Regulations (FAR), Part 19.

HUBZone SB Certifications: Offerors are reminded that HUBZone SB concerns must obtain formal certification from the Small Business Administration (SBA) if they expect to receive the evaluation benefits associated with the HUBZone SB programs either as a prime or subcontractor(s). For more information on the HUBZone SB certification requirements and available benefits, contact your local SBA representative. Certified HUBZone SB firms are listed on the U.S. Small Business Administration's Dynamic Small Business Search (DSBS) website at http://web.sba.gov/pro-net/search/dsp_dsbs.cfm. It is the responsibility of the prime contractor to periodically check the DSBS as certifications are subject to change.

(a) Solicitation Submittal Requirements:

i. PAST PERFORMANCE IN UTILIZATION OF SMALL BUSINESS CONCERNS:

Proposals that do not include responses addressing ALL elements of the requirements stated below (a through d) must include an explanation why that element is not addressed. Failure to address all elements will result in lower ratings.

a. Provide performance evaluation ratings (i.e., SF1420, DD2626, or equivalent) obtained on the implementation of small business subcontracting plans for all of the Offeror's projects referenced under Factor 2, Past Performance. Recently completed project evaluations are desired, however, in the absence of recently completed project evaluations, interim ratings for projects that are 80% complete may be considered. If more than five evaluation ratings are provided, only the first five will be considered. In addition, the Government may consider past performance information on other projects as made available to the Government from other sources (such as the Construction Contractor Appraisal Support Systems (CCASS)), Architect-Engineer Contract Administration Support System (ACASS) and Contractor Performance Assessment Reporting System (CPARS)).

b. Provide small business subcontracting history. Large businesses with Federal prime contracting experience shall provide final or current Subcontracting Report for Individual Contracts (SF294) or Individual Subcontracting Reports (ISR's) on prime (only) contracts submitted under Factor 2, Past Performance. If Factor 2 submitted contracts are not prime contracts, submit SF294s or ISRs for contracts of similar scope performed as the prime contractor. If goals were not met on any submitted contracts, an explanation for each unmet goal is required. Large

Businesses with no documented SF294/ISR history shall submit a subcontracting history on Attachment F, Small Business Past Performance. If more than five (5) reports are provided, only the first 5 reports will be considered

c. Small Business proposers shall provide a subcontracting history on Attachment F, Small Business Past Performance.

d. If an Offeror is utilizing past performance information of JV partner, subcontractor, or any other entity (name and/ or DUNS is not exactly as stated on the Cover Letter), the proposal shall clearly demonstrate that the entity will have meaningful participation in the management of the subcontracting program/plan by identifying the personnel or resources from the member companies that will be dedicated to managing the plan, and an organization chart which demonstrates the reporting chain within the membership.

If the Offeror is a Joint Venture, Partnership LLC or other entity consisting of more than one entity, provide past performance information, elements a. through d., for each individual business entity(ies) that will be responsible for managing the subcontracting program/plan.

Proposals including information on any of the following additional elements may be rated higher, based on the evaluated extent to which the information addresses the basis of evaluation:

- Provide information on national-level, and industry-issued awards that Offerors received for outstanding support to SB concerns within the past five (5) years. Include purpose, issuer, and date of award(s). National and industry-issued awards received beyond five (5) years will not be considered.
- Provide information on previous, existing, planned or pending mentor-protégé agreements (MPA) under any Federal Government, or other, program held within the last five years. Information should include, at a minimum, the members, objectives, period of performance, and major accomplishments during the MPA.
- Provide information on past use of Community Rehabilitation Program (CRP) organizations certified under the AbilityOne Program by SourceAmerica, or the National Industry for the Blind (NIB). Information should include the contract type, type of work performed, period of performance, and number of employed severely handicapped persons.

ii. SMALL BUSINESS PARTICIPATION

a. Identify in terms of dollar value and percentage of the total acquisition, the extent of work you will perform as the prime contractor. If submitting an offer as a Joint-Venture, identify the percentage of work each member will be responsible for and indicate the size status of each member, e.g., LB, SB, SDB, WOSB, HUBZone SB, etc.

b. If you are a Large Business, submit a Small Business Subcontracting Plan for this project in the format provided in Attachment G for this factor, to include all information required in the Attachment. If you are a Small Business, submit a subcontracting participation breakdown in the format provided in Attachment H for this factor. All proposers: To demonstrate commitment in using small business concerns, the Small Business Subcontracting Plan or subcontracting participation breakdown may list all subcontractors by name. If the proposed Small Business Subcontracting goals do not meet the minimum NAVFAC Small Business Subcontracting Targets, include a detailed explanation describing the actions taken to arrive at that determination, along with an explanation for the goals that actually were proposed. For proposals submitted on design-build solicitations, the proposer must identify its designer/design team in its Subcontracting Plan or Small Business Participation Breakdown.

(b) Basis of Evaluation:

i. PAST PERFORMANCE IN UTILIZATION OF SMALL BUSINESS CONCERNS

The extent to which the proposal demonstrates the proposer's level of past performance in utilizing Small Business (SB) concerns, AbilityOne, Mentor-Protégé Agreements, and other socio-economic programs, as defined in FAR Parts 26.1 and 26.2, in subcontracting, and in meeting established Small Business subcontracting goals.

ii. SMALL BUSINESS PARTICIPATION

The extent to which the proposer's Small Business Subcontracting Plan establishes reasonable efforts demonstrating the subcontracting targets can be met during the performance of the contract:

A copy of the blank forms to be used for Offeror submission of Small Business Utilization are included as follows:

Attachment F – Small Business Past Performance
Attachment G – Small Business Subcontracting Plan.
Attachment H – Small Business Offeror Small Business Participation Breakdown

The following will be evaluated on all proposals:

- The extent to which the proposal demonstrates maximum practicable participation of SBs in terms of the total value of the acquisition, including options.
- The extent to which the proposal demonstrates a commitment to use SB concerns that are specifically identified in the proposal, including but not limited to use of mentor protégé programs.
- The extent to which the proposal demonstrates SB participation in a variety of industries expected during the performance of work.
- The realism of the proposal to meet the proposed goals.

The following will be evaluated on proposals submitted by Large Business firms:

i. The extent to which the proposal provides Small Business Subcontracting goals that meet or exceed the minimum NAVFAC Small Business Subcontracting Targets, and utilization of AbilityOne CRP organizations. Proposals that provide goals exceeding the NAVFAC Subcontracting Targets may be rated higher. The proposed goals and NAVFAC Subcontracting Targets are expressed as a percentage of total subcontracted values. The minimum NAVFAC Subcontracting Targets are as follows:

FY 15 NAVFAC Subcontracting Targets

Small Business	66.80%
Small Disadvantaged Business	17.27%
Women-Owned Small Business	15.30%
HUBZone Small Business	8.94%
Service-Disabled Veteran-Owned SB	3.03%

ii. The extent to which the proposer's Small Business Subcontracting Plan establishes reasonable efforts demonstrating the subcontracting targets can be met during the performance of the contract:

6. Definitions

A supplemental list of definitions applicable to this solicitation is provided as **Attachment I**.

7. Pre-Proposal Conference –

A pre-proposal conference and site visit will be scheduled. See Section 00100 FAR Clause 52.236-27 Site Visit (Construction) (FEB 1995) – Alternate I (FEB 1995) for specific site visit information. See Attachment J – Short Term Visitor Badge Request and Attachment K – Foreign Interest Determination Questionaire.

EXHIBITS FOR SUBMISSION REQUIREMENTS ARE PROVIDED AS SEPARATE ATTACHMENTS ON THE NAVY ELECTRONIC COMMERCE ONLINE (NECO) WEBSITE AT https://www.neco.navy.mil/

V. ATTACHMENTS

Attachment A – Pre-Proposal Inquiry Form

Attachment B – Schedule of Prices

Attachment C – Construction & Design Experience Project Data Sheet

Attachment D – Past Performance Questionnaire

Attachment E – Past Performance Worksheet for Safety

Attachment F - Small Business Participation Plan

Attachment G – Small Business Subcontracting Plan (Large Businesses)

Attachment H – Small Business Subcontracting Plan (Small Businesses)

Attachment I – Definitions

Attachment J – Short Term Visitor Badge Request

Attachment K – Foreign Interest Determination Questionnaire

Attachment L – SECNAV 5512/ 1 (APR 2014)

(End of Summary of Changes)

SOLICITATION, OFFER, AND AWARD *(Construction, Alteration, or Repair)*	1. SOLICITATION NO. N44255-15-R-6002-0003	2. TYPE OF SOLICITATION [ ] SEALED BID (IFB) [X] NEGOTIATED *(RFP)*	3. DATE ISSUED 06-Feb-2015	PAGE OF PAGES 1 OF 72

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

4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO.	6. PROJECT NO.

7. ISSUED BY CODE N44255	8. ADDRESS OFFER TO *(If Other Than Item 7)* CODE
NAVFAC NORTHWEST 1101 TAUTOG CIRCLE SILVERDALE WA 98315-1101 TEL: FAX:	**See Item 7** TEL: FAX:

9. FOR INFORMATION CALL:	A. NAME	B. TELEPHONE NO. *(Include area code)* *(NO COLLECT CALLS)*
	ANDREW E. HART	360-396-1861

SOLICITATION

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS *(Title, identifying no., date):*

DESIGN-BID-BUILD RM09-1471 BUILDING 431 SEISMIC UPGRADES, NAVAL BASE KITSAP, BREMERTON, WA

Competition: Full and Open

NAICS: 236220

Size Standard: $36.5 Million

Magnitude of Construction: Between $25,000,000 and $100,000,000

Block 13a. See Section 00100

This is a Design-Bid-Build Procurement

FACSIMILE TRANSMISSION OF OFFERS, ACKNOWLEDGEMENT OF AMENDMENTS OR MODIFICATIONS TO OFFERS IS NOT AUTHORIZED

11. The Contractor shall begin performance within 15 calendar days and complete it within 900 calendar days after receiving [X] award, [ ] notice to proceed. This performance period is [X] mandatory, [ ] negotiable. *(See _____ .)*

12 A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? *(If "YES," indicate within how many calendar days after award in Item 12B.)* [X] YES [ ] NO	12B. CALENDAR DAYS 10

13. ADDITIONAL SOLICITATION REQUIREMENTS:

A. Sealed offers in original and 2 copies to perform the work required are due at the place specified in Item 8 by 02:00 PM *(hour)* local time 17 Apr 2015 *(date).* If this is a sealed bid solicitation, offers must be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.

B. An offer guarantee [X] is, [ ] is not required.

C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.

D. Offers providing less than 120 calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

SOLICITATION, OFFER, AND AWARD (Continued)

(Construction, Alteration, or Repair)

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

14. NAME AND ADDRESS OF OFFEROR *(Include ZIP Code)*		15. TELEPHONE NO. *(Include area code)*
		16. REMITTANCE ADDRESS *(Include only if different than Item 14)* **See Item 14**
CODE	FACILITY CODE	

17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due. *(Insert any number equal to or greater than the minimum requirements stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)*

AMOUNTS	SEE SCHEDULE OF PRICES

18. The offeror agrees to furnish any required performance and payment bonds.

19. ACKNOWLEDGMENT OF AMENDMENTS

(The offeror acknowledges receipt of amendments to the solicitation -- give number and date of each)

AMENDMENT NO.										
DATE										

20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER *(Type or print)*	20B. SIGNATURE	20C. OFFER DATE

AWARD ***(To be completed by Government)***

21. ITEMS ACCEPTED:

22. AMOUNT	23. ACCOUNTING AND APPROPRIATION DATA

24. SUBMIT INVOICES TO ADDRESS SHOWN IN *(4 copies unless otherwise specified)*	**ITEM**	25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO ☐ 10 U.S.C. 2304(c) ☐ 41 U.S.C. 253(c)
26. ADMINISTERED BY CODE		27. PAYMENT WILL BE MADE BY: CODE

CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE

☐ 28. NEGOTIATED AGREEMENT *(Contractor is required to sign this document and return _ _ copies to issuing office.)* Contractor agrees to furnish and deliver all items or perform all work, requisitions identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications or incorporated by reference in or attached to this contract.

☐ 29. AWARD *(Contractor is not required to sign this document.)* Your offer on this solicitation, is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.

30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN *(Type or print)*		31A. NAME OF CONTRACTING OFFICER *(Type or print)* TEL: EMAIL:
30B. SIGNATURE	30C. DATE	31B. UNITED STATES OF AMERICA BY
		31C. AWARD DATE

closer than nearest manhole or other structure at which an adjustment in grade can be made.

1.4.1 Notification Prior to Excavation

Notify the Contracting Officer at least 28 calendar days prior to starting excavation work.

1.5 GOVERNMENT-FURNISHED MATERIAL AND EQUIPMENT

Pursuant to Contract Clause "FAR 52.245-2, Government Property (Fixed Price Contracts)", the Government will furnish materials and equipment for installation by the Contractor as shown on Drawings Q-111A to Q-201F and on the FFE Plan.

The FFE Plan has been made to re-use the most of existing furnishings. Quantities stated for the items listed in the Q-sheets and FFE are all that will be furnished by the Government. Existing furnishings or machinery that are damaged by the Contractor shall be repaired or replaced at the expense of the Contractor.

1.5.1 Delivery Schedule

The contractor is directed to submit a equipment moving plan to the Government detailing the timeline of construction. Unless otherwise negotiated with the CO, the Government materials and equipment are to be delivered within 28 days of the specified date of installation.

1.5.2 Delivery Location

The materials and equipment are to be delivered to the Government designated storage area located within 4 miles of the jobsite.

1.6 GOVERNMENT-INSTALLED WORK

Requirements of individual shops in Building 431 are listed on Drawing Sheets Q-101 to Q-701, including government equipment that must be moved to Temporary work zones, those which must remain in place during construction, and those that may be salvaged. The contractor is directed to submit a equipment moving plan to the Government detailing the timeline of construction and to submit outage plans in a timely manner.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

-- End of Section --

SECTION 01 33 29.00 20

SUSTAINABLE REQUIREMENTS
08/13

PART 1 GENERAL

1.1 REFERENCES

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

U.S. DEPARTMENT OF ENERGY (DOE)

ISWG Guiding Principles (2008) High Performance and Sustainable Buildings Guidance

U.S. GREEN BUILDING COUNCIL (USGBC)

LEED NC (2009) Leadership in Energy and Environmental Design(tm) New Construction Rating System

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.~~]~~~~[for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.]~~ The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Preliminary Sustainability Notebook Submittal~~[; G]~~

Preliminary High Performance and Sustainable Building Checklist

SD-07 Certificates

Third Party Certification (TPC)

SD-11 Closeout Submittals

Final Sustainability Notebook Submittal~~[~~; G~~]~~

Final High Performance and Sustainable Building (HPSB/NSEDRC) Checklist~~[~~; G~~]~~

~~[~~ Amended Final Sustainability Notebook Submittal~~[~~; G~~]~~

~~]~~~~[~~ ~~Third Party Certification Plaque and Certificates[; G]~~

~~]~~1.3 GUIDING PRINCIPLES VALIDATION (GPV)

Provide construction related sustainable documentation to verify

achievement of ISWG Guiding Principles Validation (GPV) and completion of High Performance Sustainable Building (HPSB) Checklist. (This is the same checklist called NAVFAC Sustainable Energy Data Record Card (NSEDRC) items in Attachment 1).

Provide the following for GPV:

a. A completed HPSB/NSEDRC Checklist, using the HPSB/NSEDRC Checklist at Attachment 1. Further definitions and requirements are provided in paragraph HPSB/NSEDRC CHECKLIST.

b. Government approval of any changes to the HPSB/NSEDRC Checklist from the Contracting Officer at the Preconstruction Conference. Contracting Officer's approval establishes identified ISWG Guiding Principles Requirements as the project's sustainability goals.

No variations or substitutions to the sustainability requirements are allowed without written consent from the Contracting Officer. Immediately bring to the attention of the Contracting Officer any changes that impact meeting the approved ISWG Guiding Principles Requirements for this project and demonstrate that change will not incur additional construction cost or increase the life cycle cost.

c. Completion of all work required to incorporate the applicable ISWG Guiding Principles Requirements indicated on the HPSB/NSEDRC Checklist and in this contract.

d. Provision of construction related documentation ~~[~~to the Contracting Officer who will provide to the Designer of Record (DOR)~~]~~ to maintain an up-to-date Sustainability Notebook. Supplement construction related documentation containing the following components;

(1) HPSB/NSEDRC Checklist

(2) Sustainability Action Plan

~~[(3) Documentation illustrating Guiding Principle Requirements compliance~~

~~][(4) Commissioning Plan and Reports~~

~~]~~1.3.1 Sustainability Action Plan

Include the following information in the Sustainability Action Plan:

a. Contractor confirmation to achieve each construction relate GP requirement.

~~[~~ b. ~~For each designated construction related ISWG Guiding Principles Requirements that is not achieved, provide narrative explaining how mission, activity, or lack of funded scope for mandatory requirements precludes achieving specific sustainability requirement or goal. Provide analysis of particular requirement and level to which project is able to comply.~~

~~c.~~ Name and contact information for: Contractor's Sustainable POC and other sustainability professional on the Contractor's Staff responsible for ensuring sustainability goals are accomplished and

documentation is assembled.

]1.3.2 Responsibilities

Contractor is responsible for all costs associated with constructing and demonstrating that project complies with approved ISWG Guiding Principles Requirements.

[1.3.3 Calculations

Provide calculations, product data, and certifications required in this section to demonstrate compliance with the ISWG Guiding Principles Requirements.

~~][1.3.4 Third Party Certification (TPC) Documentation~~

~~This project has been designed for, and must be constructed to attain a sustainable rating of [Silver][_____] in accordance with [LEED GBDC][_____]. Project is already registered with the following TPC Organization: [USGBC - LEED] [_____]. Provide construction related sustainable documentation, in the format required by the TPC Organization, to the Contracting Officer for approval, and for final approval by the TPC organization.~~

~~The project has received a [USGBC - LEED] [_____] Design Review.~~

~~Include the following:~~

~~a. Provide the Final TPC Checklist that completes the requirements of the TPC Checklist attached to this specification as Attachment 2.~~

~~b. Approval of the Final TPC Checklist from the Contracting Officer at the Pre-Construction Conference.~~

~~No variations or substitutions to the sustainability requirements are allowed without written consent from the Contracting Officer. Immediately bring to the attention of the Contracting Officer any project changes that impact meeting the approved TPC Requirements for this project. Demonstrate that change will not: incur additional construction cost; increase the life cycle cost; impact previously approved design review credits; or impact required TPC certification level.~~

~~c. Complete all work required to incorporate the applicable TPC Requirements.~~

~~d. Maintain the construction related information, and provide replacement pages, in the Sustainability Notebook pertaining to additions and changes to the approved sustainable requirements. The Sustainability Notebook is in electronic format and is explained in paragraph SUSTAINABLE NOTEBOOK. The Sustainable Notebook contains the following components in addition to the GPV components above:~~

~~(1) TPC Checklist~~

~~(2) Sustainability Action Plan~~

~~(3) Completed TPC documentation for each identified prerequisite and credit. [Forward to the Contracting Officer for approval.][Upload~~

~~onto the TPC Online documentation website.]~~

~~(4) Copy of all correspondence with the TPC organization.~~

~~(5) Commissioning Plan~~

~~e. Include the following information in the Sustainable Action Plan. Provide this TPC information in addition to the GPV Action Plan items above:~~

~~(1) Contractor confirmation to achieve each TPC requirement.~~

~~(2) For each required TPC credit that is attempted but not achieved, provide narrative explaining how mission, activity, or lack of funded scope for TPC pre-requisites or mandatory credits precludes achieving specific sustainability requirement or goal. Provide analysis of particular requirement and level to which project is able to comply.~~

~~(3) Provide the commissioning plan and schedule for performance testing[, and data collection to take place during first year of facility usage].~~

~~(4) Name and contact information for: Contractor's Sustainable POC and other names of sustainability professionals on the Contractor's Staff responsible for ensuring TPC sustainability goals are accomplished and documentation is assembled.~~

~~f. Contractor is responsible for all costs associated with constructing and demonstrating that project complies with approved TPC requirements, including but not limited to:~~

~~(1) TPC coordination with AE/IH Team, TPC website requirements, and management for construction related documentation.~~

~~(2) Construction work required to incorporate TPC prerequisites and credits.~~

~~(3) Submittals required to demonstrating compliance with Government approved TPC checklists.~~

~~g. Provide all calculations, product data, and certifications required in this contract to demonstrate compliance with the TPC Requirements of this section.~~

~~][1.3.5 Third Party Certification (TPC)~~

~~[Contractor is responsible for achieving Third Party Certification (TPC) equivalent to USGBC LEED [Silver] [_____] Certification. The certification must come from USGBC or Government approved equivalent TPC organization. An alternative TPC organization must demonstrate equivalency and provide explanation for Government consideration, prior to use on the project. Third Party Certification is met when Government receives TPC organization certificate and plaque.]~~

~~[Project is already registered with [USGBC - LEED] [____]. The TPC Online management will be turned over to the Contractor, and he must assume full responsibility for management and obtaining Final Certification. The project has received a [USGBC - LEED] [____] Design Review.]~~

~~The TPC Certification requires the following:~~

~~a. Provide the Final TPC Checklist that completes the requirements of the TPC Checklist attached to this specification as Attachment 2.~~

~~b. Obtain approval of the Final TPC Checklist from the Contracting Officer at the Pre-Construction Conference.~~

~~No variations or substitutions to the sustainability requirements are allowed without written consent from the Contracting Officer. Immediately bring to the attention of the Contracting Officer any project changes that impact meeting the approved TPC Requirements for this project. Demonstrate that change will not: incur additional construction cost; increase the life cycle cost; impact previously approved design review credits; or impact required TPC certification level.~~

~~c. Complete all work required to incorporate the applicable TPC Requirements.~~

~~d. Maintain the construction related information, and provide replacement pages, in the Sustainability Notebook pertaining to additions and changes to the approved sustainable requirements. The Sustainability Notebook is in electronic format and is explained in paragraph SUSTAINABLE NOTEBOOK. The Sustainable Notebook contains the following components in addition to the GPV components above:~~

~~(1) TPC Checklist~~

~~(2) Completed TPC Online forms for each identified prerequisite and credit~~

~~(3) Copy of all correspondence with the TPC organization~~

~~(4) Documentation illustrating compliance with TPC requirements~~

~~(5) TPC Award Certificate~~

~~(6) Commissioning Plan~~

~~e. Include the following information in the Sustainable Action Plan. Provide this TPC information in addition to the GPV Action Plan items above:~~

~~(1) Contractor confirmation to achieve each TPC requirement.~~

~~(2) For each required TPC credit that is attempted but not achieved, provide narrative explaining how mission, activity, or lack of funded scope for TPC pre-requisites or mandatory credits precludes achieving specific sustainability requirement or goal. Provide analysis of particular requirement and level to which project is able to comply.~~

~~(3) Name and contact information for: Contractor's Sustainable POC and other names of sustainability professionals on the Contractor's Staff responsible for ensuring TPC sustainability goals are accomplished and documentation is assembled~~

~~(4) Provide the plan and schedule for performance testing, data collection, and commissioning[to take place during first year of facility usage].~~

~~f. Contractor is responsible for all costs associated with constructing and demonstrating that project complies with approved TPC requirements, including but not limited to:~~

~~(1) Final TPC review, certification and plaque fees~~

~~(2) Online (or offline with secure facilities) TPC management and documentation.~~

~~(3) Obtaining TPC certification based on Government-approved sustainability goals.~~

~~(4) Construction work required to incorporate TPC prerequisites and credits.~~

~~(5) Submittals required to demonstrate compliance with Government approved TPC checklists.~~

~~g. Provide all calculations, product data, and certifications required in this specification to demonstrate compliance with the TPC Requirements.~~

~~h. Provide all online (or offline, with secure facilities) TPC management and documentation.~~

~~i. Provide all online (or offline, with secure facilities) TPC management and documentation.~~

~~j. Provide TPC Plaque and Certificates. Use format below to create the Plaque, Certificate and Letter of Congratulations. Forward to parties designated by Contracting Officer:~~

~~(1) Plaque:~~

~~Name: Final Building Name. If unknown, provide Form DD1391 Project Name.~~

~~(2) Certificate:~~

~~Project Title, first line: P-(X); Form DD1391 Project Name).~~

~~Project Title, second line: Building #; Final Building Name (if different from Project Name.)~~

~~(3) Letter Congratulations:~~

~~Address letter to Facility's Installation commander Name. Address the letter to an individual person.~~

~~]~~1.4 SUSTAINABILITY SUBMITTALS REQUIREMENTS

Provide documentation in the Sustainability Notebook and the HPSB/NSEDRC Checklist to indicate compliance with the sustainability requirements of the project.

1.4.1 SUSTAINABILITY NOTEBOOK

Provide and maintain a comprehensive Sustainability Notebook to document compliance with the sustainability requirements identified in the approved HPSB/NSEDRC~~[and TPC]~~ Checklist~~[~~s~~]~~.Sustainability Notebook must contain all required data to support full compliance with the ISWG Guiding Principles Requirements ~~[and TPC requirements]~~. Sustainability Notebook is in the form of an Adobe PDF file; bookmarked at each ISWG Guiding Principles Requirement ~~[, TPC requirement,]~~and sub-bookmarked at each document. Match format to ISWG Guiding Principles numbering system indicated herein. Maintain up to date information, spreadsheets, templates, etc. with each current submittals.~~[For TPC projects, provide a second Table of contents using TPC numbering system. Locate documentation unique to TPC here. Where TPC documentation would repeat GP documentation, insert note referring reviewer to GP documentation.]~~

Contracting Officer may deduct from the monthly progress payment accordingly if Sustainability Notebook information is not current, until information is updated and on track per project goals.

1.4.1.1 Sustainability Notebook Submittal Schedule

Provide Sustainability Notebook Submittals at the following milestones of the project:

a. Preliminary Sustainability Notebook Submittal Submit preliminary Sustainability Notebook for approval at the Pre-construction conference.

b. Construction Progress Meetings. Update GP~~[and TPC]~~ documentation in the Sustainability Notebook~~[and TPC Online tool]~~ for each meeting.

c. Final Sustainability Notebook Submittal

Submit updated Sustainability Notebook within 60 days after the Beneficial Occupancy Date (BOD). Final progress payment retainage may be held by Contracting Officer until Final Sustainable construction phase documentation is complete. ~~[~~Submit three (3) electronic copies of the Final Sustainability Notebook on DVDs to the Government.~~]~~

~~[~~ d. Amended Final Sustainability Notebook Submittal Amend and resubmit the Final Sustainability Notebook to include commissioning, testing and balancing, and collection of performance requirements. Submit three (3) final electronic copies of the Amended Final Sustainability Notebook Submittal on DVDs to the Government no longer than 30 days after the GP, and Cx designated data collection period.

1.4.2 HIGH PERFORMANCE SUSTAINABLE BUILDING (HPSB/NSEDRC) CHECKLIST

Provide construction documentation that provides proof of and supports compliance with the completed HBSP/NSEDRC Checklist.

1.4.2.1 HPSB/NSEDRC Checklist Submittal Schedule

Submit an updated copy of the HPSB/NSEDRC Checklist in the Sustainability Notebook.

a. Preliminary High Performance and Sustainable Building Checklist

(HPSB/NSEDRC) at the Pre-construction meeting.

b. Final High Performance and Sustainable Building (HPSB/NSEDRC) Checklist not less than 60 days after BOD.

The Checklist form is found at the following link;
http://www.wbdg.org/pdfs/navfac_sustainable_energy_data_record_card.pdf

1.5 DOCUMENTATION REQUIREMENTS

~~[Where the following Guiding Principle Requirements are applicable to the Third Party Certification (TPC) project, and have a corresponding LEED requirement cited, the LEED credit is mandatory for TPC Certification. Documentation used to demonstrate TPC compliance may be used to demonstrate GP compliance.~~

~~]~~

Incorporate each of the following ISWG Guiding Principles Requirements into project construction; and provide documentation that proves compliance with each listed requirement. Items below are organized according to the ISWG Guiding Principles. Note that the ISWG Guiding Principles use Roman numerals to denote categories of requirements. The below list adds additional enumeration to further break down the ISWG Guiding Principles into the ISWG Guiding Principles Requirements. Where a Guiding Principle Requirement corresponds with a LEED NC 2009 prerequisite or credit, a LEED cross-reference is cited next to the ISWG Guiding Principles enumeration. Refer to TPC reference manual for reporting requirements.

1.5.1 Commissioning

GP Denotation - I.b.~~; LEED - EAp1 and LEED - EAc3~~

~~[~~ Work with the Government's CxA to achieve requirements of the Commissioning (Cx) plan and other construction document requirements at each stage of commissioning. Maintain up-to-date records of commissioning activities in the Sustainable Notebook.

~~][Using a qualified commissioning (Cx) authority, develop and incorporate Cx requirements into the construction documents. Develop and implement a Cx plan. Verify the installation and performance of the systems to be commissioned, including no less than: HVAC&R systems and associated controls, lighting and daylighting controls, domestic hot water systems, and renewable energy systems. Complete a summary Cx report.~~

~~Provide the following documentation:~~

~~a. Commissioning Authority certifications~~

~~b. Commissioning Authority qualifications~~

~~c. Commissioning meeting minutes during construction~~

~~d. Commissioning Plan, updated at each project stage~~

~~e. For each commissioned system, completed pre-startup checklist, completed functional verification checklist and performance verification test report.~~

~~f. Final commissioning report and narrative demonstrating project's~~

~~fundamental commissioning requirements have been successfully executed~~

~~]~~1.5.2 Energy Efficient Equipment

GP Denotation - II.a.2.

Provide only energy-using equipment that is Energy Star rated, or has the Federal Energy Management Program (FEMP) recommended efficiency. Where Energy Star or FEMP recommendations have not been established, provide equipment with efficiency in the top 25 percent for the type of equipment procured. Provide only energy using equipment that meets FEMP requirements for low standby power consumption. Energy efficient equipment can be found at: http://www1.eere.energy.gov/femp/ and http://www.energystar.gov/.

Provide the following documentation:

Proof that equipment is energy efficient and complies with the cited requirements.

1.5.3 Benchmarking

GP Denotation - II.e.1.

Provide report of baseline data with the energy design targets.

Provide the following documentation:

Prefinal Performance Report with data collected from the first 60 days of operation of the facility after Beneficial Occupancy Date (BOD). Submit this information with the Final Sustainability Notebook Submittal.

1.5.4 Reduce Volatile Organic Compounds (VOC)

GP Denotation - IV.d.~~; LEED - IEQc4.1, IEQc4.2, IEQ,4.3, IEQc4.4, IEQc4.5 and IEQc 4.6~~

Provide materials and products with ingredients, components and emissions that meet the volatile organic compound levels cited in UFC 1-200-02, "High Performance and Sustainable Building Requirements". Products include adhesives, sealants, paints, coatings, carpet and flooring systems, wood panel products, furnishings, walls, and ceilings.

Provide the following documentation:

a. Documentation showing that materials do not exceed maximum VOC emissions of cited standards. Use VOC averaging to assure maximum paint and coating performance on painted items that are subject to human contact or harsh environmental conditions.

b. Documentation showing that flooring materials comply with VOC emissions of cited standards.

c. Documentation showing that composite wood and agrifiber products and associated laminating adhesives contain no added urea-formaldehyde.

d. Documentation showing that furniture and seating is third-party certified.

e. Documentation showing that all gypsum board, insulation, acoustical ceiling systems and wall coverings installed in building interior meet cited standards.

1.5.5 Indoor Air Quality During Construction

GP Denotation - IV.e. ~~;LEED - IEQc3.1 and IEQc3.2~~

Prior to construction, create indoor air quality plan. Implement IAQ plan during construction and flush building air before occupancy.

Provide the following documentation:

IAQ management plan for the construction and preoccupancy phases of the building that has been developed and implemented in accordance with Sheet Metal and Air Conditioning Contractor's National Association (SMACNA) Indoor Air Quality Guidelines for Occupied Buildings Under Construction 2007.

Provide required documentation showing that after construction ends and prior to occupancy, new HVAC filters were installed, and building air was flushed out a minimum of 72-hours with maximum outdoor air consistent with achieving relative humidity no greater than 60 percent, and indoor air temperature maintained at minimum 60 degrees Fahrenheit.

1.5.6 Recycled Content

Denotation - Va~~; LEED - MRc4~~

Provide materials on this project with aggregated total recycled content greater than 10 percent

Provide the following documentation:

a. Documentation showing total amount of recycled content contained in building materials as a percentage of total cost of all building materials on the project (mechanical, electrical, and plumbing components, and specialty items such as elevators excluded).

b. Substitutions: In case of conflict between project's recycled content goals and individual technical section requirements, Contractor may submit for Government approval, proposed alternative products or systems that provide equivalent performance and appearance and have greater contribution to project recycled content requirements. For all such proposed substitutions, submit with the Sustainability Action Plan accompanied by product data demonstrating equivalence.

1.5.7 Bio-Based Products

GP Denotation - V.b.1~~[; LEED - MRc6]~~

Use bio-based products. Bio-based is defined as commercial or industrial products (other than food or feed) that are composed in whole, or in significant part, of biological products, renewable agricultural materials (including plant, animal, and marine materials), or forestry materials. Refer to www.biopreferred.gov.

Provide the following documentation:

Documentation to indicate bio-based products have been used.

1.5.8 Landfill Disposal

GP Denotation - V.d.1~~; LEED - MRc2~~

Divert 60 percent or more of construction waste from landfill disposal.

Provide the following documentation:

Documentation showing total amount of construction debris diverted from landfill as a percentage of all construction debris on the project.

Include project's Construction Waste Management Plan and all dumpster haul tickets.

1.5.9 Ozone Depleting Substances

GP Denotation - V.e~~; LEED - EAp3[, and LEED - EAc4]~~

Eliminate the use of ozone depleting substances during and after construction where alternative environmentally preferable products are available and in accordance with either the Montreal Protocol and Title VI of the Clean Air Act Amendment of 1990 or equivalent overall air quality benefits that take into account lifecycle impacts.

Provide the following documentation:

a. MSDS sheets for all refrigerants provided

b. Products that meet the criteria of U.S. EPA Significant New Alternatives Policy, available at http://www.epa.gov/ozone/snap/index.html.

1.5.10 Validation and Certification Restrictions

The purchase of renewable energy credits (RECs) to meet project sustainable goals is prohibited.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 SUSTAINABILITY COORDINATION

3.1.1 Coordinating Sustainability Documentation Progress

Provide sustainability focus and coordination at the following meetings to achieve sustainability goals. Contractor's designated ~~[TPC accredited]~~ sustainability professional responsible for GP ~~[and TPC]~~ documentation must participate in the following meetings to coordinate documentation completion.

a. Pre-Construction Conference: Discuss the following: ~~[TPC and]~~ HPSB/NSEDRC Checklist~~[s]~~, Sustainability Action Plan, Construction submittal requirements and schedule, individuals responsible for achieving each Guiding Principle Requirement~~[and TPC prerequisite and~~

~~credit]~~.

b. Construction Progress Meetings: Review GP~~[and TPC]~~ sustainability requirements with project team including contractor and sub-contractor representatives. Demonstrate GP~~[and TPC]~~ documentation is being collected and updated to the Sustainability Notebook~~[and TPC Online tool]~~.

(1) Project Closeout Meetings (Begin closeout meetings no later than 75 percent construction complete): Review Sustainability Notebook ~~[, and TPC Online submission]~~ for completeness and identify any outstanding issues relating to final documentation requirements.

(2) Final Sustainability Notebook Review

~~[3.2 SUSTAINABILITY AWARD~~

~~Finalize the sustainability certification process and obtain the TPC Certification Plaque and Certificates, indicating completion of the projects sustainability goals.~~

~~3.2.1 Third Party Certification Plaque and Certificates~~

~~Obtain and install plaque and provide one original framed copy of the certificate. Mount certificates in 1 inch deep metal frames, with double matt, and wire hangers. Obtain [_____] additional certificates, and deliver to Contractor Officer, unless otherwise instructed. Hang the Plaque in a prominent interior location approved by the Contracting Officer.~~

~~]~~ -- End of Section --

hazards in the work place and during different phases of construction. Address how to protect and prevent workers from falling to lower levels when they are exposed to fall hazards above 6 feet. A qualified person for fall protection shall prepare and sign the program documentation. Include fall protection and prevention systems, equipment and methods employed for every phase of work, responsibilities, assisted rescue, self-rescue and evacuation procedures, training requirements, and monitoring methods. Revise the Fall Protection and Prevention Program documentation every six months for lengthy projects, reflecting any changes during the course of construction due to changes in personnel, equipment, systems or work habits. Keep and maintain the accepted Fall Protection and Prevention Program documentation at the job site for the duration of the project. Include the Fall Protection and Prevention Program documentation in the Accident Prevention Plan (APP).

The FP&P Plan shall include a Rescue and Evacuation Plan in accordance with USACE EM 385-1-1, Section 21.M. The plan shall include a detailed discussion of the following: methods of rescue; methods of self-rescue; equipment used; training requirement; specialized training for the rescuers; procedures for requesting rescue and medical assistance; and transportation routes to a medical facility. Include the Rescue and Evacuation Plan in the Fall Protection and Prevention (FP&P) Plan, and as part of the Accident Prevention Plan (APP).

f. Occupant Protection Plan. The safety and health aspects of lead-based paint removal, prepared in accordance with Section 02 82 33.13 20 HAZARDOUS METALS IN CONSTRUCTION.

g. Lead Compliance Plan. The safety and health aspects of lead work, prepared in accordance with Section 02 83 13.00 20 HAZARDOUS METALS IN CONSTRUCTION.

h. Asbestos Hazard Abatement Plan. The safety and health aspects of asbestos work, prepared in accordance with Section 02 82 16 HANDLING OF LIGHTING BALLASTS~~ AND LAMPS CONTAINING POLYCHLORINATED BIPHENYLS (PCBs) AND MERCURY~~.

i. Site Safety and Health Plan. The safety and health aspects prepared in accordance with Section 01 35 26 GOVERNMENT SAFETY REQUIREMENTS.

j. PCB Plan. The safety and health aspects of Polychlorinated Biphenyls work, prepared in accordance with Sections 02 84 16 HANDLING OF LIGHTING BALLASTS AND LAMPS CONTAINING POLYCHLORINATED BIPHENYLS (PCBs) AND MERCURY and 02 84 33 REMOVAL AND DISPOSAL OF PCBs.

k. Site Demolition Plan. The safety and health aspects prepared in accordance with Section 02 41 00 DEMOLITION and referenced sources. Include engineering survey as applicable.

l. Excavation Plan. The safety and health aspects prepared in accordance with Section 31 23 00.00 20 EXACAVATION AND FILL.

1.8 ACTIVITY HAZARD ANALYSIS (AHA)

The Activity Hazard Analysis (AHA) format shall be in accordance with USACE EM 385-1-1, Section 1. Submit the AHA for review at least 15 calendar days **but no more than 30 calendar days** prior to the start of each

phase. Format subsequent AHAs as amendments to the APP. The analysis should be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls.

The AHA list will be reviewed periodically (at least monthly) at the Contractor supervisory safety meeting and updated as necessary when procedures, scheduling, or hazards change.

Develop the activity hazard analyses using the project schedule as the basis for the activities performed. Any activities listed on the project schedule will require an AHA. The AHA's will be developed by the contractor, supplier or subcontractor and provided to the prime contractor for (review and acceptance by the SSHO and QC, prior to formal submittal to the contracting officer.)

1.9 DISPLAY OF SAFETY INFORMATION

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

a. Confined space entry permit.

b. Hot work permit.

1.10 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in the article "References." Maintain applicable equipment manufacturer's manuals.

1.11 EMERGENCY MEDICAL TREATMENT

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

1.12 NOTIFICATIONS and REPORTS

1.12.1 Accident Notification

Notify the Contracting Officer as soon as practical, but no more than two hours after any accident meeting the definition of Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than $2,000, or any weight handling equipment accident. Within notification include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted.

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. 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 except for those phases of control designated to be performed by QC Specialists, 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 the QC Specialists, 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

A graduate of a four year accredited college or university program in one of the following disciplines: Engineering, Architecture, Construction Management, Engineering Technology, Building Construction, or Building Science, with a minimum of 10 years experience as a 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 ~~LEED~~ Commissioning Authority

1.5.2.1 Duties

Provide a Commissioning Authority (CA) as key person for the Cx and documentation thereof, who is subordinate to the QC Manager. The CA directs and coordinates Cx activities. The CA coordinates the actions of the QC Specialists, Testing Laboratory personnel, eOMSI Preparer, and other inspection and testing personnel required by this Contract for building Cx.

1.5.2.2 Qualifications

The CA must be certified as a commissioning professional by the Association of Energy Engineers (AEE), the Building Commissioning Association (BCA), the National Environmental Balancing Bureau (NEBB), or the University of Wisconsin - Madison (UWM). A CA resume is required, providing education, experience and management capabilities on at least two similar size and type contracts. The CA may not have been involved with the project design, construction management, or supervision, and must be with a third-party firm that is not ~~on~~ the ~~design team~~**Designer of Record or the Mechanical Contractor**.

1.5.3 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.

1.5.4 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.

1.5.5 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.

Qualification/Experience in Area of Responsibility	Area of Responsibility	Frequency of attendance at CQC Meeting
5 years	Structural Construction	2 weeks
3 years	Hazardous Material Handling	2 weeks
	HVAC Installation	
5 years	Fire Protection Specialist	Monthly
3 Years		Monthly

1.5.6 Registered Fire Protection Engineer

The U.S. Registered Fire Protection Engineer (FPE) shall be an independent third party hired directly by the Prime Contractor as an integral part of the Prime Contractor's Quality Control Organization. This FPE must have no business relationships (owner, partner, operating officer, distributor, salesman, or technical representative) with any subcontractors involved with this project, or with any fire protection equipment device manufacturers, suppliers or installers for any such equipment provided as part of this project. This FPE is responsible for review, approval, and coordination of all fire protection system material submittals, calculations, shop drawings, etc.

1.5.7 Submittal Reviewer Duties and Qualifications

Provide a Submittal Reviewer, other than the QC Manager or CA, qualified in the discipline being reviewed, to review and certify that the submittals meet the requirements of this Contract prior to certification or approval by the QC Manager.

Each submittal must be reviewed by an individual with 10 years of construction experience.

Each submittal must be reviewed by a registered architect or professional engineer.

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

safety fencing at the work site. The safety fencing must be a high visibility orange colored, high density polyethylene grid or approved equal, a minimum of 42 inches high, supported and tightly secured to steel posts located on maximum 10 foot centers, constructed at the approved location. Maintain the safety fencing during the life of the contract and, upon completion and acceptance of the work, will become the property of the Contractor and be removed from the work site.

3.3 CLEANUP

Remove construction debris, waste materials, packaging material and the like from the work site daily. Any dirt or mud which is tracked onto paved or surfaced roadways must be cleaned away. ~~S~~

3.4 RESTORATION OF STORAGE AREA

Upon completion of the project remove the bulletinboard, signs, barricades, haulroads, and any other temporary products from the site within 15 working days. After removal of trailers, materials, and equipment from within the fenced area, remove the fence that will become the property of the Contractor. Restore to the original or better condition, areas used by the Contractor for the storage of equipment or material, or other use. Gravel used to traverse grassed areas must be removed and the area restored to its original condition, including top soil and seeding as necessary.

-- End of Section --

SECTION 01 57 19.00 20

TEMPORARY ENVIRONMENTAL CONTROLS
11/11

PART 1 GENERAL

1.1 REFERENCES

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

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA 530/F-93/004	(1993; Rev O; Updates I, II, IIA, IIB, and III) Test Methods for Evaluating Solid Waste (Vol IA, IB, IC, and II) (SW-846)

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
40 CFR 112	Oil Pollution Prevention
40 CFR 112.7	General Requirements for Spill Prevention, Control, and Countermeasure Plans
40 CFR 241	Guidelines for Disposal of Solid Waste
40 CFR 243	Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste
40 CFR 258	Subtitle D Landfill Requirements
40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 263	Standards Applicable to Transporters of Hazardous Waste
40 CFR 264	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 265	Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 266	Standards for the Management of Specific

	Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities
40 CFR 268	Land Disposal Restrictions
40 CFR 270	EPA Administered Permit Programs: The Hazardous Waste Permit Program
40 CFR 271	Requirements for Authorization of State Hazardous Waste Programs
40 CFR 272	Approved State Hazardous Waste Management Programs
40 CFR 273	Standards For Universal Waste Management
40 CFR 279	Standards for the Management of Used Oil
40 CFR 280	Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST)
40 CFR 300	National Oil and Hazardous Substances Pollution Contingency Plan
40 CFR 355	Emergency Planning and Notification
40 CFR 372-SUBPART D	Specific Toxic Chemical Listings
40 CFR 60	Standards of Performance for New Stationary Sources
40 CFR 63	National Emission Standards for Hazardous Air Pollutants for Source Categories
40 CFR 82	Protection of Stratospheric Ozone
49 CFR 171	General Information, Regulations, and Definitions
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements
49 CFR 173	Shippers - General Requirements for Shipments and Packagings
49 CFR 178	Specifications for Packagings

1.2 DEFINITIONS

1.2.1 Sediment

Soil and other debris that have eroded and have been transported by runoff water or wind.

1.2.2 Solid Waste

Garbage, refuse, debris, sludge, or other discharged material, including solid, liquid, semisolid, or contained gaseous materials resulting from domestic, industrial, commercial, mining, or agricultural operations. Types of solid waste typically generated at construction sites may include:

a. Green waste: The vegetative matter from landscaping, land clearing and grubbing, including, but not limited to, grass, bushes, scrubs, small trees and saplings, tree stumps and plant roots. Marketable trees, grasses and plants that are indicated to remain, be re-located, or be re-used are not included.

b. Surplus soil: Existing soil that is in excess of what is required for this work, including aggregates intended, but not used, for on-site mixing of concrete, mortars and paving. Contaminated soil meeting the definition of hazardous material or hazardous waste is not included.

c. Debris: Non-hazardous solid material generated during the construction, demolition, or renovation of a structure which exceeds 2.5 inch particle size that is: a manufactured object; plant or animal matter; or natural geologic material (e.g. cobbles and boulders), broken or removed concrete, masonry, and rock asphalt paving; ceramics; roofing paper and shingles. Inert materials may] be reinforced with or contain ferrous wire, rods, accessories and weldments. A mixture of debris and other material such as soil or sludge is also subject to regulation as debris if the mixture is comprised primarily of debris by volume, based on visual inspection.

d. Wood: Dimension and non-dimension lumber, plywood, chipboard, hardboard. Treated and/or painted wood that meets the definition of lead contaminated or lead based contaminated paint is not included.

e. Scrap metal: Scrap and excess ferrous and non-ferrous metals such as reinforcing steel, structural shapes, pipe and wire that are recovered or collected and disposed of as scrap. Scrap metal meeting the definition of hazardous material or hazardous waste is not included.

f. Paint cans: Metal cans that are empty of paints, solvents, thinners and adhesives. If permitted by the paint can label, a thin dry film may remain in the can.

g. Recyclables: Materials, equipment and assemblies such as doors, windows, door and window frames, plumbing fixtures, glazing and mirrors that are recovered and sold as recyclable. Metal meeting the definition of lead contaminated or lead based paint contaminated may be included as recyclable if sold to a scrap metal company. Paint cans may be included as recyclable if sold to a scrap metal company.

h. Hazardous Waste: By definition, to be a hazardous waste a material must first meet the definition of a solid waste. Hazardous waste and hazardous debris are special cases of solid waste. They have additional regulatory controls and must be handled separately. They are thus defined separately in this document.

Material not regulated as solid waste are: nuclear source or byproduct materials regulated under the Federal Atomic Energy Act of 1954 as amended; suspended or dissolved materials in domestic sewage effluent or irrigation return flows, or other regulated point source

discharges; regulated air emissions; and fluids or wastes associated with natural gas or crude oil exploration or production.

1.2.3 Hazardous Debris

As defined in Solid Waste paragraph, debris that contains listed hazardous waste (either on the debris surface, or in its interstices, such as pore structure) per 40 CFR 261; or debris that exhibits a characteristic of hazardous waste per 40 CFR 261.

1.2.4 Chemical Wastes

This includes salts, acids, alkalizes, herbicides, pesticides, and organic chemicals.

1.2.5 Garbage

Refuse and scraps resulting from preparation, cooking, dispensing, and consumption of food.

1.2.6 Hazardous Waste

Any discarded material, liquid, solid, or gas, which meets the definition of hazardous material or is designated hazardous waste by the Environmental Protection Agency or State Hazardous Control Authority as defined in 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, 40 CFR 268, 40 CFR 270, 40 CFR 271, 40 CFR 272, 40 CFR 273, 40 CFR 279, and 40 CFR 280.

1.2.7 Hazardous Materials

Hazardous materials as defined in 49 CFR 171 and listed in 49 CFR 172.

Hazardous material is any material that:

a. Is regulated as a hazardous material per 49 CFR 173, or

b. Requires a Material Safety Data Sheet (MSDS) per 29 CFR 1910.120, or

c. During end use, treatment, handling, packaging, storage, transpiration, or disposal meets or has components that meet or have potential to meet the definition of a hazardous waste as defined by 40 CFR 261 Subparts A, B, C, or D.

Designation of a material by this definition, when separately regulated or controlled by other instructions or directives, does not eliminate the need for adherence to that hazard-specific guidance which takes precedence over this instruction for "control" purposes. Such material include ammunition, weapons, explosive actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical supplies, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos, mercury, and polychlorinated biphenyls (PCBs). Nonetheless, the exposure may occur incident to manufacture, storage, use and demilitarization of these items.

1.2.8 Waste Hazardous Material (WHM)

Any waste material which because of its quantity, concentration, or

physical, chemical, or infectious characteristics may pose a substantial hazard to human health or the environment and which has been so designated. Used oil not containing any hazardous waste, as defined above, falls under this definition.

1.2.9 Oily Waste

Those materials which are, or were, mixed with used oil and have become separated from that used oil. Oily wastes also means materials, including wastewaters, centrifuge solids, filter residues or sludges, bottom sediments, tank bottoms, and sorbents which have come into contact with and have been contaminated by, used oil and may be appropriately tested and discarded in a manner which is in compliance with other State and local requirements.

This definition includes materials such as oily rags, "kitty litter" sorbent clay and organic sorbent material. These materials may be land filled provided that:

a. It is not prohibited in other State regulations or local ordinances

b. The amount generated is "de minimus" (a small amount)

c. It is the result of minor leaks or spills resulting from normal process operations

d. All free-flowing oil has been removed to the practical extent possible

Large quantities of this material, generated as a result of a major spill or in lieu of proper maintenance of the processing equipment, are a solid waste. As a solid waste, a hazardous waste determination must be performed prior to disposal. As this can be an expensive process, it is recommended that this type of waste be minimized through good housekeeping practices and employee education.

1.2.10 Regulated Waste

Those solid wastes that have specific additional Federal, state, or local controls for handling, storage, or disposal.

1.2.11 Class I and II Ozone Depleting Substance (ODS)

Class I ODS is defined in Section 602(a) of The Clean Air Act and includes the following chemicals:

chlorofluorocarbon-11 (CFC-11)
chlorofluorocarbon-12 (CFC-12)
chlorofluorocarbon-13 (CFC-13)
chlorofluorocarbon-111 (CFC-111)
chlorofluorocarbon-112 (CFC-112)
chlorofluorocarbon-113 (CFC-113)

chlorofluorocarbon-114 (CFC-114)
chlorofluorocarbon-115 (CFC-115)
chlorofluorocarbon-211 (CFC-211)
chlorofluorocarbon-212 (CFC-212)
chlorofluorocarbon-213 (CFC-213)
chlorofluorocarbon-214 (CFC-214)
chlorofluorocarbon-215 (CFC-215)
chlorofluorocarbon-216 (CFC-216)
chlorofluorocarbon-217 (CFC-217)
chlorofluorocarbon-500 (CFC-500)
chlorofluorocarbon-502 (CFC-502)
chlorofluorocarbon-503 (CFC-503)
halon-1211
halon-1301
halon-2402
carbon tetrachloride
methyl bromide
methyl chloroform

Class II ODS is defined in Section 602(s) of The Clean Air Act and includes the following chemicals:

hydrochlorofluorocarbon-21 (HCFC-21)
hydrochlorofluorocarbon-22 (HCFC-22)
hydrochlorofluorocarbon-31 (HCFC-31)
hydrochlorofluorocarbon-121 (HCFC-121)
hydrochlorofluorocarbon-122 (HCFC-122)
hydrochlorofluorocarbon-123 (HCFC-123)
hydrochlorofluorocarbon-124 (HCFC-124)
hydrochlorofluorocarbon-131 (HCFC-131)

hydrochlorofluorocarbon-132 (HCFC-132)
hydrochlorofluorocarbon-133 (HCFC-133)
hydrochlorofluorocarbon-141 (HCFC-141)
hydrochlorofluorocarbon-142 (HCFC-142)
hydrochlorofluorocarbon-221 (HCFC-221)
hydrochlorofluorocarbon-222 (HCFC-222)
hydrochlorofluorocarbon-223 (HCFC-223)
hydrochlorofluorocarbon-224 (HCFC-224)
hydrochlorofluorocarbon-225 (HCFC-225)
hydrochlorofluorocarbon-226 (HCFC-226)
hydrochlorofluorocarbon-231 (HCFC-231)
hydrochlorofluorocarbon-232 (HCFC-232)
hydrochlorofluorocarbon-233 (HCFC-233)
hydrochlorofluorocarbon-234 (HCFC-234)
hydrochlorofluorocarbon-235 (HCFC-235)
hydrochlorofluorocarbon-251 (HCFC-251)
hydrochlorofluorocarbon-252 (HCFC-252)
hydrochlorofluorocarbon-253 (HCFC-253)
hydrochlorofluorocarbon-261 (HCFC-261)
hydrochlorofluorocarbon-262 (HCFC-262)
hydrochlorofluorocarbon-271 (HCFC-271)

1.2.12 Universal Waste

The universal waste regulations streamline collection requirements for certain hazardous wastes in the following categories: batteries, pesticides, mercury-containing equipment (e.g., thermostats) and lamps (e.g., fluorescent bulbs). The rule is designed to reduce hazardous waste in the municipal solid waste (MSW) stream by making it easier for universal waste handlers to collect these items and send them for recycling or proper disposal. These regulations can be found at 40 CFR 273.

1.3 SUBMITTALS

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

SD-01 Preconstruction Submittals

Solid Waste Management Plan and Permit; G

Regulatory Notifications; G

Environmental Protection Plan; G

Dirt and Dust Control Plan

Contractor Hazardous Material Inventory Log; G

SD-06 Test Reports

Laboratory Analysis

Solid Waste Management Report; G

SD-07 Certificates

Contractor 40 CFR employee training records

ECATTS certificate of completion

SD-11 Closeout Submittals

Some of the records listed below are also required as part of other submittals. For the "Records" submittal, maintain on-site a separate three-ring Environmental Records binder and submit at the completion of the project. Make separate parts to the binder corresponding to each of the applicable sub items listed below.

Waste Determination Documentation

Disposal Documentation for Hazardous and Regulated Waste

Contractor 40 CFR Employee Training Records

Solid Waste Management Permit

Solid Waste Management Report

Contractor Hazardous Material Inventory Log; G

Hazardous Waste/Debris Management

Regulatory Notifications

1.4 ENVIRONMENTAL PROTECTION REQUIREMENTS

Provide and maintain, during the life of the contract, environmental protection as defined. Plan for and provide environmental protective measures to control pollution that develops during normal construction practice. Plan for and provide environmental protective measures required to correct conditions that develop during the construction of permanent or temporary environmental features associated with the project. Comply with Federal, State, and local regulations pertaining to the environment, including water, air, solid waste, hazardous waste and substances, oily

substances, and noise pollution.

The Contractor may be required to promptly conduct tests and procedures for the purpose of assessing whether construction operations are in compliance with Applicable Environmental Laws. Analytical work shall be done by qualified laboratories; and where required by law, the laboratories shall be certified.

1.4.1 Environmental Compliance Assessment Training and Tracking System (ECATTS)

The QC Manager is responsible for environmental compliance on projects unless an Environmental Manager is named. The QC Manager (and alternative QC Manager) or Environmental Manager must complete ECATTS training prior to starting respective portions of on-site work under this contract. If personnel changes occur for any of these positions after starting work, replacement personnel must complete ECATTS training within 14 days of assignment to the project

Submit an ECATTS certificate of completion for personnel who have completed the required "Environmental Compliance Assessment Training and Tracking System (ECATTS)" training. This training is web-based and can be accessed from any computer with Internet access using the following instructions.

Register for NAVFAC Environmental Compliance Training and Tracking System, by logging on to http://navfac.ecatts.com/. Obtain the password for registration from the Contracting Officer.

This training has been structured to allow contractor personnel to receive credit under this contract and also to carry forward credit to future contracts. Contractors shall ensure that the QC Manager (and alternate QC Manager) or Environmental Manager review their training plans for new modules or updated training requirements prior to beginning work. Some training modules are tailored for specific State regulatory requirements; therefore, Contractors working in multiple states will be requires to re-take modules tailored to the state where the contract work is being performed.

ECATTS is available for use by all contractor and subcontractor personnel associated with this project. These other personnel are encouraged (but not required) to take the training and may do so at their discretion.

1.5 QUALITY ASSURANCE

1.5.1 Regulatory Notifications

The Contractor is responsible for all regulatory notification requirements in accordance with Federal, State and local regulations. In cases where the Navy must also provide public notification (such as stormwater permitting), coordinate with the Contracting Officer. Submit copies of all regulatory notifications to the Contracting Officer prior to commencement of work activities. Typically, regulatory notifications must be provided for the following (this listing is not all inclusive): demolition, renovation, NPDES defined site work, remediation of controlled substances (asbestos, hazardous waste, lead paint).

1.5.2 Environmental Brief

Prior to initiating any work on site, meet with the Contracting Officer and activity environmental staff to discuss the proposed Environmental Protection Plan. Develop a mutual understanding relative to the details of environmental protection, including measures for protecting natural resources, required reports, required permits, permit requirements, and other measures to be taken.

1.5.3 Environmental Manager

Appoint in writing an Environmental Manager for the project site. The Environmental Manager will be directly responsible for project compliance with Federal, State, local, and station requirements. The Environmental Manager will ensure compliance with Hazardous Waste Program requirements (including hazardous waste handling, storage, manifesting, and disposal); implement the Environmental Protection Plan; ensure that all environmental permits are obtained, maintained, and closed out; ensure compliance with Storm Water Program Management requirements; ensure compliance with Hazardous Materials (storage, handling, and reporting) requirements; and coordinate any remediation of regulated substances (lead, asbestos, PCB transformers). This can be a collateral position; however the person in this position must be trained to adequately accomplish the following duties: ensure waste segregation and storage compatibility requirements are met; inspect and manage Satellite Accumulation areas; ensure only authorized personnel add wastes to containers; ensure all Contractor personnel are trained in 40 CFR requirements in accordance with their position requirements; coordinate removal of waste containers; and maintain the Environmental Records binder and required documentation, including environmental permits compliance and close-out.

1.5.4 Contractor 40 CFR Employee Training Records

Prepare and maintain employee training records throughout the term of the contract meeting applicable 40 CFR requirements. Submit these training records to the Contracting Officer at the conclusion of the project, unless otherwise directed.

1.6 ENVIRONMENTAL PROTECTION PLAN (EPP)

Submit the Environmental Protection Plan in the following format and include the elements specified below.

a. Description of the Environmental Protection Plan

(1) General overview and purpose

(a) A brief description of each specific plan required by environmental permit or elsewhere in this contract.

(b) The duties and level of authority assigned to the person(s) on the job site that oversee environmental compliance.

(c) A copy of any standard or project specific operating procedures that will be used to effectively manage and protect the environment on the project site.

(d) Communication and training procedures that will be used to convey environmental management requirements to contractor

employees and subcontractors.

(e) Emergency contact information contact information (office phone number, cell phone number, and e-mail address).

(2) General site information

(3) A letter signed by an officer of the firm appointing the Environmental Manager and stating that he/she is responsible for managing and implementing the Environmental Program as described in this contract. Include in this letter the Environmental Manager's authority to direct the removal and replacement of non-conforming work.

b. Management of Natural Resources

(1) Land resources

(3) Replacement of damaged landscape features

(4) Temporary construction

(6) Fish and wildlife resources

c. Protection of Historical and Archaeological Resources

(1) Objectives

(2) Methods

d. Storm Water Management and Control

(1) Ground cover

(2) Erodible soils

(3) Temporary measures

(a) Mechanical retardation and control of runoff

(b) Vegetation and mulch

(4) Effective selection, implementation and maintenance of Best Management Practices (BMPs).

e. Protection of the Environment from Waste Derived from Contractor Operations

(1) Control and disposal of solid and sanitary waste. If Section 01 74 19 CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT is included in the contract, submit the plan required by that section as part of the Environmental Protection Plan.

(2) Control and turn-in of hazardous waste (Hazardous Waste Management Section)

This item will consist of the management procedures for all hazardous waste to be generated. The elements of those procedures will coincide with the Activity Hazardous Waste Management Plan.

A copy of the Activity Hazardous Waste Management Plan will be provided by the Contracting Officer. As a minimum, include the following:

(a) Procedures to be employed to ensure a written waste determination is made for appropriate wastes which are to be generated;

(b) Sampling/analysis plan;

(c) Methods of hazardous waste accumulation/storage (i.e., in tanks and/or containers);

(d) Management procedures for storage, labeling, transportation, and disposal of waste (treatment of waste is not allowed unless specifically noted);

(e) Management procedures and regulatory documentation ensuring disposal of hazardous waste complies with Land Disposal Restrictions (40 CFR 268);

(f) Management procedures for recyclable hazardous materials such as lead-acid batteries, used oil, and the like;

(g) Used oil management procedures in accordance with 40 CFR 279;

(h) Pollution prevention\hazardous waste minimization procedures;

(i) Plans for the disposal of non-hazardous waste by permitted facilities;

(j) Procedures to be employed to ensure all required employee training records are maintained.

f. Prevention of Releases to the Environment

(1) Procedures to prevent releases to the environment

(2) Notifications in the event of a release to the environment

g. Regulatory Notification and Permits

List what notifications and permit applications must be made. Some permits require up to 90 days to obtain. Demonstrate that those permits have been obtained or applied for by including copies of all applicable, environmental permits. The Plan will not be approved until all permits have been obtained.

h. Clean Air Act Compliance

(1) Identify air pollution generating equipment or processes that may require federal, state, or local permits under the clean air act.

(2) Identify portable and stationary internal combustion engines (ICE's) that will be supplied, utilized or serviced. Address compliance with 40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ, and local regulations as applicable. At minimum, include the make, model, serial number, manufacture date, size (engine bhp), and EPA emission certification status of each engine.

(3) Identify management practices to ensure that HVAC work involving refrigerants complies with 40 CFR 82 requirements.

(4) Identify planned air pollution generating processes and management control measures (including but not limited to spray painting, abrasive blasting, demolition, material handling, fugitive dust, and fugitive emissions)

1.6.1 Environmental Protection Plan Review

Within thirty days after the Contract award date, submit the proposed Environmental Protection Plan for review and approval. Commencement of work will not begin until the environmental protection plan has been approved.

1.6.2 Licenses and Permits

Obtain licenses and permits pursuant to the "Permits and Responsibilities" FAR Clause 52.236-7.

No permits will be obtained by the Contracting Officer.

Where required by the State regulatory authority, the inspections and certifications will be provided through the services of a Professional Engineer (PE), registered in the State where the work is being performed. As a part of the quality control plan, which is required by Section 01 45 00.00 20 QUALITY CONTROL, provide a sub item containing the name, appropriate professional registration or licence number, address, and telephone number of the professionals or other qualified persons who will be performing the inspections and certifications for each permit.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 PROTECTION OF NATURAL RESOURCES

Preserve the natural resources within the project boundaries and outside the limits of permanent work. Restore to an equivalent or improved condition upon completion of work. Confine construction activities to within the limits of the work indicated or specified. If the work is near streams, lakes, or other waterways, conform to the national permitting requirements of the Clean Water Act.

Do not disturb fish and wildlife. Do not alter water flows or otherwise significantly disturb the native habitat adjacent to the project and critical to the survival of fish and wildlife, except as indicated or specified.

3.1.1 Erosion and Sediment Control Measures

3.1.1.1 Burnoff

Burnoff of the ground cover is not permitted.

3.1.1.2 Protection of Erodible Soils

Immediately finish the earthwork brought to a final grade, as indicated or specified. Immediately protect the side slopes and back slopes upon completion of rough grading. Plan and conduct earthwork to minimize the duration of exposure of unprotected soils.

3.1.1.3 Temporary Protection of Erodible Soils

Use the following methods to prevent erosion and control sedimentation:

a. Mechanical Retardation and Control of Runoff

Mechanically retard and control the rate of runoff from the construction site. This includes construction of diversion ditches, benches, berms, and use of silt fences and straw bales to retard and divert runoff to protected drainage courses.

b. Sediment Basins

(1) Trap sediment in temporary sediment basins. Select a basin size to accommodate the runoff of a local 10-year storm. Pump dry and remove the accumulated sediment, after each storm. Use a paved weir or vertical overflow pipe for overflow. Remove collected sediment from the site. Institute effluent quality monitoring programs.

(2) Install, inspect, and maintain best management practices (BMPs) as required by the general permit. Prepare BMP Inspection Reports as required by the general permit. If required by the permit, include those inspection reports.

c. Vegetation and Mulch

Provide temporary protection on sides and back slopes as soon as rough grading is completed or sufficient soil is exposed to require erosion protection. Protect slopes by accelerated growth of permanent vegetation, temporary vegetation, mulching, or netting. Stabilize slopes by hydroseeding, anchoring mulch in place, covering with anchored netting, sodding, or such combination of these and other methods necessary for effective erosion control.

3.1.2 Stormwater Drainage and Construction Dewatering

There will be no discharge of excavation ground water to the sanitary sewer, storm drains, or to Sinclair Inlet without prior specific authorization of the Environmental Division in writing. Discharge of hazardous substances will not be permitted under any circumstances.

Construction site runoff will be prevented from entering any storm drain or the Inlet directly by the use of straw bales or other method suitable to the Environmental Division. Contractor will provide erosion protection of the surrounding soils.

Construction Dewatering shall not be discharged to the sanitary sewer. If the construction dewatering is noted or suspected of being contaminated, it may only be released to the storm drain system if the discharge is specifically permitted. Authorization for any contaminated groundwater

release shall be obtained in advance from the base Environmental Officer. Discharge of hazardous substances will not be permitted under any circumstances.

3.2 HISTORICAL AND ARCHAEOLOGICAL RESOURCES

Carefully protect in-place and report immediately to the Contracting Officer historical and archaeological items or human skeletal remains discovered in the course of work. Upon discovery, notify the Contracting Officer. Stop work in the immediate area of the discovery until directed by the Contracting Officer to resume work. The Government retains ownership and control over historical and archaeological resources.

3.3 SOLID WASTE MANAGEMENT PLAN and PERMIT

Provide to the contracting officer written notification of the quantity of solid waste/debris that is anticipated to be generated by construction. Include in the report the locations where various types of waste will be disposed or recycled. Include letters of acceptance or as applicable, submit one copy of a State and local Solid Waste Management Permit or license showing such agency's approval of the disposal plan before transporting wastes off Government property.

3.3.1 Solid Waste Management Report

Monthly, submit a solid waste disposal report to the Contracting Officer. For each waste, the report will state the classification (using the definitions provided in this section), amount, location, and name of the business receiving the solid waste.

Include copies of the waste handling facilities' weight tickets, receipts, bills of sale, and other sales documentation. In lieu of sales documentation, the Contractor may submit a statement indicating the disposal location for the solid waste which is signed by an officer of the Contractor firm authorized to legally obligate or bind the firm. The sales documentation or Contractor certification will include the receiver's tax identification number and business, EPA or State registration number, along with the receiver's delivery and business addresses and telephone numbers. For each solid waste retained by the Contractor for his own use, the Contractor will submit on the solid waste disposal report the information previously described in this paragraph. Prices paid or received will not be reported to the Contracting Officer unless required by other provisions or specifications of this Contract or public law.

3.3.2 Control and Management of Solid Wastes

Pick up solid wastes, and place in covered containers which are regularly emptied. Do not prepare or cook food on the project site. Prevent contamination of the site or other areas when handling and disposing of wastes. At project completion, leave the areas clean. Recycling is encouraged and can be coordinated with the Contracting Officer and the activity recycling coordinator. Remove all solid waste (including non-hazardous debris) from Government property and dispose off-site at an approved landfill. Solid waste disposal off-site must comply with most stringent local, State, and Federal requirements including 40 CFR 241, 40 CFR 243, and 40 CFR 258.

Manage spent hazardous material used in construction, including but not

limited to, aerosol cans, waste paint, cleaning solvents, contaminated brushes, and used rags, as per environmental law.

3.3.2.1 Disposal Documentation for Hazardous and Regulated Waste

Manifest, pack, ship and dispose of waste that is generated as a result of construction in accordance with the generating facilities generator status under the Recourse Conservation and Recovery Act.

Submit a copy of the applicable EPA and or State permit(s), manifest(s), or license(s) for transportation, treatment, storage, and disposal of waste by permitted facilities. To obtain specific disposal instructions coordinate with the Activity Environmental office. Refer to Section 01 57 19.01 20 SUPPLEMENTAL TEMPORARY ENVIRONMENTAL CONTROLS for the Activity Point of Contact information.

3.4 WASTE DETERMINATION DOCUMENTATION

Complete a Waste Determination form (provided at the pre-construction conference) for all contractor derived wastes to be generated. Base the waste determination upon either a constituent listing from the manufacturer used in conjunction with consideration of the process by which the waste was generated, EPA approved analytical data, or laboratory analysis (Material Safety Data Sheets (MSDS) by themselves are not adequate). Attach all support documentation to the Waste Determination form. As a minimum, a Waste Determination form must be provided for the following wastes (this listing is not all inclusive): oil and latex based painting and caulking products, solvents, adhesives, aerosols, petroleum products, and all containers of the original materials.

3.5 POLLUTION PREVENTION/HAZARDOUS WASTE MINIMIZATION

Minimize the use of hazardous materials and the generation of hazardous waste. Include procedures for pollution prevention/ hazardous waste minimization in the Hazardous Waste Management Section of the Environmental Protection Plan. Consult with the activity Environmental Office for suggestions and to obtain a copy of the installation's pollution prevention/hazardous waste minimization plan for reference material when preparing this part of the plan. If no written plan exists, obtain information by contacting the Contracting Officer. Describe the types of the hazardous materials expected to be used in the construction when requesting information.

3.6 HAZARDOUS MATERIAL MANAGEMENT

Include hazardous material control procedures in the Safety Plan. Address procedures and proper handling of hazardous materials, including the appropriate transportation requirements. No hazardous material shall be brought onto government property that does not directly relate to requirements for the performance of this contract. Submit a MSDS and estimated quantities to be used for each hazardous material to the Contracting Officer prior to bringing the material on base. Typical materials requiring MSDS and quantity reporting include, but are not limited to, oil and latex based painting and caulking products, solvents, adhesives, aerosol, and petroleum products. Ensure that hazardous materials are utilized in a manner that will minimize the amount of hazardous waste that is generated. Ensure that all containers of hazardous materials have NFPA labels or their equivalent. Certify that all hazardous materials removed from the site are hazardous materials and

do not meet the definition of hazardous waste per 40 CFR 261.

3.6.1 Contractor Hazardous Material Inventory Log

Submit the "Contractor Hazardous Material Inventory Log"(found at: http://www.wbdg.org/ccb/NAVGRAPH/graphtoc.pdf), which provides information required by (EPCRA Sections 312 and 313) along with corresponding Material Safety Data Sheets (MSDS), to the Contracting Officer at the start and at the end of construction (30 days from final acceptance), and update no later than January 31 of each calendar year during the life of the contract. Keep copies of the MSDS for hazardous materials on site at all times. At the end of the project, provide the Contracting Officer with copies of all of these MSDS, and the maximum quantity of each material that was present at the site at any one time, the dates the material was present, the amount of each material that was used during the project, and how the material was used.

Documentation for any spills/releases, environmental reports or off-site transfers may be requested by the Contracting Officer.

3.7 PETROLEUM PRODUCTS AND REFUELING

Conduct the fueling and lubricating of equipment and motor vehicles in a manner that protects against spills and evaporation. Manage all used oil generated on site in accordance with 40 CFR 279. Determine if any used oil generated while on-site exhibits a characteristic of hazardous waste. Used oil containing 1000 parts per million of solvents will be considered a hazardous waste and disposed of at Contractor's expense. Used oil mixed with a hazardous waste will also be considered a hazardous waste.

3.7.1 Oily and Hazardous Substances

Prevent oil or hazardous substances from entering the ground, drainage areas, or navigable waters. In accordance with 40 CFR 112, surround all temporary fuel oil or petroleum storage tanks with a temporary berm or containment of sufficient size and strength to contain the contents of the tanks, plus 10 percent freeboard for precipitation. The berm will be impervious to oil for 72 hours and be constructed so that any discharge will not permeate, drain, infiltrate, or otherwise escape before cleanup occurs. Provide general secondary containment for oil transfer operations as required by 40 CFR 112.7.

3.7.2 Inadvertent Discovery of Petroleum Contaminated Soil or Hazardous Wastes

If petroleum contaminated soil or suspected hazardous waste is found during construction that was not identified in the contract documents, the contractor shall immediately notify the contracting officer. The contractor shall not disturb this material until authorized by the contracting officer.

3.8 FUEL TANKS

Petroleum products and lubricants required to sustain up to 30 days of construction activity may be kept on site. Storage and refilling practices shall comply with 40 CFR Part 112. Secondary containment shall be provided and be no less than 110 percent of the tank volume plus five inches of free-board. If a secondary berm is used for containment then the berm shall be impervious to oil for 72 hours and be constructed so

that any discharge will not permeate, drain, infiltrate, or otherwise escape before cleanup occurs. Drips pans are required and the tanks must be covered during inclement weather.

3.9 RELEASES/SPILLS OF OIL AND HAZARDOUS SUBSTANCES

Exercise due diligence to prevent, contain, and respond to spills of hazardous material, hazardous substances, hazardous waste, sewage, regulated gas, petroleum, lubrication oil, and other substances regulated by environmental law. Maintain spill cleanup equipment and materials at the work site. In the event of a spill, take prompt, effective action to stop, contain, curtail, or otherwise limit the amount, duration, and severity of the spill/release. In the event of any releases of oil and hazardous substances, chemicals, or gases; immediately (within 15 minutes) notify the Base or Activity Fire Department, the activity's Command Duty Officer, and the Contracting Officer. If the contractor's response is inadequate, the Navy may respond. If this should occur, the contractor will be required to reimburse the government for spill response assistance and analysis.

The Contractor is responsible for verbal and written notifications as required by the federal 40 CFR 355, State, local regulations and Navy Instructions. Spill response will be in accordance with 40 CFR 300 and applicable State and local regulations. Contain and clean up these spills without cost to the Government. If Government assistance is requested or required, the Contractor will reimburse the Government for such assistance. Provide copies of the written notification and documentation that a verbal notification was made within 20 days.

Maintain spill cleanup equipment and materials at the work site. Clean up all hazardous and non-hazardous (WHM) waste spills. The Contractor shall reimburse the government for all material, equipment, and clothing generated during any spill cleanup. The Contractor shall reimburse the government for all costs incurred including sample analysis materials, equipment, and labor if the government must initiate its own spill cleanup procedures, for Contractor responsible spills, when:

a. The Contractor has not begun spill cleanup procedure within one hour of spill discovery/occurrence, or

b. If, in the government's judgment, the Contractor's spill cleanup is not adequately abating life threatening situation and/or is a threat to any body of water or environmentally sensitive areas.

3.10 CONTROL AND MANAGEMENT OF ASBESTOS CONTAINING MATERIAL (ACM)

Items, components, or materials disturbed by or included in work under this contract do involve asbestos. Other materials in the general area around where work will be performed may contain asbestos. All thermal insulation, in all work areas, should be considered to be asbestos unless positively identified by conspicuous tags or previous laboratory analysis certifying them as asbestos free.

Inadvertent discovery of non-disclosed asbestos that will result in an abatement action requires a change in scope before proceeding. Upon discovery of asbestos containing material not identified in the contract documents, the Contractor shall immediately stop all work that would generate further damage to the material, evacuate the asbestos exposed area, and notify the Contracting Officer for resolution of the situation

prior to resuming normal work activities in the affected area. Do not remove or perform work on any asbestos containing materials without the prior approval of the Contracting Officer. Do not engage in any activity, which would remove or damage such materials or cause the generation of fibers from such materials.

Manage and dispose of asbestos containing waste in accordance with applicable environmental law. Asbestos containing waste shall be manifested and the manifest provided to the Contracting Officer.

3.11 CONTROL AND MANAGEMENT OF HAZARDOUS WASTES

3.11.1 Facility Hazardous Waste Generator Status

PSNS & IMF is designated as a Large Quantity Generator . All work conducted within the boundaries of this activity must meet the regulatory requirements of this generator designation. Comply with all provisions of Federal, State and local regulatory requirements applicable to this generator status regarding training and storage, handling, and disposal of all construction derived wastes.

3.11.2 Hazardous Waste/Debris Management

Identify all construction activities which will generate hazardous waste/debris. Provide a documented waste determination for all resultant waste streams. Hazardous waste/debris will be identified, labeled, handled, stored, and disposed of in accordance with all Federal, State, and local regulations including 40 CFR 261, 40 CFR 262, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, and 40 CFR 268.

Hazardous waste shall be turned-in to the Government for disposal. See 01 57 19.01 20, Supplemental Temporary Environmental Controls for specific direction.. Store hazardous wastes in approved containers in accordance with 49 CFR 173 and 49 CFR 178. Hazardous waste generated within the confines of Government facilities will be identified as being generated by the Government.

No hazardous waste shall be brought onto Government property. Provide to the Contracting Officer a copy of waste determination documentation for any solid waste streams that have any potential to be hazardous waste or contain any chemical constituents listed in 40 CFR 372-SUBPART D. For hazardous wastes spills, verbally notify the Contracting Officer immediately.

3.11.2.1 Regulated Waste Storage/Satellite Accumulation/90 Day Storage Areas

If the work requires the temporary storage/collection of regulated or hazardous wastes, the Contractor will request the establishment of a Regulated Waste Storage Area, a Satellite Accumulation Area, or a 90 Day Storage Area at the point of generation. The Contractor must submit a request in writing to the Contracting Officer.

Attach a waste determination form. Allow ten working days for processing this request. The designated area where waste is being stored shall be barricaded and a sign identifying as follows:

"DANGER - UNAUTHORIZED PERSONNEL KEEP OUT"

3.11.2.2 Sampling and Analysis of Waste

a. Waste Sampling

Sample waste in accordance with EPA 530/F-93/004. Each sampled drum or container will be clearly marked with the Contractor's identification number and cross referenced to the chemical analysis performed.

b. Laboratory Analysis

Follow the analytical procedure and methods in accordance with the 40 CFR 261. The Contractor will provide all analytical results and reports performed to the Contracting Officer.

c. Analysis Type

Identify waste hazardous material/hazardous waste by analyzing for the following properties as a minimum: ignitability, corrosivity, and TCLP for 8 RCRA metals.

3.11.2.3 Hazardous Waste Disposal

No hazardous, toxic, or universal waste shall be disposed or hazardous material abandoned on government property.

The Contractor is not authorized to discharge any materials to sanitary sewer, storm drain, or water way or conduct waste treatment or disposal on government property without written approval of the Contracting Officer.

Control of stored waste, packaging, sampling, analysis, and disposal will be determined by the details in the contract.

3.11.2.4 Universal Waste/e-Waste Management

Universal waste including but not limited to some mercury containing building products such florescent lamps, mercury vapor lamps, high pressure sodium lamps, CRTs, batteries, aerosol paint containers, electrical equipment containing PCBs, and consumed electronic devices, shall be managed in accordance with applicable environmental law and installation instructions.

3.11.3 Class I and II ODS Prohibition

Class I and II ODS in pure or blended form as defined and identified herein must not be used in the performance of this contract, nor be provided as part of the equipment except for the use of servicing existing government owned equipment. This prohibition will be considered to prevail over any other provision, specification, drawing, or referenced documents.

3.11.3.1 Recycling Requirements

Recycle used refrigerants and ozone depleting substances generated during the performance of this contract to the maximum extent practicable to minimize used refrigerant and ozone depleting substance disposal as HW.

Test, collect, transfer, recycle, and/or arrange for shipping and proper disposal of used refrigerants and ozone depleting substances generated during the performance of work under this contract. The Contractor is

responsible for all associated costs.

Any and all Class I ODS and R-22 recovered by the Contractor as part of this contract shall be packaged and turned over to the Government for recycling upon the completion of the work covered by this contract. The Contractor shall arrange for recycling of used refrigerants not turned over to the government, at a licensed refrigerant recycler approved by the Contracting Officer.

3.11.3.2 EPA Certification Requirements

Heating and air conditioning technicians must be certified through an EPA-approved program. Copies of certifications shall be maintained at the employees' place of business and be carried as a wallet card by the technician, as provided by environmental law. .

3.11.3.3 Accidental Venting of Refrigerant

Accidental venting of a refrigerant is a release and must be reported to the Contracting Officer

3.12 DUST CONTROL

Keep dust down at all times, including during nonworking periods.Dry power brooming will not be permitted. Instead, use vacuuming, wet mopping, wet sweeping, or wet power brooming. Air blowing will be permitted only for cleaning nonparticulate debris such as steel reinforcing bars. Only wet cutting will be permitted for cutting concrete blocks, concrete, and bituminous concrete. Do not unnecessarily shake bags of cement, concrete mortar, or plaster.

3.12.1 Dirt and Dust Control Plan

Submit truck and material haul routes along with a plan for controlling dirt, debris, and dust on base roadways. As a minimum, identify in the plan the subcontractor and equipment for cleaning along the haul route and measures to reduce dirt, dust, and debris from roadways.

3.13 ABRASIVE BLASTING

3.13.1 Blasting Operations

Abrasive blasting is prohibited.

3.14 NOISE

Make the maximum use of low-noise emission products, as certified by the EPA. Blasting or use of explosives will not be permitted without written permission from the Contracting Officer, and then only during the designated times. Confine pile-driving operations to the period between 8 a.m. and 4 p.m., Monday through Friday, exclusive of holidays, unless otherwise specified.

3.15 MERCURY MATERIALS

Mercury is prohibited in the construction of this facility, unless specified otherwise, and with the exception of mercury vapor lamps and fluorescent lamps. Dumping of mercury-containing materials and devices such as mercury vapor lamps, fluorescent lamps, and mercury switches, in

rubbish containers is prohibited. Remove without breaking, pack to prevent breakage, and transport out of the activity in an unbroken condition for disposal as directed. Immediately report to the Environmental Office and the Contracting Officer instances of breakage or mercury spillage. Clean mercury spill area to the satisfaction of the Contracting Officer.

Cleanup of a mercury spill shall not be recycled and shall be managed as a hazardous waste for disposal.

-- End of Section --

SECTION 01 57 19.01 20

SUPPLEMENTAL TEMPORARY ENVIRONMENTAL CONTROLS
02/10

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only. If state or local references are not provided here, refer to Section 01 57 19.00 20 TEMPORARY ENVIRONMENTAL CONTROLS for appropriate references.

PUGET SOUND CLEAN AIR AGENCY (PSCAA)

PSCAA Regulation	Regulation I, II, and III

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA SW-846	(Third Edition; Update IV) Test Methods for Evaluating Solid Waste: Physical/Chemical Methods

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 60	Standards of Performance for New Stationary Sources
40 CFR 63	National Emission Standards for Hazardous Air Pollutants for Source Categories
40 CFR 82	Protection of Stratospheric Ozone
49 CFR 171	General Information, Regulations, and Definitions
49 CFR 172	Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements
49 CFR 178	Specifications for Packagings

WASHINGTON STATE ADMINISTRATIVE CODE (WAC)

WAC-173-160	Minimum Standards for Construction and Maintenance of Wells
WAC-173-303	Washington Dangerous Waste Regulations
WAC-173-60	Maximum Environmental Noise Levels

WASHINGTON STATE DEPARTMENT OF ECOLOGY (WSDE)

WSDE SMM	(2012) Washington State Stormwater Management Manual for Western Washington

1.2 DEFINITIONS

1.2.1 Contractor-Generated Waste

Material that is Contractor originated, brought on site by the Contractor, and becomes a waste during construction at or on government property.

1.2.2 Dangerous Waste

Waste defined as dangerous waste per WAC-173-303. This includes, but is not limited to, hazardous waste, extremely hazardous waste and state-only dangerous waste.

1.2.3 Encountered Waste

Material that is of government origin which becomes a waste during construction at or on government property. This term includes both foreseen and unforeseen government wastes discovered at the worksite.

1.2.4 Firewood

Raw woody material cut into short lengths and burned to produce energy.

1.2.5 Fugitive Dust

Particulate matter or any visible air contaminant (smoke, dust, or fume) other than uncombined water that is not collected by a capture system and emitted from a stack, but is released to the atmosphere at the point of generation.

1.2.6 Ozone Depleting Substance (ODS) Substitute

Any chemical or product, whether existing or new, that is used by any person as an EPA approved replacement for a class I or II ozone-depleting substance in a given refrigeration or air-conditioning end-use.

1.2.7 Refrigerant

Any substance consisting in part or whole of a class I or class II ozone-depleting substance, or an ozone depleting substance substitute that is used for heat transfer purposes and provides a cooling effect.

1.2.8 Refuse

Includes, but is not limited to garbage, rubbish, trash, some soils, and non-painted demolition and construction debris. Refuse shall be designated by the government. When designated "refuse," the government has determined the waste is not "Dangerous Waste."

1.2.9 Sewage

Liquid wastes designated by the government as "domestic sanitary sewage" and normally discharged through domestic sanitary sewage systems. Liquids designated as "sewage" include human body wastes, and wastewater from sinks, showers, laundries, dishwashers, and garbage disposals when these liquids use only chemicals approved by the Government for discharge into the sanitary sewer.

1.2.10 Spill Event

A spill is any release of oil or hazardous substances to the water or ground that is not controlled or permitted. This includes any spilling, leaking, pumping, emitting, discharging, injecting, escaping, leaching, disposing, or dumping of liquid or solid material that is not authorized in writing by the Contracting Officer. Emergency and non-emergency spills are defined as follows:

1.2.10.1 Emergency Spill Event

An emergency spill event is any release of a known or unknown material or hazardous substance that poses an immediate threat to human health or the environment to the air, soil, or water and is not classified as a non-emergency spill event. All unpermitted or uncontrolled releases on land, to air or discharges to any waterways or outside Navy properties, are classified as emergency spill events.

1.2.10.2 Non-emergency Spill Event

A non-emergency spill event is a discharge of a known material or any hazardous substance that does not pose an immediate threat to human health or the environment, can be cleaned up as part of normal housekeeping by the personnel who discovered the spill, and is not released on the soil or into any waterway inlet (e.g.,storm drain) or outside Navy property boundaries.

1.2.11 Timber, Merchantable

Any raw material yielded by a forest that is of a size, quality and condition suitable for marketing under given economic conditions, even if so situated as not to be immediately accessible for logging.

1.2.12 Landfill-Controlled Waste

Waste containing harmful substances but not designated as dangerous per WAC-173-303 that are screened by a receiving facility to ensure that it meets the requirements of their operating permit. Examples; petroleum contaminated soil, abrasive blast grit, street or dry-dock sweepings, treated wood, oily debris, and waste containing free liquids as determined by the Paint Filter Liquids Test method 9095.

1.3 SUBMITTALS

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

SD-01 Preconstruction Submittals

Excavation Permits; G

PSCAA Non-Road Engine Notification Form

Notice of Construction, PSCAA; G

Contractor's Operation and Maintenance (O & M) Plan

SD-07 Certificates

Storm Drain/Sanitary Sewer Discharge Approval; G

Waste Determination Documentation; G

Monthly Project Waste Summary Report

Landfill Disposal Form; G

Contractor Request for Hazardous Waste Satellite Accumulation Area (SAA) Registration; G

Contractor Request for 45/90-Day Hazardous Waste Accumulation Certification/Recertification; G

Accumulation area inspection record

SD-11 Closeout Submittals

Notice of Completion, PSCAA

Solid Waste Tracking Sheet

Refrigerant Work Checklist

Operation and Maintenance Records (Air Pollution Sources)

1.4 NORTHWEST (Washington)

1.4.1 Regulatory Notifications

Submit drafts of all regulatory notifications to the Contracting Officer for review, approval, and subsequent Government submittal to the applicable regulatory agency prior to the start of work covered by the notification. The Contractor is responsible for associated fees.

1.4.2 Environmental Manager

Appoint in writing an Environmental Manager for the project site. The Environmental Manager will be directly responsible for project compliance with Federal, State, local, and station requirements.

The Environmental Manager will implement the Environmental Protection Plan, including management of natural resources, protection of historical and archaeological resources, storm water management and control, waste management, regulatory notifications and permits, air pollution control, and spill prevention and response. The Environmental Manager shall control and operate waste accumulation areas, or have direct supervision over an alternate accumulation area operator.

1.4.3 Contractor Employee Training Records

All employees must be familiar (read and understand) the approved Environmental Protection Plan and the "Contractor's Guide to Environmental Compliance." The contractor may elect to complete the ECATTS course titled "Site Specific Hazardous Waste Management Training for the Bremerton Naval Complex" in order to satisfy the Contractor 40 CFR Employee Training Records submittal per section 01 57 19.00 20. Taken

annually, this course will satisfy the refresher training requirement of WAC-173-303 for work at NBK Bremerton and would not be required per project.

Submit an ECATTS certificate of completion for personnel who have completed the required training. This training is web-based and can be accessed from any computer with Internet access using the following instructions.

Register for NAVFAC Environmental Compliance Training and Tracking System, by logging on to http://navfac.ecatts.com/. Obtain the password for registration from the Contracting Officer.

Train employees in accordance with WAC-173-303-330. Training must be completed and documented prior to the generation of waste.

1.4.4 Refrigerant Work Checklist

Submit a completed Refrigerant Work Checklist form to document that work was performed in compliance with 40 CFR 82 requirements. One form shall be completed for each piece of equipment containing refrigerant that is installed, removed, or serviced as part of this contract.

1.4.5 Environmental Protection Plan (EPP)

The following clarifications and requirements supplement paragraph ENVIRONMENTAL PROTECTION PLAN in Section 01 57 19.00 20, TEMPORARY ENVIRONMENTAL CONTROLS. **Bulk waste shall not exceeding four (4) feet in any dimension.**

1.4.5.1 Control and Disposal of Solid and Sanitary Waste

Include the Solid Waste Management Plan from Section 01 57 19.00 20, TEMPORARY ENVIRONMENTAL CONTROLS, as part of the Environmental Protection Plan. Identify each solid waste disposal facility, including: the type of facility, name, physical address, phone numbers, issuing authority and approval signature, permitted entity and period of issuance for all wastes. Submit a copy of the county hauling permit (for non-exempt franchised haulers).

Perform all waste management practices in accordance with PSNS&IMFINST 5090.30, Water Pollution Prevention and Control Plan; PSNS&IMFINST 5090.5, Waste Management Plan 40 CFR 262, 40 CFR 263, 40 CFR 264, 49 CFR 172, and 49 CFR 178.

1.4.5.2 Control and Disposal of Hazardous Waste

1.4.5.2.1 Contractor-Generated Dangerous Waste Turn-in

Specify procedures to handle, process and dispose Contractor-generated dangerous waste. All project generated dangerous waste will be turned into the government for disposal.

Collect dangerous waste in Department of Transportation (DOT) approved containers in accordance with 49 CFR 171, 49 CFR 172, and 49 CFR 178 properly labeled to identify the type of waste, hazard to personnel, and the start date. Containers and labels will be supplied by the Government. Notify the Contracting Officer 14 calendar days in advance for request of bulk containers. Request is accomplished by submission of

a WIS including an estimated quantity of dangerous waste and the number of containers. Identify dangerous waste generated within the confines of the station by the use of the station's EPA generator identification number. Accumulate in an approved satellite or 90-day accumulation area meeting the requirements set forth in WAC-173-303. Contact the Contracting Officer no more than 45 calendar days from the start date for 90-day accumulation areas to arrange for transport. Accumulate bulk dangerous wastes in a 90-day area. Turn in non-bulk dangerous waste from a 90-day area within 45 days of the start date. Turn in dangerous waste from satellite accumulation areas to the government prior to exceeding time and quantity limits. On-site treatment of waste is prohibited.

1.4.5.3 Salvage, Reuse and Recycle

Identify anticipated materials and waste for salvage, reuse, and recycling. Describe actions to be taken to promote material reuse or resale and/or recycling.

Include the name, physical address, and telephone number of the hauler, if transported by a franchised solid waste hauler. Include destination and, unless exempted, provide a copy of the state or local permit (cover) or license for recycling.

1.4.5.4 Storm Water Management and Control

A narrative of the storm water management and control is required. Include the following:

a. A brief project description

b. Total disturbed acreage

c. US Waters that the project will drain onto

d. The sequence of construction events

e. Stormwater Best Management Practices (BMPs) that will be applied to the site including mandatory Bremerton Naval Complex Best Management Practices (BMPs).

f. Site map showing location of BMP measures

g. Description of weekly inspections

h. How and where hazardous materials will be handled and stored on site

i. Exposed soil coverage practices

j. Final site stabilization method(s)

1.4.5.5 Clean Air Act Compliance

Identify any air pollution generating equipment or processes that may require a Notice of Construction pursuant to PSCAA Regulation.

Identify portable and stationary internal combustion engines (ICEs) that will be supplied, used, or serviced. Address compliance with 40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ, and PSCAA Regulations as applicable.

Include PSCAA Non-Road Engine Notification Form

Identify management practices to ensure that HVAC work involving refrigerants complies with 40 CFR 82 requirements.

Identify planned air pollution generating processes and management control measures (including but not limited to spray painting, abrasive blasting, demolition, material handling, fugitive dust, and fugitive emissions).

1.4.5.6 Licenses and Permits

a. Notice of Construction (NOC)and Notice of Completion

Schedule to allow for up to 120 days for NOC permits to receive approval from outside regulatory agencies. Prepare and forward the permit application package to the Contracting Officer for approval and submittal to the applicable regulatory agency. The Contractor is responsible for associated fees. Permit approval must be obtained prior to the start of work covered by the permit. Upon completion of work, notify the Contracting Officer who will submit the Notification of Completion to the applicable regulatory agency.

Equipment and work provided as part of this contract must comply with all terms and conditions of the permit, and all other applicable federal, state, and local air pollution control regulations.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

3.1 NORTHWEST (Washington)

3.1.1 Protection of Natural Resources

Limit the footprint of construction activities to encompass the minimum area necessary to achieve project objectives. Construction operations must remain within the defined project boundaries. Project boundaries must not be changed without the approval of the Contracting Officer.

3.1.1.1 Erosion and Sediment Control Measures

Polyacrylamide (PAM) must NOT be used as a Best Management Practice for erosion control.

Erosion Control BMPs must be selected for the site to meet the requirements of the WSDE SMM.

Use of straw or hay bales is prohibited.

3.1.1.2 Water Resources

Employ mandatory Bremerton Naval Complex Best Management Practices (BMPs) under the facility's National Pollutant Discharge Elimination System (NPDES) permit. If the applicable BMPs are not effective in preventing the discharge of pollutants, then additional BMPs shall be selected and

employed.

3.1.1.2.1 Stormwater Drainage and Construction Dewatering

Perform dewatering of excavation sites as specified in the Groundwater/Stormwater Flow Chart. Coordinate requirements with Section 31 00 00, EARTHWORK FOR STRUCTURES AND PAVEMENTS, and Section 31 23 00.00 20, EXCAVATION AND FILL.

Submit a Storm Drain/Sanitary Sewer Discharge Approval form to obtain approval before discharging uncontaminated water into storm drain.

3.1.1.2.2 Groundwater

Construct, maintain, and decommission any wells and well heads associated with, or impacted by, the project in accordance with Washington State Standards for Construction and Maintenance of Wells (WAC-173-160).

3.1.2 Historical and Archaeological Resources

Excavation is in an area of high archeological potential. An archeologist is not required to be on site during excavation activities. Prior to excavation or other work that has potential to affect cultural resources ensure, via the Contracting Officer, that consultation with SHPO and all interested parties is complete.

Existing historical, archaeological, and cultural resources within the Contractor's work area are shown on the drawings. Protect these resources and preserve during the life of the Contract.

3.1.3 Solid Waste Management Plan And Permit

Incorporate requirements of paragraph SOLID WASTE MANAGEMENT PLAN AND PERMIT in Section 01 57 19.00 20, TEMPORARY ENVIRONMENTAL CONTROLS, into the Environmental Protection Plan.

3.1.3.1 Solid Waste Management Report

The Solid Waste Management Report is known locally as the Contractor's Monthly Project Waste Summary Report

3.1.3.2 Control and Management of Solid Wastes

Complete a serialized Solid Waste Tracking Sheet (SWTS) for each off-site shipment of solid waste (except sanitary sewage), recyclable materials and and non-dangerous recyclable waste. Do not use SWTS for asbestos, PCBs or dangerous waste. Ensure transporter has the SWTS before leaving the base. Hand-off exchange is preferred. When a face-to-face hand-off is not possible, the following procedure is required:

a. Firmly affix a clear (no colors), waterproof envelope to the front left corner of the accumulation container (a zipper sealed baggie duct-taped to the box is acceptable). At the end of the shift prior to pick-up time, inspect the box, complete the applicable portion of the SWTS, and place it in a waterproof envelope.

b. The transporter removes the SWTS from the envelope, signs on the appropriate line, and provides it to the receiver for signature at the disposal site. The receiver completes their portion of the SWTS and

returns it to the Contractor.

c. When no SWTS is in the envelope, the waste will not be transported for disposal.

3.1.3.2.1 Concrete Operations

Sawcutting and rinse water must be collected and managed as waste unless the following conditions exist: Water can seep into permeable ground if the quantity is less than 100 gallons per day, is more than 50 feet away from a storm drain, open ditch, or receiving water, and the ground is a future pour site and is not subject to surface water runoff.

For collected waste, allow sawcutting water to let solids settle. Check the pH by the end of the shift in which the water was collected. For water with a pH less than 11, immediately decant the water and discharge to the sanitary sewer as specified on the WIS. For water with a pH of greater than 11, manage as a dangerous waste.

Concrete trucks are prohibited from being washed on station unless there is an area at the project site which is going to be a future pour site (e.g., foundation) and the location is not subject to surface water runoff and is more than 50 feet away from a storm drain, open ditch, or receiving water.

3.1.3.2.2 Wastewater Discharge

Submit Waste Determination Documentation for each unique type of wastewater.

Also notify the Contracting Officer for wastewater discharges to the sanitary sewer in quantities greater than 1000 gallons per day or 1000 gallons for the entire project, and allow 10 working days to obtain discharge approval from the City of Bremerton via the Contracting Officer. If discharge is less than 1000 gallons per day or per project, then completion of the Waste Determination Documentation specifying disposition to sanitary sewer completes the approval process.

3.1.3.2.3 Hydrotest Water Discharge

Waste Determination Documentation is not required to discharge water from new, clean piping system to the sanitary system at a flow rate less than 100 gallons per minute and 3000 gallons per day. Notify the Contracting Officer 10 working days prior to discharge to the sanitary system to obtain approval for greater flow rates. Clean, uncontaminated, hydrotest water may also be discharged to the storm drain. Submit a Storm Drain/Sanitary Sewer Discharge Approval form to obtain approval before discharging.

3.1.3.2.4 Control and Disposal of Landfill-Controlled Wastes

Store landfill controlled waste under cover in a manner that minimizes contact with process water or storm water. Keep covered and secured at all times except when adding wastes or taking samples. Store in containers or in the following manner:

a. Underlay the waste with a continuous impervious sheet of plastic with a thickness sufficient to contain the waste with a minimum thickness of 10 mils. Thicker or reinforced plastic, or other measures, to protect

the integrity of the plastic underlayment may be required if there is danger that the plastic will be punctured or torn during accumulation. Weld, heat seal or continuously tape (on both sides) all seams. Protect the plastic from perforation during loading and handling operations.

b. Install a berm around the pile so that the landfill controlled waste remains in the designated area. Straw or hay bales are prohibited. The edges of the underlayment must be laid over the top of the berm and secured to prevent water from running under the pile.

c. Install an impervious continuous sheet of plastic, 10 mils minimum thickness, over the pile and over the outside of the berm so that rainwater is directed away from the landfill controlled waste inside the berm. Weld, heat seal or continuously tape (on both sides) all seams.

d. Secure the top cover to ensure that wind will not balloon the cover or blow it aside leaving the pile exposed to weather.

e. If soil testing is required but not complete, place an ID label on stockpiled soil containers or top cover identifying the waste/soil as "Soil, Non-Hazardous Pending Sampling."

f. Disposal of Landfill Controlled Wastes:

Submit a Landfill Disposal Form as required by the receiving landfill prior to removal of solid waste off government property. The Landfill Disposal Form may have different titles, depending upon the landfill (e.g Waste Disposal Application, Contaminated Soil Waste Information Sheet, and Industrial Waste Information Sheet). The Government will co-sign forms.

3.1.4 Waste Determination Documentation

The Encountered Waste Summary, attached, provides a summary table of anticipated encountered wastes along with the corresponding probable waste designation. This table may not be inclusive of all wastes that could be encountered. This table does not require such wastes to be disposed rather than recycled or reused. This table is intended to provide a bid basis. These estimated designations are subject to change upon receipt of the completed Waste Determination Documentation. Any segregation, addition, or mixing of identified wastes invalidates these estimated designations. Where such action increases the quantity of dangerous waste, all such waste shall be disposed at the Contractor's expense.

Waste Determination Documentation must consist of the base-specific waste form and related documentation prepared by the Contractor and submitted to the Government for the purpose of Government designation of waste. Examples of related documentation include MSDS, sampling and analysis plans, analytical information, and description of waste or process that generate waste. No waste shall be transported off site without completed Waste Determination Documentation. Follow all instructions provided on completed Waste Determination Documentation forms.

Within 1 working day after waste stream has been produced, submit a Waste Information Sheet (WIS) for each waste (except sanitary wastes) generated on site for designation by the Government. Submit a WIS for each waste stream anticipated to be produced to the maximum extent possible for

pre-designation of waste. The Government will complete Section II and Section III of the WIS.

3.1.4.1 Control of Waste Without Documented Waste Determination

Collect wastes for which the Waste Determination Documentation has not been completed, label "waste awaiting designation" or "WAD" to indicate that analysis is pending. Accumulate and manage in an area that meets the minimum criteria for satellite accumulation per WAC-173-303 and the contract specifications, except for the time and quantity limitations.

Submit Waste Determination Documentation for each undesignated waste type within one day of generation. Do not transport waste off-site prior to designation by the Government.

3.1.5 Contractor Hazardous Material Inventory Log

In addition to the materials (e.g. paints, lacquers, thinners, adhesives, sealants, cleaners) required in the Contractor Hazardous Material Inventory Log, include the following materials:

a. If performing abrasive blasting operations, denote blast grit usage, blast nozzle throughput in tons, and blasting unit efficiency.

b. If performing welding, denote welding rod usage and welding rod type (e.g. aluminum, carbon steel).

Use local form, PSNS 5090/132 CHMI, in lieu of that specified in Section 01 57 19.00 20, TEMPORARY ENVIRONMENTAL CONTROLS.

3.1.6 Fuel Tanks

If Contractor tanks and containers of oil have an aggregate aboveground capacity greater than 1,320 gallons (only containers with a capacity of 55 gallons or greater are counted), then the contractor must provide and implement their own SPCC plan. Do not bring underground storage tanks to this installation for Contractor use during a project.

3.1.7 Releases/Spills of Oil and Hazardous Substances

In the event of an emergency spill immediately notify the PSNS & IMF and NBK Bremerton Regional Dispatch Center, station phone 911, or (360) 476-3333 on outside lines or cellular phones, then notify the Contracting Officer.

3.1.8 Control and Management of Hazardous Wastes

The following clarifications and requirements supplement paragraph CONTROL AND MANAGEMENT OF HAZARDOUS WASTES in Section 01 57 19.00 20, TEMPORARY ENVIRONMENTAL CONTROLS.

3.1.8.1 Facility Hazardous Waste Generator Status

PSNS & IMF is a fully regulated Large Quantity Generator.

3.1.8.2 Hazardous Waste Management

Containers and labels will be supplied by the Government. Notify the Contracting Officer 14 calendar days in advance for request of bulk

containers. Request is accomplished by submission of Waste Determination Documentation including an estimated quantity of dangerous waste and the number of containers. Accumulate in an approved satellite or 90-day accumulation area meeting the requirements set forth in WAC-173-303. Contact the Contracting Officer no more than 45 calendar days from the start date for 90-day accumulation areas to arrange for transport. Accumulate bulk dangerous wastes in a 90-day area. Turn in non-bulk dangerous waste from a 90-day area within 45 days of the start date.

Labels will be supplied by the Government.

Waste Determination Documentation must be submitted and all dangerous waste must be designated before removal from Government property.

Submit a copy of the applicable EPA and or State permit(s), manifest(s), Land Disposal Restriction (LDR) forms, and license(s) for transportation, treatment, storage, and disposal of hazardous and regulated waste by permitted facilities. Dangerous waste manifests must be reviewed, signed, and approved by the Navy before the Contractor may ship waste. To obtain specific disposal instructions, coordinate with the Activity environmental office.

3.1.8.2.1 Regulated Waste Storage/Satellite Accumulation/90 Day Storage Areas

Prior to generating waste, submit an accumulation area registration form, known locally as: Contractor Request for 45/90-Day Hazardous Waste Accumulation Certification/Recertification or Contractor Request for Hazardous Waste Satellite Accumulation Area (SAA) Registration.

90-Day areas are known locally as 45/90 day areas and such wastes shall be manifested prior to 45 days. Satellite accumulation over-water, such as on piers and dry docks, is not authorized unless waste is accumulated with secondary containment and is attended by a trained person at all times. 90-Day areas will not be authorized in dry docks, on piers, or over-water site. Submit to the Contracting Officer once every 7 calendar days an Accumulation Area Inspection Record meeting the requirements set forth in WAC-173-303. Closure of 90-day areas require inspection and approval by the Government.

3.1.8.2.2 Laboratory Analysis

~~When, at the sole discretion of the Government, laboratory analytical information is necessary to designate waste, provide sampling and analysis services in accordance with WAC-173-303 and EPA SW-846.~~

~~Submit all analytical results and reports to the Contracting Officer as part of the Waste Determination Documentation.~~
(AMD 0003) When analytical information is necessary to designate waste, the Government will sample and test wastes in accordance with WAC-173-303 and EPA SW-846.

Exception for waste soil: When, at the sole discretion of the Government, laboratory analytical information is necessary to designate waste soil, or analytical information is required by the selected landfill, provide sampling and analysis services in accordance with WAC-173-303 and EPA SW-846.

3.1.8.2.3 Vacuum Cleaners

Container ID labeling requirements apply to all vacuums used on site. Vacuum cleaners must be empty when they arrive at the BNC and emptied at the end of the shift into approved containers per this section. If a vacuum cleaner cannot be empted at the end of the shift, it must be managed as a Hazardous Waste container and stored in a registered SAA. Hazardous Waste container labeling and storage requirements of this section apply to vacuum cleaners used for pickup and storage of HW.

3.1.8.2.4 Hazardous Waste Disposal

Transporting dangerous waste off-site is prohibited. The Government will arrange for the transporting and disposal of dangerous waste. Turn in dangerous waste from accumulation areas to the government prior to exceeding time and quantity limits.

3.1.8.3 Class I and II ODS Prohibition

Turn over to the Government any and all Class I ODS reclaimed as part of this contract, upon the completion of the work covered by this contract.

3.1.9 Noise

Conduct work in full compliance with WAC-173-60.

3.1.10 Contractor's Operation and Maintenance (O&M) Plan

Prior to using the types of air contaminant generating equipment defined in PSCAA Regulation, develop and submit a Contractor's Operation and Maintenance (O & M) Plan. Maintain the O & M plan and any associated records on site for the duration of the project. Be prepared to provide these records for review, within 30 minutes, when requested by regulatory agencies or the Contracting Officer. The O&M plan must contain at a minimum the following elements:

a. Maintain all equipment in good working order. Follow manufacturer's operation and maintenance recommendations, at a minimum.

b. Maintain records of any repairs made, including records of preventive maintenance.

c. Inspect periodically, including, but not limited to, evidence of fugitive emissions. If fugitive emissions are found, determine whether reasonable precautions are being taken to minimize such emissions. List requirements to repair the equipment or shut down operations, when reasonable precautions are not being taken to minimize fugitive emissions or unreasonable odors.

d. Ensure deficiencies are promptly repaired. Secure operation of such equipment if immediate repairs are not feasible.

e. List any requirements noted under "Conditions" on the Order of Approval for the equipment.

f. Generate records that list any actions (e.g. inspections, maintenance, shut down) that have been taken or completed, including the location, date, time, and name of person(s) completing the actions. Records may be maintained in the form of a logbook. Submit Operation and

Maintenance Records at contract completion.

3.1.11 Emission Standards

Opacity from Contractor equipment and operations must be in compliance with PSCAA Regulation I, Section 9.03 including but not limited to Visual Emissions (Opacity), Odor, Fugitive Dust, Spray Coating, Crushing, and Maintenance of Equipment.

3.1.11.1 Volatile Organic Compound Emission Control

Do not leave containers of paint, epoxy, or solvent open to the atmosphere unless they are being used. Secure all containers at the end of each shift. Do not use evaporation as a means of minimizing or disposing of hazardous waste.

-- End of Section --

SECTION 14 21 00.00 20

ELECTRIC TRACTION ELEVATORS
05/12

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only. **Comply with most stringent applicable provisions of following Codes, laws, and acts, including revisions and changes in effect:**

AMERICAN WELDING SOCIETY (AWS)

AWS D1.1/D1.1M	(2010; Errata 2011) Structural Welding Code - Steel

ASME INTERNATIONAL (ASME)

ASME A17.1/CSA B44	(2013) Safety Code for Elevators and Escalators
ASME A17.2	(2012) Guide for Inspection of Elevators, Escalators, and Moving Walks Includes Inspection Procedures for Electric Traction and Winding Drum Elevators, Hydraulic Elevators, and Escalators and Moving Walks

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70	(2014; AMD 1 2013; Errata 1 2013; AMD 2 2013; Errata 2 2013; AMD 3 2014; Errata 3 2014) National Electrical Code

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910.27	Fixed Ladders
36 CFR 1191	Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines

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. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Elevator and accessories; G

Machinery and controls; G

Wiring diagrams

Sequence of operations

SD-03 Product Data

Elevator supporting systems

Data sheets

Maintenance and diagnostic tools

Logic control

SD-05 Design Data

Reaction loads

SD-07 Certificates

Welders' qualifications

SD-10 Operation and Maintenance Data

Elevator, Data Package 4 G

Submit in accordance with Section 01 78 23 OPERATION AND MAINTENANCE DATA.

Maintenance and Repair Action Plan

1.3 QUALITY ASSURANCE

1.3.1 Qualification

Provide pre-engineered elevator system by a manufacturer regularly engaged in the manufacture of elevator systems. The manufacturer shall either install elevator system or shall provide letter of endorsement certifying that the elevator-system installer is acceptable to the manufacturer. An installer is required to be regularly engaged in the installation and maintenance of elevator system.

1.3.2 Shop Drawing Requirements

Provide assembly and arrangement of elevators, accessories, and supporting systems. Show location of machinery and controls in machine room. Provide details for materials and equipment, including but not limited to operating and signal fixtures, doors, door and car frames, car enclosure, controllers, motors, guide rails and brackets, layout of hoistway in plan and elevation, and other layout information and clearance dimensions. Submit complete wiring diagrams and sequence of operations, which show electrical connections and functions of elevator systems, for the machine room, hall and in the hoistway. Provide one set of wiring diagrams in plastic or glass cover, framed and mounted in the elevator machine room. Deliver other sets to the Contracting Officer. Coded diagrams are not acceptable unless adequately identified.

1.3.3 Product Data Requirements

Include information on motor, hall station, and buffer on elevators and accessories. For elevator supporting systems, include information on car control systems, and for data sheets, provide document identification number or bulletin number, published or copyrighted prior to the date of contract bid opening.

1.3.4 Design Data: Reaction Load Data Requirements

Provide calculations to the Contracting Officer for reaction loads imposed on building by elevator system. Demonstrate calculations complying with ASME A17.1/CSA B44, Appendix F. Provide calculations certified by a licensed structural engineer registered in any state. Do not fabricate materials nor perform construction until approved by the Contracting Officer.

1.3.5 Certificates: Welders' Requirements

Comply with AWS D1.1/D1.1M, Section 5. Include certified copies of welders' qualifications. List welders' names with corresponding code marks to identify each welder's welding work.

1.4 NEW INSTALLATION SERVICE

Provide routine warranty service in accord with the manufacturer's warranty requirements **and the FAR**, for a period of 12 months after the date of acceptance by Contracting Officer. Include 24-hour emergency service, with 1 hour response time, during regular working hours and a 2-hour response time before 7 a.m. and after 5 p.m. Monday through Friday, and all day on Saturday and Sunday, during this period without additional cost to the Government. Include adjustments, greasing, oiling, and cleaning. Provide routine inspection and tests of elevators in accordance with ASME A17.1/CSA B44 (Sections 1001 and 1002) and ASME A17.2. Provide supplies and parts to keep elevator system in operation. Perform service only by factory trained personnel.

1.4.1 Special Operations

Every six months, test systems for Battery Rescue Operation, Earthquake Emergency Operation, and Firefighters' Service. Schedule to not interfere with building operations. For Firefighter's Service, test monthly in accordance with ASME A17.1/CSA B44, Rule ~~1206.7~~**8.6.11**. **Provide category one testing prior to end of warranty period.** Deliver written results of each test operation to the Contracting Officer.

1.4.2 Maintenance and Diagnostic Tools

Provide all special tools and software necessary to service and maintain each elevator; deliver at time of final acceptance. Provide one of each tool per group of elevators. Provide solid state or microprocessor diagnostic tools unavailable on the open market. Include necessary diagnostic software in cases where the solid state or microprocessor diagnostic tools are available on the open market.

1.4.3 Keys for Elevator Key Switches

Provide a minimum of 12 keys per unique cylinder used on all key switches for a single elevator. If there is more than one elevator, additional

keys will not be required unless there are additional unique lock cylinders. Provide keys with brass or fiberglass tags marked "PROPERTY OF THE U.S. GOVERNMENT" on one side with function of key or approved code number on the other side.

1.5 FIRE PROTECTION SYSTEM

Additional fire protection requirements are located in; Section 28 31 63.00 20 ANALOG/ADDRESSABLE INTERIOR FIRE ALARM SYSTEM; Section 21 13 13.00 20 WET PIPE SPRINKLER SYSTEM, FIRE PROTECTION; and Section 26 20 00 INTERIOR DISTRIBUTION SYSTEM.

1.6 MAINTENANCE

1.6.1 Maintenance and Repair Action Plan

~~Provide plan of action by the Elevator Installation Contractor to provide emergency and routine maintenance in accordance with paragraph entitled "New Installation Services".~~ In addition to Data Package SD-19 "Operation and Maintenance Manuals", provide a list of phone numbers, personnel contacts, and all tools to be provided to the Contracting Officer.

Submit elevator manuals in accordance with Section 01 78 23 OPERATION AND MAINTENANCE DATA. **Include diagnostic equipment complete with access codes, adjusters' manuals and set-up manuals for adjustment, diagnosis and troubleshooting of elevator system, and performance of routine safety tests as part of elevator manuals.**

PART 2 PRODUCTS

2.1 ELEVATOR DESCRIPTION

Provide elevator system that complies with ASME A17.1/CSA B44 in its entirety, ASME A17.2 in its entirety, and additional requirements specified herein.

a. The scope of work in this specification defines the elevator modernization work for existing passenger elevator 5 and existing freight elevator 7 in Building 431 at Puget Sound Naval Shipyard in Bremerton, WA. In order to discover and resolve conflicts or lack of definition that might create problems, Contractor must review Contract Documents and site conditions for compatibility with its product prior to submittal of quotation. Review existing structural, electrical, and mechanical provisions for compatibility with Contractor's products. Purchaser will not pay for change to structural, mechanical, electrical, or other systems required to accommodate Contractor's equipment.

b. Unless specifically identified as "retain existing," in this specification provide new equipment. Information included in Contract Documents relates to both elevators unless specifically indicated for one of the elevators. In order to discover and resolve conflicts or lack of definition that might create problems, Contractor must review Contract Documents and site conditions for compatibility with its product prior to submittal of quotation.

2.1.1 Passenger Elevator 5

a. Type: New ~~geared or~~ gearless machine with AC motor

b. Rated load: 4,000 lb. - Retain existing

c. Rated Speed: 350 fpm - Retain existing

d. Travel Length: 90 ft. - Retain existing

e. Number of Stops: Six in line - Retain existing

f. Number of Hoistway Openings: 6 Front; 1-6 Retain existing

g. Car Inside Dimensions: 7 ft. 8 in. wide, 5 ft. 3 in. deep and 8 ft. 0 in. high - Retain existing

h. Car Door Opening: 3 ft. 6 in. wide and 7 ft. 0 in. high - Retain existing

i. Car Door Types: Single-speed center opening - Retain existing

2.1.1.1 Cab Enclosures and Door Finishes

Provide finishes as indicated below:

a. Floor; Vinyl composition tile.

b. Walls; Laminated plastic on particleboard. Provide each cab wall with equally spaced and equally sized wall panels. All wall panel fasteners shall be concealed.

(1) Wall trim; Stainless steel.

(2) Accessories; Hand rails. Cylindrical 1-1/2-inch diameter on side and rear walls with ends returning to the wall.

c. Interior face of door(s); Stainless steel.

d. Ceilings; Prefinished steel panels.

(1) Ceiling frame; Stainless steel.

e. Hoistway Doors and Frame Finishes

Provide finishes on exterior of hoistway as follows:

(1) Frame; Retain existing finishes and refinish to provide a uniform finish.

(2) Exterior face of door; Retain existing finishes and refinish to provide a uniform finish.

2.1.2 Freight Elevator 7

a. Type: Gearless - Retain existing

b. Rated Load: 20,000 lb. - Retain existing.

c. Rated Speed: 200 fpm - Retain existing.

d. Travel Length: 90 ft. - Retain existing.

e. Number of Stops: Six in-line - Retain existing.

f. Number of Hoistway Openings: 6 Front; 1-6 - Retain existing

g. Car Inside Dimensions: 8 ft. 9 in. wide, 19 ft. 7 in. deep; - Retain existing.

h. Hoistway Door Type & Size: Power operated, vertical bi-parting 8 ft. 9 in. wide and 8 ft. 2 in. high - Retain existing door panels. Provide new door operators, door chains, and related door hardware as specified in this specification.

i. Car Gate Type: Power operated vertical rising.

j. Loading Type: Class C - Retain existing.

2.1.2.1 Cab Enclosures and Door Frame Finishes

Provide finishes as indicated below:

a. Floor; Retain existing.

b. Walls; Repaint existing cab walls.

c. Ceiling; Retain existing.

d. Hoistway Doors and Frame Finishes

Provide finishes on exterior of hoistway as follows:

(1) Frame; Retain existing.

(2) Exterior face of door; Retain existing.

2.2 SPECIAL OPERATION AND CONTROL

Provide all special operations and control systems in accordance with ASME A17.1/CSA B44. Provide special operation key switches with 5 pin cylinder locks with removable cores. Provide a key control lock for each operation system.

2.2.1 Firefighters' Service

ASME A17.1/CSA B44, Section ~~211~~2.27~~, Rule 211.3~~. Provide equipment and signaling devices. The designated level for firefighters' key operated switch is the ground floor.

2.2.2 Smoke and Heat Detectors

Smoke and heat detectors are specified in Section 28 31 63.00 20 ANALOG/ADDRESSABLE INTERIOR FIRE ALARM SYSTEM, including conduit and wiring from each detector to elevator machinery space control panel. Provide connections directly to elevator controls which will, when smoke is detected by any smoke detector, actuate Firefighters' Service and send each elevator to the correct floor as required by ASME A17.1/CSA B44. Provide dual-contact smoke detectors located in the elevator lobbies and the elevator machine room. If sprinkler is provided in the hoistway, provide dual-contact smoke detector at top of hoistway. The circuit for

elevator controller actuation of Firefighters' Service shall include only these smoke detectors. In lieu of dual-contact smoke detectors, an addressable fire alarm system with listed smoke detectors can be used in the above stated locations. Ensure that all smoke detectors are mounted on finished ceiling. Smoke detector system must comply with ASME A17.1/CSA B44.

2.2.3 Fire Sprinklers

Provide fire sprinklers in accordance with Section 21 13 13.00 20 WET PIPE SPRINKLER SYSTEM, FIRE PROTECTION; providing dual contact flow switch, check valve, and shutoff valve in each sprinkler line immediately outside of each machine room and hoistway in accordance with ASME A17.1/CSA B44.

Provide electrical connection to fire sprinkler system in accordance with Section 26 20 00 INTERIOR DISTRIBUTION SYSTEM. For each elevator, provide control wiring connecting the flow switch to the shunt trip equipped circuit breaker within the electrical panel serving the main line disconnect **inside the elevator machine room**. Upon flow of water, flow switch shall instantaneously send a signal to cause opening of shunt-trip equipped mainline circuit breaker, in compliance with ASME A17.1/CSA B44, Rule 102.2(c)(4), and send a signal to fire alarm control panel to indicate water flow condition. Machine room sprinkler flow switch actuation shall shunt trip all elevators served by the machine room. **The flow switch shall have no time delay capability**~~Hoistway sprinkler flow switch actuation shall shunt trip all elevators in the hoistway~~.

2.2.4 Top-of-Car Operating Device

~~ASME A17.1/CSA B44, Section 306, Rule 306.2.~~ Provide elevator with an operating device, mounted on or from the car crosshead, that will permit car operation at a speed not exceeding 150 fpm for purposes of adjustment, maintenance, testing, and repair. Include an integral or remote safety device, "UP" and "DOWN" switches or buttons, an emergency stop switch, and inspection switch.

2.2.5 Hoistway Access Switches

~~ASME A17.1/CSA B44, Section 110, rule 111.9.~~ Provide key-operated hoistway access switches that permit limited movement of the car at terminal floors for car door opening and car positioning, operative only when the "INSPECTION" switch in car operating panel is in inspection position. Locate switch 6 feet above floor level, with in 12 inches of hoistway entrance frame of an elevator or with the ferrule exposed when located in entrance frame.

2.2.6 Independent Service

Provide exposed key-operated switch in car operating panel to enable independent service and simultaneously disable in-car signals and landing-call responses. Provide indicator lights that automatically illuminate during independent service.

2.2.7 Elevator Operation

ASME A17.1/CSA B44, Introduction, Section 3, Definitions.

2.2.7.1 Selective Collective Automatic Operation

Provide Selective Collective Automatic Operation. Provide illuminating push buttons.

2.3 ELEVATOR MACHINE

~~ASME A17.1/CSA B44, Section 208, geared or gearless traction, direct-drive machines.~~ Provide new **gearless traction** machine with AC motor and emergency brake device for Passenger Elevator 5. Provide emergency brake device, as well as necessary block up beams to locate deflector sheaves in machine room. Provide necessary interface with existing structure.

Retain existing machine, adding an emergency brake device for Freight Elevator 7. Drain, flush and provide new gear lubricant. Retrofit new direct drive, digital, closed-loop velocity encoder on hoist machine. Completely disassemble, clean, and inspect all brake components. Replace all worn or damaged parts. Reassemble and test for proper operation.

Provide 2-inch steel angle guards around cable or duct slots through floor slabs or grating. Provide rope and smoke guards for sheaves, cables, and cable slots in machine room.

Paint or finish ferrous surfaces with minimum one coat of rust-inhibiting paint conforming to manufacturer's standard practice.

~~2.3.1 Direct Current Drive Motor~~

~~NEMA MG 1, Part 18, hoisting motor with separately excited direct current (dc) generator. Provide drive motor with Class F insulation, and rated for continuous duty.~~

2.3.1 **Governors**

Provide new centrifugal-type car governors. Machine room mounted with pull-through jaws and bi-directional shutdown switches. Provide required bracketing and supports for attachment to building structure.

2.4 CONTROL EQUIPMENT

2.4.1 Motor Control Equipment

2.4.1.1 SCR Control ~~or~~**and** Variable Voltage Variable Frequency (VVVF) AC Control

Provide individual isolation transformers and individual choke reactors for each individual hoist motor. Provide filtering to maintain harmonic distortion below IEEE standards as measured at the elevator machine room disconnect. Provide new AC VVVF **regenerative** motor control for new machine for Passenger Elevator 5, and new DC solid state motor control for existing DC gearless machine that is being retained in place of existing motor generator set for Freight Elevator 7. **New AC VVVF regenerative drive for Passenger Elevator 5 shall be regenerative and utilize IGBT converter/inverter and dynamic braking during overhauling condition.**

2.4.2 Logic Control

Provide solid-state microprocessor controller to enable programmable control of call allocation, logic functions, door control, speed sensing

and car position. Provide a method of reprogramming adjustable parameters of computerized controls. Store all programming in non-volatile memory. The microprocessor control system is acceptable only if hardware and software required to maintain and utilize microprocessor is provided and training is provided to Government Personnel by the equipment manufacturer and supplier.

2.4.2.1 Repair Requirements

For the repair of microprocessor control system, provide maintenance tools, supporting computer software, and software documentation required for complete maintenance of elevator system including diagnostics and adjustments. Tools may be hand-held or built into control system. Provide tools which do not require recharging to maintain their memory or authorization for use. Do not use software which requires periodic reprogramming, or reauthorization. Programs shall be stored in non-volatile memory. Tools and software may be factory programmed to operate only with this project's identification serial number. **Provide laptop utilizing serialized software capable of accessing each parameter capable of adjustment. All testing during inspection shall be performed with the provided laptop; no company or personally owned interfaces will be allowed.**

2.5 OPERATING PANELS, SIGNAL FIXTURES, AND COMMUNICATIONS CABINETS

2.5.1 Capacity and Data Plates

~~ASME A17.1/CSA B44, Rule 207.3a, Rule 207.3b, and Rule 207.3c.~~ Attach faceplates with spanner security screws. On car panel, provide stainless steel capacity and data plates, with name of elevator manufacturer.

2.5.2 Car and Hall Buttons

Provide recessed tamper-proof push buttons of minimum 3/4 inch size satin-finish stainless steel with illuminated jewel center. Include approved engraved message and pictorial representation prohibiting use of elevator during fire or other emergency as part of faceplate. **Provide communications failure fixture with engraving integral with main lobby hall button fixtures.**

2.5.2.1 Hall Station Door Operating Buttons

Provide for Freight Elevator 7. Identical in size and design to hall call buttons, but not illuminated.

2.5.3 Passenger Car-Operating Panel

~~ASME A17.1/CSA B44, Section 211 and 306.~~ Provide each car with new car operating panels replacing existing car operating panels that contain operation controls and communication devices. Provide exposed, flush mounted buttons for the controls that must be passenger accessible. Provide service cabinet or keyed switches for those controls that should not be passenger accessible. Allow maximum 48 inches between car floor and center line of bottom button. Use engraving and backfilling or photo etching for button and switch designators. Do not use attached signs.

2.5.3.1 Passenger Controls

a. Illuminated operating call buttons identified to correspond to

landings served by elevator car. For two openings at a floor, provide two buttons marked "FRONT" and "REAR" above button location.

b. "DOOR OPEN" and "DOOR CLOSE" buttons.

~~c. Keyed "STOP" switch in accordance with ASME A17.1/CSA B44, rule 210.2(v).~~

~~d~~c. "ALARM" button in compliance with UFAS, ADA, and ASME A17.1/CSA B44~~, rule 211.1~~. Alarm button shall be red with engraved legend "ALARM." Alarm button shall illuminate when pushed. Locate "ALARM" button at panel bottom.

~~e~~d. "FIRE DEPARTMENT" key switch, with "OFF-HOLD-ON" positions, in that order with key to be removable in all positions. Provide fire sign or jewel and audible signal device, in accordance with ASME A17.1/CSA B44, Figure ~~211.3a~~**2.27.3.1.6(h)**. Both visual and audible signals are activated when Phase I key switch in hall is activated or when smoke detector activates return of elevator(s) to main fire response floor. Visual and audible signal shall remain activated until car has reached designated or alternate fire response floor. Upon arrival at fire response floor visual signal remains illuminated and audible signal becomes silent.

~~f~~e. Emergency two-way communication. Provide momentary pressure, single illuminating pushbutton operated communication device that complies with ASME A17.1/CSA B44, UFAS, and the Americans with Disabilities Act.

2.5.3.2 Service Controls

a. Inspection switch that transfers car control to top-of-car inspection operating controls and prevents car operation from in-car control panel.

b. Independent service switch.

c. Two car light switches, one for light in car and one for lights on top and bottom of car frame.

d. Fan switch, two-speed.

~~e. Infra-red curtain unit cutout switch.~~

~~f~~e. 120-volt ac 60 Hz single-phase duplex electrical outlet of ground-fault-circuit-interrupt (GFCI) design.

~~g~~f. Device for communication between car and elevator machine room.

2.5.3.3 Certificate Window

Provide a minimum 4 inch high by 6 inch wide certificate window in car operating panel for elevator inspection certificate.

2.5.4 Freight Car-Operating Panel

~~ASME A17.1/CSA B44, Section 211 and 306.~~ Provide 1/8 inch thick stainless steel face plate with edges relieved. Provide each car with one car operating panel that contains operation controls and communication devices. Provide exposed, flush mounted buttons for the controls that

must be passenger accessible. Provide service cabinet or keyed switches for those controls that should not be passenger accessible. Allow maximum 48 inches between car floor and centerline of bottom button. Use engraving and backfilling or photo etching for button and switch designations. Do not use attached signs.

2.5.4.1 Passenger Controls

a. Illuminated operating call buttons identified to correspond to landings served by elevator car. For two openings at a floor, provide two buttons, marked "FRONT" and "REAR" above the button location.

b. Manual "STOP" switch in accordance with ASME A17.1/CSA B44, Rule ~~210.2 (e)~~**2.26.2**.

c. "ALARM button in compliance with UFAS, ADA, and ASME A17.1/CSA B44 Alarm button shall be red with engraved legend "ALARM." Alarm button shall illuminate when pushed. Locate "ALARM" button at panel bottom.

d. "FIRE DEPARTMENT" key switch, with "OFF-HOLD-ON" positions, in that order with key removable in all positions. Provide fire sign or jewel and audible signal device~~, in accordance with ASME A17.1/CSA B44 Figure 211.3a~~. Both visual and audible signals are activated when Phase I key switch in hall is activated or when smoke detector activates return of elevator(s) to main fire response floor. Visual and audible signal shall remain activated until car has reached designated or alternate fire response floor. Upon arrival at fire response floor visual signal remains illuminated and audible signal becomes silent.

e. Emergency two-way communication. Provide momentary pressure, single illuminating pushbutton operated communication device that complies with ASME A17.1/CSA B44, UFAS, and the Americans with Disabilities Act.

2.5.4.2 Service Controls

a. Inspection switch that transfers car control to top-of-car inspection operating controls and prevents car operation from in-car control panel.

b. Independent service switch.

c. Two car light switches, one for light in car and one for lights on top and bottom of car frame.

d. Fan switch, two-speed.

e. Infra-red curtain unit cutout switch.

f. 120-volt ac 60 Hz single-phase duplex electrical outlet of ground-fault-circuit-interrupt (GFCI) design.

g. Communication device between car and elevator machine room.

h. "DOOR OPEN" and "DOOR CLOSE" buttons.

2.5.4.3 Certificate Window

Provide a minimum 4 inches high by 6 inches wide, certificate window in

car operating panel for elevator inspection certificate.

2.5.5 Switches and Devices

Provide elevator manufacturer's standard grade for switches and devices on car operating panel. Legibly and indelibly identify each device and its operating positions. Locate car dispatching buttons in identical positions in car operating panels for corresponding floors.

2.5.6 In-Car Position and Direction Indicator and Signal

In-car direction indicator shall be included in the in-car position indicator fixture.

2.5.6.1 In-Car Position Indicator and Signal

Provide horizontal electrical or electronic digital position indicator located minimum of 84 inches above car floor. Arrange indicator to show floor position of car in hoistway and its traveling direction. Indicate position by illumination of numeral or letter corresponding to landing at which car is passing or stopping. Provide audible signal to alert passenger that elevator is passing or stopping at a floor. Provide audible signals exceeding ambient noise level by at least 20 decibels with frequency not higher than 1500 Hz.

2.5.7 Landing Position and Direction Indicator and Signal

Provide a single fixture containing the landing position and direction indicators.

2.5.7.1 Landing Position Indicator and Signal

Provide an electrical or electronic digital position indicator similar to the car position indicator. Arrange position indicator in wall horizontally above the door frame or vertically at the side of the door frame. Indicators to show floor position of car in hoistway. Indicate position by illumination of numeral or letter corresponding to landing at which car is passing or stopping.

2.5.7.2 Landing Direction Indicator and Signal

Provide landing direction indicator with visual and audible signal devices integral with the landing position indicator at each floor for Passenger Elevator 5. Provide single direction indicator at terminal floors; "UP" and "DOWN" direction indicator at intermediate floors. Provide equilateral triangles not less than 2 1/2 inches in size, green for upward direction and red for downward direction. Provide electronic audible device that sounds once for upward direction and twice for downward direction. Provide audible signals exceeding ambient noise level by at least 20 decibels with frequency not higher than 1500 Hz.

2.6 HOISTWAY AND CAR EQUIPMENT

ASME A17.1/CSA B44~~, Parts I and II~~.

2.6.1 Car and Counterweight Guide Rails and Fastenings

Retain existing car and counterweight rails.

2.6.2 Car and Counterweight Buffers

Retain existing car and counterweight buffers. Drain, flush, refill and test.

2.6.3 Pit Equipment

Retain existing. Provide new governor tail sheave assembly mounted in the pits as part of the new governor assembly.

2.6.3.1 Pit "STOP" Switch

Provide push/pull type pit "STOP" switch for stopping elevator motor, independent of regular operating device. Locate switch on same side of hoistway as ladder.

2.6.3.2 Ladder

Section 05 50 13 MISCELLANEOUS METAL FABRICATIONS, Section 05 52 00 METAL RAILINGS, Section 05 51 00 METAL STAIRS, galvanized steel. Provide ladder in accordance with 29 CFR 1910.27 with maximum distance between rung and wall based on existing conditions. Locate ladder on hoistway side wall closest to hoistway door opening. **Minimum distance shall be 7 inches from center line of rung to wall if space permits.**

2.6.3.3 Lighting of Pits

~~ASME A17.1/CSA B44, Rule 106e.~~ Locate light not less than 6 feet above pit floor. Locate switch on same side of hoistway as ladder. Provide GFCI duplex receptacle in each pit.

2.6.4 Terminal Stopping Devices

~~ASME A17.1/CSA B44, Section 209.~~**Provide new terminal stopping devices in accordance with ASME A17.1/CSA B44, Rule 2.26.2.11.**

2.6.5 Wiring and Traveling Cables

NFPA 70, Article 620 and Section 26 20 00 INTERIOR DISTRIBUTION SYSTEM. Suspend traveling cables by means of self-tightening webbed devices. **Provide new wiring and traveling cables. Provide copper conductors and connections throughout with individual wires coded and connections on identified studs or terminal blocks. Use no splices or similar connections in wiring except at terminal blocks, control compartments, or junction boxes. Provide 10 percent spare conductors throughout. Run spare wires from car connection points to individual elevator controllers in the machine room. Tag spares in machine room. Provide flame and moisture-resistant outer cover for traveling cables. Prevent traveling cable from rubbing or chafing against hoistway or equipment within hoistway. Connect fire alarm initiating devices and emergency two-way communication system auxiliary wiring in each car controller in machine room.**

2.6.6 Emergency Signaling Devices

Provide an audible signaling device, operable from the Car Operating Panel button marked "ALARM". The audible signaling device shall be mounted in the hoistway and shall conform to the requirements of ASME A17.1/CSA B44, Rule 211.1(a). In addition, for freight elevators, operation of the

EMERGENCY STOP button shall sound the audible signaling device.

2.7 PASSENGER CAR AND HOISTWAY DOOR ACCESSORIES

~~ASME A17.1/CSA B44, Sections 111, 112, and 204.~~ Provide infra-red curtain unit. Provide high-speed electric operator, safety interlocks for car and hoistway doors, and electric safety contact to prevent car operation unless doors are closed. **Provide new door interlocks, operable without retiring cam. Paint interlock box flat black.**

2.7.1 Infrared Curtain Unit

Provide Infra-red Curtain Unit (ICU) with multiple infra-red beams that protect to the full height of the door opening. Minimum coverage shall extend from 2 inches off the floor to 70 inches above floor level. ~~Door operation must meet the requirements of ASME A17.1/CSA B44, Rule 211.3a(5) and 112.5.~~

2.8 PASSENGER ELEVATOR GUIDES, PLATFORM, AND ENCLOSURE

2.8.1 Roller Guides

~~ASME A17.1/CSA B44, Section 200.~~ Provide roller guide assemblies in adjustable mountings on each side of car and counterweight frames in accurate alignment at top and bottom of frames.

2.8.2 Car Frame and Platform

Retain existing. Provide new 48-inch extended toe guard.

2.8.3 Car Enclosure, Car Door, and Car Illumination

Retain existing.

2.8.3.1 Car Shell Return Panels, Entrance Columns, Cove Base, and Transom

Retain existing.

2.8.3.2 Car Top

Retain existing. Install car top guard rails on sides and rear of each car top. Rails should include a bottom, middle and top section **in accordance with ASME A17.1/CSA B44, Rule 2.10.2. Install electrical device on car top emergency exits that will prevent operation of the elevator car if the exit cover is open more than 2 inches in accordance with ASME A17.1/CSA B44, Rule 2.14.1.5.1(f).** .

2.8.3.3 Car Door

Provide 16 gauge minimum stainless steel, sandwich construction without binder angles. Provide a minimum of 2 door guide assemblies per door panel, one guide at leading and one at trailing door edge with guides in the sill groove their entire length of travel.

2.8.3.4 Car Entrance Sill

Retain existing.

2.9 PASSENGER ELEVATOR HOISTWAY DOORS AND ENTRANCES

2.9.1 Hoistway Entrance Frames

Retain existing.

2.9.2 Hoistway Entrance Sills

Retain existing.

2.9.3 Hoistway Entrance Doors

Retain existing.

2.9.4 Entrance Fascias and Dust Covers

Retain existing.

2.9.5 Hoistway Ventilation

Provide hoistway ventilation directly to outside air by fixed louver through side wall of hoistway at highest possible point in hoistway. Net size of louver to be at least 3 1/2 percent of hoistway cross section.

2.10 FREIGHT ELEVATOR GUIDES, PLATFORM, AND ENCLOSURE

2.10.1 Roller Guides

~~ASME A17.1/CSA B44, Section 200.~~ Provide roller guide assemblies in adjustable mountings on each side of car and counterweight frames in accurate alignment to top and bottom of frames.

2.10.2 Car Frame and Platform

Retain existing.

2.10.3 Car Enclosure

Retain existing.

2.11 FREIGHT ELEVATOR HOISTWAY DOORS AND ENTRANCES

2.11.1 Door Panel

Retain existing.

2.11.2 Door Operation

Semi-selective Full-selective. Provide new door operators, **door chains** controls, wiring, and necessary interface to install new equipment on existing door panels.

2.11.3 Door Guide Rails

Retain existing.

2.11.4 Door Interlocks

~~ASME A17.1/CSA B44, Rule 111.3 and 111.6.~~**Provide new door interlocks,**

operable without retiring cam. Paint interlock box flat black.

2.12 HANDICAPPED AND MEDICAL SERVICES ACCESS

36 CFR 1191, Sections 4.10 for Elevator, 4.30 for Signage, ~~and~~ 4.31 for Telephones**, and most current accessibility standards**..

2.13 EMERGENCY BATTERY RESCUE FEATURE

Battery Rescue Feature: Upon loss of normal power, provide controls to automatically lower or raise the cars to the nearest landing based on loading conditions. Upon arrival at the landing, the elevator doors shall open automatically and remain open until regular door time has expired. The elevator shall then become deactivated. The standby power source shall be provided via 12-volt D.C. battery units installed in machine room, including solid-state charger and testing means mounted in a common metal container. Battery to be rechargeable lead acid or nickel cadmium with a ten-year life expectancy. Upon restoration of normal power, the elevator shall automatically resume normal operation.

2.14 PROVISIONS FOR EARTHQUAKE PROTECTION

ASME A17.1/CSA B44, ~~Part XXIV~~**Section 8.4**. This facility is located in a seismic zone 3, comply with all ASME A17.1/CSA B44, ~~Part XXIV~~**Section 8.4** requirements. Provide dual counterweight derailment sensing wires vertically each side of counterweight the entire height of travel. The counterweight frame shall be equipped with a minimum of four derailment rings. A dual axis seismic switch shall be provided in the machine room that will activate at no less than 0.15 times gravity in the vertical or horizontal directions. **Provide position restraints on new guide assemblies.** Counterweight retainer plates must be bolted.

PART 3 EXECUTION

3.1 INSTALLATION

Install in accordance with manufacturer's instructions, ASME A17.1/CSA B44, 36 CFR 1191, and NFPA 70.

3.1.1 Traveling Cables

Do not allow abrupt bending of traveling cables.

3.1.2 Structural Members

Do not cut or alter. Restore any damaged or defaced work to original condition.

3.1.3 Safety Guards

Selector cables or tapes exposed to possibility of accidental contact in machine room shall be completely enclosed with 16 gage sheet metal or expanded metal guards, both horizontally and vertically. Exposed gears, sprockets, tape or rope sheaves, floor controllers, or signal machines, and their driving ropes, chains or tapes, and selector drums shall be guarded from accidental contact in accordance with ASME A17.1/CSA B44.

3.1.4 Miscellaneous Requirements

Include recesses, cutouts, slots, holes, patching, grouting, and refinishing to accommodate elevator installation. Use core drilling to drill all new holes in concrete. Finish work to be straight, level, and plumb. During installation, protect machinery and equipment from dirt, water, or mechanical damage. At completion, clean all work, and spot paint.

3.1.5 Firefighters' Service

Firefighters' service shall be complete including installation and wiring of all smoke detectors in accordance with ASME A17.1/CSA B44, Rule ~~211.3b~~ **2.27.3.2**. Coordinate smoke detector installation for Firefighters' Service.

3.2 FIELD QUALITY CONTROL

After completing elevators system installation, notify Contracting Officer that elevator system is ready for final inspection and acceptance test. Contracting Officer will obtain services of Naval Facilities Engineering Command certified elevator inspector.

Contractor shall perform all required tests and demonstrate proper operation of each elevator system and prove that each system complies with contract requirements and ASME A17.1/CSA B44, and the applicable requirements of **Section 8.3, "Engineering Tests, Type Tests, and Certification"**~~Part XI, "Engineering and Type Tests"~~. Inspection procedures in ASME A17.2 form a part of this inspection and acceptance testing. All testing and inspections shall be conducted in the presence of the elevator inspector. Demonstrate the proper operation of all equipment at various date settings, selected by the elevator inspector, ranging from the date of contract award through 1 January 2099.

Inspector shall complete, sign and post form NAVFACENGCOM 9-11014/23 (Rev. 7-88), Elevator Inspection Certificate, after successful completion of inspection and testing.

3.2.1 Testing Materials and Instruments

Furnish testing materials and instruments required for final inspection. Include calibrated test weights, tachometer, 600-volt megohm meter, volt meter and ammeter, three Celsius calibrated thermometers, door pressure gage, spirit level, stop watch, dynamometer, and 100 foot tape measure.

3.2.2 Field Tests

3.2.2.1 Endurance Tests

Test each elevator for a period of one hour continuous run, with specified rated load in car. Restart the one hour test period from beginning, following any shutdown or failure. During test run, stop car at each floor in both directions of travel for standing period of 10 seconds per floor. The requirements for Rated Speed, Leveling, Temperature Rise and Motor Amperes Test specified herein are to be met throughout the duration of the Endurance Test.

3.2.2.2 Speed Tests

Determine actual speed of each elevator in both directions of travel with rated load and with no load in elevator car. Make Speed tests before and immediately after Endurance test. Determine speed by tachometer reading, excluding accelerating and slow-down zones per ASME A17.2. Minimum acceptable elevator speed is the Rated speed specified. Maximum acceptable elevator speed is 110 percent of Rated speed.

3.2.2.3 Leveling Tests

Test elevator car leveling devices for landing accuracy of plus or minus 1/4 inch at each floor with no load in car, symmetrical load in car, and with rated load in car in both directions of travel. Determine accuracy of floor landing both before and immediately after endurance tests. ~~For Class C2 landing, freight elevators shall comply with ASME A17.1/CSA B44, Rules 207.2b (3)(a), (b) and (c).~~ The maximum load on car platform during loading or unloading shall not exceed 150 percent of rated load.

3.2.2.4 Insulation Resistance Tests

Perform tests to ensure elevator wiring systems are free from short circuits and grounds. Minimum acceptable insulation resistance for electrical conductors is one megohm between each conductor and ground and between each conductor and other conductors. Prior to megohm meter test, make provisions to prevent damage to electronic devices.

3.2.2.5 Brake Test

Conduct brake test with 125 percent of rated load in elevator. Verify that brakes stop and hold elevator with 125 percent of rated load.

3.2.2.6 Buffer Tests

Test buffers for car and counterweight as outlined in ASME A17.1/CSA B44, Rule ~~1100.5~~**8.3.2**.

~~3.2.2.7 Temperature Rise Tests~~

~~Determine temperature rise of elevator hoisting motor, motor-generator, exciter, and booster during full-load test run for one hour minimum. Under these conditions, maximum acceptable temperature rise shall not exceed acceptable temperature rise indicated on manufacturer's data plate. Start test only when equipment is within 5 degrees C of ambient temperature.~~

3.2.2.7 Balance Tests

Perform electrical and mechanical balance tests of car and counterweight.

3.2.2.8 Motor Ampere Tests

Measure and record motor amperage when motor is running and elevator is lifting at rated load and speed. Measure and record motor amperage at beginning and end of Endurance test.

3.3 MAINTENANCE SERVICE TRAINING

Provide qualified representative of elevator manufacturer to instruct ~~Government~~**contracted elevator service** personnel in care, adjustment, and maintenance of elevator equipment for a period of not less than 5 working days immediately following acceptance of elevator system. Training shall include familiarization and use of any supplied software.

-- End of Section --

Building 431 Repair Inside Machine Shop
PWS for Machine Relocation

REQUIREMENTS: The Contractor shall be responsible for the relocation of machine tools, including: Pre-move qualification, disconnect existing utilities, oil, lubricant removal, machine dis-assembly, rigging, skidding, setting equipment, re-assembly, and connection to existing shop level utilities, leveling, and post-move qualification of machines.

Pre-Move Qualification Test of Machines. The contractor shall conduct pre-move qualification tests of the machines prior to relocation. The pre-move qualification shall consist of an operational cycle test, laser accuracy repeatability test and ball-bar test. The pre-move qualification tests shall establish the as-is baseline condition of the machines.

Qualification Accreditation. The Contractor performing the pre and post-move accuracy, repeatability and ball-bar testing of machines shall have demonstrated experience in the machine tool metrology services field. The machine tool metrology services Contractor shall have ISO 9001:2008 registration/certification. All metrology equipment utilized shall have documented proof of accuracy traceable to the National Institute of Standards and Technology (NIST). The Contractor performing the pre and post-move machine qualifications shall provide documentation to the Quality Assurance Evaluator/Contractor Quality Control (QAE/CQC) indicating proof of ISO 9001:2008 and AS 9100 Rev. B accreditation and certification.

Operational Cycle Tests. The Government will perform an operational verification “cycle test” of each machine prior to the relocation with the presence of the Contractor. The operational cycle test shall consist of program that exercises all machine functions. The Contractor shall provide a “Qualification Checklist Form” for each machine on which successful completion, interruptions and failures associated with the Operational Cycle Test are mutually noted. The contractor developed “Qualification Checklist Form”. Pre-move condition reports (Qualification Checklist Form) for each machine shall be a document signed by both Contractor and Government quality assurance evaluator (QAE) indicating agreement of the machine as-is conditions.

Accuracy, Repeatability and Ball-Bar Tests. The Contractor shall provide all labor, equipment, fixturing, adapters and materials necessary to perform the pre-move laser accuracy, repeatability and bar-ball analysis tests of the equipment. The Contractor shall provide accuracy, repeatability test results, and ball-bar test results, along with NIST traceable documentation for the measurement equipment utilized. The Contractor generated “as-is” baseline test results for each machine shall be documented and signed by both Contractor and Government QAE indicating agreement to the machine "as-is" baseline conditions (ie. Qualification Checklist Form). The accuracy, repeatability and ball-bar test results of the relocated machines (post-move condition) shall be equal to or better than the “pre-move” baseline test results. The contractor shall provide both hard copy and electronic transmittal of accuracy, repeatability, ball-bar test results to the QAE as services are rendered.

Removal of Fluids. The Contractor shall be responsible for draining the existing fluid(s). Containers shall be labeled by the fluid type, stored, transported and placed back into the relocated machines, if feasible. The Contractor shall be responsible for topping off hydraulic, way lube, and spindle lube reservoirs in the event the quantity of fluids recovered are

insufficient. The contractor shall notify the shop HAZMAT monitor or QAE prior to handling fluids. The Government will be responsible for the removal and addition of coolant cutting fluids.

Utilities Disconnect. The Contractor and the Government QAE shall assess the existing utilities as identified. Concurrence or special notes by Government and contactor representatives shall be annotated on the Contractor provided Qualification Checklist Form. The Contractor shall disconnect existing utilities from the machines.

Machine Dis-Assembly & Preparation for movement. The Contractor construct skids, dis-assemble machine components, obtain brackets, and prepare machine for movement with the manufacturer's recommended procedures. Contractor proposed deviations from OEM recommendations shall be coordinated with QAE and annotated on the Checklist form.

Rigging. The Contractor shall furnish all labor and material handling equipment required for moving the machines. The Contractor shall be responsible for the disposal of all crating, skids and packing materials.

Installation and Assembly. The Contractor shall furnish all personnel, equipment, tools and materials necessary to set on-site machine components, grout, weld anchor bolts, leveling devices and the associated assembly of machine to manufacturer's specifications.

Leveling. The Contractor shall furnish all personnel, equipment, tools, and materials necessary to level the machines on the installed foundations IAW manufacturer's direction.

Utilities Hook-Up. The Contractor shall furnish all personnel, equipment and materials necessary to connect the identified machines to electrical, compressed air and water as required. All electrical work shall be IAW National Electrical Codes (NEC). Equipment grounding requirements shall be the responsibility of the Contractor. The Contractor and Government representative shall indicate concurrence of utilities hook-up by machine on the Contractor provided Qualification Checklist Form. The contractor shall maintain hardcopy record of the checklist and email copy to the QAE as services are rendered.

Post-Move Qualification Test of Machines. The contractor shall conduct post-move qualification tests of the machines. The post-move qualification tests of a machine shall consist of an operational cycle test, laser accuracy, repeatability test, and ball-bar test to establish operational readiness of all relocated machines.

Operational Cycle Tests. The Government will perform an operational verification "cycle test" of each machine after relocation in the presence of the Contractor. The operational cycle test shall consist of a program that exercises all machine functions. The Contractor shall provide a Qualification Checklist Form for each machine on which successful completion of operation cycle test(s), interruptions and failures are mutually noted. The Qualification Checklist Form for each machine shall be a document signed by both Contractor and Government representative indicating agreement on the operating condition of the machine conditions post-move. The Contractor shall provide both hard copy and electronic transmittal of operational cycle test results to the QAE as services are rendered.

Accuracy, Repeatability and Ball-Bar Tests. The Contractor shall provide all labor, equipment, fixturing, adapters and materials necessary to perform the post-move laser accuracy, repeatability and bar-ball analysis tests of the equipment. The Contractor shall provide accuracy, repeatability test results, and ball-bar test results, along with NIST traceable documentation for the measurement equipment utilized. The Contractor generated post-move test results for each machine shall be documented and signed by both Contractor and Government QAE indicating agreement to the machine post-move conditions (ie. Qualification Checklist Form). The accuracy, repeatability and ball-bar test results of the relocated machines (post-move condition) shall be equal to or better than the "pre-move" baseline test results. The contractor shall provide both hard copy and electronic transmittal of accuracy, repeatability, ball-bar test results to the QAE as services are rendered.

Machine Adjustments/Compensations. The Contractor shall be responsible for machine adjustments/compensation(s) required to restore a relocated machine's condition to an "equal-to" or "better" condition than the machine's pre-move baseline and re-test until the requirements are attained.

Service Report: The Contractor shall provide service report(s) by specific machine to the QAE in hardcopy and electronic format upon completion of services rendered. The service report(s) shall contain the following information as a minimum: name of company, service date, description of services provided, additional services recommended (if any), legible name and signature of technician performing the services, signature of on-site Government QAE, start and completion dates. The service reports shall as a minimum contain fields for recording Contractor and QAE coordination by machine and date for: utilities assessment, pre-move operational cycle test, pre-move accuracy, repeatability, ball-bar test, verification of utilities hook-up of relocated machine, post-move operational cycle test and post-move accuracy, repeatability and ball-bar test. The Contractor shall furnish actual test results, maintain Qualification Checklist Forms as services are rendered and provide a final comprehensive report of checklist forms and test results. The Qualification Checklist Forms for each machine shall be a document signed by both Contractor and Government QAE indicating agreement that the machine's relocated post-move condition is "equal to or better than" its pre-move, baseline condition.