

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD
SHORE MAINTENANCE COMMAND

SPECIFICATIONS
FOR
BLDG 100 - REPAIR/REPLACE OIL WATER SEPARATOR
U.S. COAST GUARD BASE ELIZABETH CITY
AVIATION LOGISTICS CENTER
ELIZABETH CITY, NORTH CAROLINA

DECEMBER 2011

COMMANDING OFFICER
UNITED STATES COAST GUARD
CIVIL ENGINEERING UNIT, RM 2179
1240 EAST NINTH STREET
CLEVELAND, OHIO 44199-2060

AUTHOR: J. GREENE

DIV 1 Final

TABLE OF CONTENTS

<u>Division</u>	<u>Section</u>	<u>Title</u>	<u>Page</u>
1		<u>GENERAL REQUIREMENTS</u>	
	01010	Scope of Work	
	01012	Work by Others	
	01015	Contractor Work Hours	
	01028	Pre-bid Site Visits	
	01030	Pre-Construction Site Conditions	
	01040	Coordination	
	01041	Field Adjustments	
	01062	Utility Permits	
	01063	Building Permits	
	01067	Environmental Permits	
	01158	Design/Build Criteria	
	01160	Construction Design Documents	
	01200	Project Meetings	
	01300	Submittals	
	01310	Construction Schedule, Schedule of Values and Progress Schedule	
	01370	Construction Daily Reports	
	01510	Temporary Utilities	
	01520	Protection from Weather and Construction Operations	
	01540	Safety Program	
	01541	Equipment/Utility Lockout and Tagout Requirements	
	01542	Material Safety Data Sheets and Material Handling Procedures	
	01543	Confined Entry	
	01544	Temporary Fire Protection	
	01550	Access Roads and Parking	
	01566	General Cleanup and Site Restoration of Work Areas	
	01567	Pollution Control	
	01569	Hazardous Waste	
	01620	Staging Areas and Access	

TABLE OF CONTENTS (Cont.)

<u>Division</u>	<u>Section</u>	<u>Title</u>	<u>Page</u>
1		<u>GENERAL REQUIREMENTS</u>	
	01650	Recovered Materials Notice	
	01720	As Built Drawings	
	01730	Operating Instructions and Training	
		List of Submittals	
		Contract Item Acceptance Request	

DIVISION 1
(January 2002 Version)

SECTION 01010
SCOPE OF WORK

1. WORK INCLUDED: Contract work shall encompass the following items of work as described in these specifications. This summary is not all-inclusive and delineates only those work items deemed as major to the contract. Ancillary work items not listed below, though necessary to attain the completed project, shall be included in the contract.

GENERAL: General project scope is to replace existing Oil Water Separator serving Bldg 100. Major items of work shall include the following:

- 1.1 Remove existing oil water separator (OWS) and dispose of in accordance with local, state and federal regulations.
- 1.2 Install new OWS above ground and connect to existing piping. OWS must meet all local, state and federal regulations as well as the following specifications:
Flow Rate – 100 gal/min
- 1.3 Insulate and/or provide heating mechanism for above-ground equipment as necessary to avoid freeze/thaw conditions.
- 1.4 New OWS system shall not require Confined Space Entry into existing concrete vault in order to perform preventative maintenance or maintain the system.
- 1.5 New OWS system shall include new pump for transfer of oil to oil storage tank.
- 1.6 Contractor shall provide all OWS product submittals for approval.

2. DRAWINGS: Drawings and the accompanying specifications are the property of the Government and comprise legal documentation that pertains exclusively to this project. Drawings can only be obtained electronically by downloading the files identified with this solicitation at <https://www.fbo.gov>. CEU Cleveland will not provide hard copies of drawings.

- 2.1 Construction Drawings: None
- 2.2 Reference Drawings C400185s27.tif

SECTION 01012
WORK BY OTHERS

1. WORK NOT INCLUDED IN THE CONTRACT: Non-contractor personnel will accomplish the following work items necessary for completion of the project. However, the contractor must coordinate accomplishment of these work items with the appropriate parties noted below in accordance with SECTION 01040, "Coordination".

1.1 Work by Utility Companies: Utility company service crews will perform all electrical, water, natural gas, and/or sewer connections to main service lines. The contractor shall ensure

that all main electrical service panels and accompanying feeders /sewer and water line drops are completed and ready for service prior to coordinating any tie in as indicated on the drawings.

SECTION 01015 CONTRACTOR WORK HOURS

1. WORK HOURS: Accomplish work during normal unit operational hours of 7:00 a.m. to 4:30 p.m., Monday through Friday unless otherwise approved by the Coast Guard. Note any departures from these work hours on the Daily Reports.
2. SATURDAY, SUNDAY AND HOLIDAYS: The contractor shall provide the Contracting Officer's Technical Representative at least forty-eight hours advance notice prior to working on weekends or Federal holidays. The Government may reject any such request without impacting the completion time of the contract.
3. CONTRACT COMPLETION: The contractor shall complete work within the time frame indicated upon issuance of the Notice to Proceed. Limitations imposed by these work hours will not entitle the Contractor additional time to complete the project. Refer to FAR Clause 52.211-10 "Commencement, Prosecution and Completion of Work".

SECTION 01028 PRE-BID SITE VISITS

1. GENERAL: Bidders are responsible for visiting the site to field verify existing conditions and determine actual dimensions and the nature of the work required. Failure to visit the site does not relinquish the bidder from determining the extent and scope of the work required and estimating the difficulty and cost to complete the project. Requests for equitable adjustments, in either time or money, arising from failing to field verify site conditions may be denied. Provisions regarding the site visit requirements are outlined in FAR Clause 52.236-3 "Site Investigation and Conditions Affecting the Work"
2. SITE VISIT: Arrange pre-bid site visits to Base Elizabeth City to verify existing conditions with Mr. David Aydlett at (252) 335-6870, david.p.aydlett@uscg.mil.

SECTION 01030 PRE-CONSTRUCTION SITE CONDITIONS

1. SITE CONDITION VERIFICATION: The Contractor shall verify the conditions of the existing site, equipment and facilities potentially affected by the work under this contract and photograph and/or videotape the conditions in order to document their pre-construction condition. Copies of the photos and videos shall be submitted to the Contracting Officer prior to starting work.

2. UTILITIES: The contractor shall use proactive measures such as digging, metering, testing, underground utility location devices, and utility company location services to locate all underground utilities identified in the area of work at no additional expense to the Government. Additional cost of unplanned outages and repair of damaged utilities, including emergency repairs by others, not properly identified by the Contractor shall be the Contractor's responsibility.

SECTION 01040 COORDINATION

1. INTERFERENCE WITH COAST GUARD OPERATIONS: Accomplish work in a manner that causes minimal impact on normal operations. The Contractor shall notify the Contracting Officer's Technical Representative at least five working days in advance of any planned outages of water, electrical, telephone, or sanitary facilities. Notify the Contracting Officer's Technical Representative at least one week prior to beginning construction.

2. MILITARY STATION REGULATIONS:

2.1 The Contractor, his employees, and subcontractors shall become familiar with and obey all station regulations. All personnel employed on the project shall keep within the limits of the work and avenues of ingress and egress, and shall not enter any other areas outside of the site of the work unless required to do so in the performance of their duties. The Contractor's equipment shall be conspicuously marked for identification.

2.2 There shall be NO SMOKING in any Coast Guard building.

2.3 Storage Areas: The Contracting Officer's Technical Representative will determine exact location and boundaries of staging areas. Under no circumstances shall materials be stored in areas that will interfere with aircraft operations.

2.4 Storm Protection: If a gale force wind warning or higher is issued, take precautions to minimize any danger to persons and protect the work and nearby Government property. Precautions shall include, but not be limited to, closings, removing loose materials, tools and equipment, from exposed locations. Remove and secure scaffolding and temporary work. Close openings in the work area if storms of lessor intensity are imminent.

SECTION 01041 FIELD ADJUSTMENTS

1. The Contracting Officer's Technical Representative may authorize field adjustments. Field adjustments are those alterations that do not affect time, price, or intent of the contract documents. All field adjustments shall be documented in the Daily Reports and on the As-Built Drawings.

SECTION 01062
UTILITY PERMITS

1. The Contractor is responsible for obtaining all permits required for connection to all public or private utility systems. This shall include all permit, inspection, administrative and accessory costs normally charged of customers by the utility.

1.1 All Tie-in and/or connection fees will be paid by the Contractor.

SECTION 01063
BUILDING PERMITS

1. NO BUILDING PERMITS from state or local governments are required for work performed on federal property. Courtesy permits may be obtained at the Contractor's option. No payment will be made to the Contractor for any permit cost. Design changes to obtain courtesy permits, even at no cost, will not be allowed without written approval of the Contracting Officer.

SECTION 01067
ENVIRONMENTAL PERMITS

1. Unless directed by other sections of this specification, the Contractor will not be responsible for obtaining environmental permits.

SECTION 01158
DESIGN/BUILD CRITERIA

1. REFERENCES, CODES AND STANDARDS: The codes, standards and publications are referenced in the text by the basic designation only. The latest editions, at the time of bid proposal, shall be used.

1.1 New construction and modification to existing construction shall comply with the requirements of

American Society of Civil Engineers - Minimum Design Loads for Buildings and Structures (ASCE-7)

American Society of Heating Refrigeration and Air Conditioning (ASHRA)

American Society for Testing and Materials (ASTM)

American Concrete Institute

Electronics Industries Association (TIA/EIA)-Commercial Building Standard for Telecommunications Pathways and Spaces (EIA/TIA-569)

International Building Code (IBC)
International Fire Code (IFC)
International Mechanical Code (IMC)
Occupational Safety and Health Association (OSHA)
Code of Federal Regulations (CFR)
Illumination Engineering Society of North America (IESNA) Lighting Handbook
(LHBK)
National Fire Protection Association (NFPA)
National Life Safety Code (NFPA 101)
National Electrical Code (NEC, NFPA 70)
National Fire Alarm Code (NFPA 72)
National Electrical Safety Code (NESC, IEEE C2)
National Electrical Contractors Association (NECA) National Electrical Installation
Standards (NEIS)
Uniform Federal Accessibility Standards (UFAS)
Motorola Standards and Guidelines for Communication Sites (R56)

1. ROLE OF REQUEST FOR PROPOSAL (RFP) SPECIFICATIONS AND DRAWINGS

1.1 General: Section 01158, "Design/Build Criteria," and Drawings contain abbreviated minimum facility requirements. The Contractor shall provide all necessary materials, equipment, labor and services required to provide a complete and useable facility for its intended purpose.

1.2 Contractor-produced Construction Design Documents: The Contractor shall provide construction design documents for the enclosures and any supports. The Contractor shall provide marked-up site drawings in compliance with Section 01160 "Construction Design Documents".

1.3 RFP Drawings: The design and design data indicated on the RFP drawings are the minimum requirements, i.e. baseline drawing requirements, to be used by the Contractor to develop the project design. The Contractor shall add to, supplement, and complete these drawings to fully comply with the documentation requirements specified in Section 01160, "Construction Design Documents." The design and design data on the RFP drawings shall not be changed unless the requirements of paragraph "Variations From Procurement Documents" of Section 01160, "Construction Design Documents" are met.

1.4 Precedence: In the event of conflict or inconsistency between provisions of the various portions of this contract (the reconciliation of which is not otherwise provided for herein), precedence shall be given in the following order. The provisions of a particular portion shall prevail over those of a subsequently listed portion.

- a. The provisions of the Requests For Proposal (RFP) issued in connection with this contract including all addenda, amendments, or other modifications issued there under.
- b. The Government reviewed and Contractor-produced Design Drawings and Specifications except to the extent that any variation therein has been specifically approved in writing pursuant to the provisions of Section 01160, "Construction Design Documents."

2. CIVIL AND SITEWORK DESIGN

2.1 Design Requirements Overview: Location of existing utilities indicated on the site survey and utility maps is approximate only. The Contractor shall scan the construction site with electromagnetic or sonic equipment, and mark the surface of the ground where existing underground utilities are discovered. The Contractor shall contact commercial utility companies (i.e.; telephone, cable TV, gas, etc.) to obtain commercial utility information. The Contractor shall obtain approved station digging permits prior to excavating. Request for digging permits shall be in accordance with current USCG Facilities Engineer's Office policies. All design work shall be in accordance with applicable codes and standards. For general design requirements refer to Section 01160 Construction Design Documents.

2.2 Pavement Demolition and Earthwork: The Contractor shall excavate and remove underlying base material necessary for construction.

2.3 Site Physical Security: The Contractor shall provide site physical security.

2.4 Construction Lay down Areas: Field office trailers, materials, and equipment may be stored on site at a place designated by the Facilities Engineer. Lay down areas shall be returned to their natural condition as directed by the Contracting Officer.

2.5 Concrete Reinforcing: ASTM A615, "Deformed and Plain Billet Steel Bars for Concrete Reinforcement". Placement: ACI 301. Provide bars, wire fabric, wire ties, supports, and other devices necessary to install and secure reinforcement.

2.6 Concrete: Concrete shall have a 28 day compressive strength of 4,000 psi, slump between 2 and 4 inches and 4 to 6 percent air content (ASTM 173). Maximum water to cement ratio is 0.48 by weight. Attain air content using an air-entraining admixture. Cement shall be ASTM C150, Type I or II. Aggregates shall be ASTM C33, size No. 57 or 67. Aggregates shall be free from any substance that may be deleteriously reactive with alkalis in the cement. Once finish is attained, hand tool expansion joints, evenly spaced, and edging in concrete surfaces. All edging and shrinkage crack control joints shall be scored into the concrete with hand tools prior to final set of concrete.

2.7 Submittal: Delivery Tickets: Provide the on-site representative with copies of delivery tickets showing design strength, cement content on a 96 pound sack per cubic yard basis, water content, time of mixing and other pertinent information.

3. GEOTECHNICAL DESIGN

3.1 Geotechnical Site Data: The Government has not conducted any subsurface investigations for this project. The allowable bearing pressure shall be considered to be 1,000 psf.

3.2 Assumed Foundation Type: For bidding purposes, refer to the foundation shown on the drawings and follow the enclosure manufacturer's specifications for anchorage.

4. LANDSCAPING DESIGN

4.1 Seed and restore grassy areas disturbed by contract using the same species of grass.

5. SENSORS AND DETECTION DEVICES

a. Provide the following sensor and detection devices in the equipment enclosure:

- 1) addressable fire detection system
- 2) high temperature sensor (32F-100F)
- 3) low temperature sensor (32F-100F)
- 4) high humidity sensor (0-100%)
- 5) low humidity sensor (0-100%)
- 6) balanced magnetic door switch.

5.1 The Base maintains an addressable fire alarm system whereby each building contains a battery operated addressable monitoring system. R21 enclosure shall be complete with an addressable fire detection system. It shall be compatible for use with and be connected to the existing facility fire detection and alarm system.

5.2 Temperature and humidity sensors shall be adjustable with minimum ranges as noted and shall have normally open contacts which close when the sensor detection setting is reached. Provide a 25 pair 66 type terminal block and provide wiring from the normally open contacts of each of the sensors and smoke detector to the terminal block. Wiring connections from the terminal block to alarms will be provided by the Government.

6. ELECTRICAL

6.1 All electrical work and materials shall be in accordance with the National Electrical Code (NEC).

6.2 Exterior Electrical Systems

6.3 Electrical Service: Provide a 208/120 volt, three phase electrical service to the equipment enclosure from the existing facility electrical distribution system. Amperage rating of the service shall be 200 amp. The Rescue 21 equipment consists of 7 equipment racks will be installed by the Government following completion of this contract. Electrical load is anticipated to be on the order of 15 to 20 KVA and 15 KW for equipment racks only. The BTU load of the racks is 35,000 BTU's for all 7 racks. The volume encompassed by the assembled racks is 263 FT³.

6.4 The following describes existing electrical system conditions at the site and a presumptive means to provide power to the equipment enclosure; regardless, the Contractor is responsible for investigating existing conditions and providing all required modifications to the electrical systems required for providing power to the equipment enclosures with the approval of the Base Engineer.

6.5 Existing Electrical System Enclosure Power Source: Enclosure primary power shall be obtained from the Sector Building. A conduit will have to be installed on the roof of the building to the shelter to access this panel. The conduit shall span from the shelter to the building and then up the wall and run on the roof to the room where the panel exists. Emergency power is obtained from the emergency power panel located in the same room.

6.6 Wiring methods: Underground conductors shall be installed in conduit except as noted otherwise. Use rigid galvanized steel for electrical wiring and PVC schedule 40 for communications wiring.

6.7 Enclosure Electrical Systems: Provide service entrance equipment including a surface mounted, 208/120 volt, three phase main circuit breaker type panel-board with 42 pole spaces, a transient voltage surge suppressor (TVSS), and electronic watt hour demand meter. Panel shall be complete with (9) 20 ampere breakers which will provide power to the 7 Rescue 21 equipment racks. Additionally, provide branch circuits as required to provide power for lighting, general purpose receptacle outlets, and HVAC equipment. Branch circuits shall include (2) 15 ampere breakers for inside outlets, (1) 15 ampere breaker for the outside GFE outlet and (1) 15 ampere breaker for the lighting. Equipment racks shall be powered by receptacles in the overhead. Contractor is responsible for providing total amperage as required by all equipment.

6.8 The Government will, at a later date, run power from the panel-board to Government installed equipment. Short circuit current rating and bracing of equipment shall exceed available fault current by at least 10 percent.

7. Panel-boards:

7.1 Provide bolt-on circuit breaker type panel-boards. Do not use dual section panel-boards. Do not use series rated circuit breakers. Do not use fuses. Directory cards shall identify load locations by name.

7.2 Wiring methods: All wiring shall be installed in conduit, minimum size 1/2 inch except where larger sizes are recommended by equipment manufacturers or required for code compliance. Conduit may be run exposed. Provide a green color insulated equipment grounding conductor in all raceway with ungrounded conductors. Provide a separate neutral conductor with each branch circuit.

7.3 Conduit shall be: rigid steel (zinc-coated); electrical metallic tubing (EMT); flexible metal conduit. Exterior electrical conduit shall be galvanized rigid steel.

7.4 Fittings: Cadmium or zinc coated for metal conduit, EMT and flexible metal conduit; threaded type (split couplings are unacceptable) for rigid metal conduit; and compression type for EMT.

7.5 Conductors: All conductors shall be copper, manufactured within 12 months of date of delivery. Power and lighting conductors shall be 600 volt, type THWN/THHN or XHHW. Provide color coding of ungrounded conductors as follows:

208Y/120
Phase A – black
Phase B – red
Phase C – blue

7.6 Receptacle Outlets: shall be specification grade, heavy duty, grounding type. Provide NEMA configuration 5-15R receptacle outlets per NFPA 70, and, as a minimum, as follows:

- a. Interior: Ceiling mounted for equipment racks – (9) evenly spaced on-center with the overall length of collective rack footprint. Additionally one duplex outlet per 10 feet of wall space measured at the floor level with a minimum of one outlet per wall.
- b. Exterior: one GFI type duplex outlet, preferably near the entrance. Outlets provided per NFPA 70 requirements for HVAC equipment maintenance may be counted for the required outlet.

8. Grounding System:

- a. Provide a perimeter ground ring around the building with #1/0 bare stranded copper cable and minimum 10 foot x 3/4 inch copper clad steel ground rods located at each corner of the ring and such that rods are not more than 20 feet apart. All connections to the ground ring shall be exothermically welded. Measure resistance to ground; if resistance exceeds 5 ohms, provide additional measures to reduce resistance to ground.
- b. Provide a 4" x 20" x 1/4" copper master ground bus bar (MGB) with drilled holes for bolted connections. Mount the bar at the telecommunications service entrance location at 18" above the floor with 2 inch insulated offsets from the wall. Connect the bar to the ground ring with

#1/0 AWG copper conductor. All ground connections within the equipment enclosure, including the electrical service neutral conductor, shall be made to the MGB.

SECTION 01160 CONSTRUCTION DESIGN DOCUMENTS

1. GENERAL DOCUMENTATION REQUIREMENTS

1.1 The Contractor shall provide design documents for the installation and associated work of the Oil Water Separator to representatives of the Contracting Officer (CO) for review and approval. The design documents shall represent a project design that complies with the design/build criteria specified in Section 01158, "Design/Build Criteria." Construction Design Documents shall be provided as specified herein.

2. DESIGN OWNERSHIP

2.1 All design documentation, including all supporting data, when submitted to the Government, shall become the property of the Government, except as specified otherwise in the contract.

3. QUALIFICATIONS OF DESIGNER

3.1 All of the work specified in this section and Section 01158, "Design/Build Criteria" shall be designed by and prepared under the direct supervision of the registered A/E design team.

4. SUBMITTALS

4.1 Construction Design Documents shall be submitted for approval as specified and shall be accompanied by pertinent calculations and documentation as specified herein.

5. CONSTRUCTION DESIGN DRAWINGS

5.1 Submit Contractor produced Construction Design Documents for all work required by this Request For Proposals (RFP). Construction Design Documents shall be in sufficient detail to show compliance with the RFP contract requirements.

5.2 Utilization of the Government's RFP drawings as part of the Contractor produced Construction Design Documents constitutes acceptance of the design responsibility by the Contractor.

6. Drawing and Computer Aided Drafting and Design Standards

6.1 Except as specified otherwise in this specification section, the Construction Design Drawings shall meet the applicable drawing standards contained in the Tri-Services CADD Standard Release 1.8, and National CAD Standard (NCS) Version 1, with some minor modifications to comply with CEU Cleveland Standards. The CEU Cleveland modifications consist of such things as colors and pen weights or “plot styles” for plotting, drawing and sheet numbers, CADD file names, symbols, etc.

6.2 All CADD drawings shall use the CEU Cleveland titleblock furnished to the Contractor by the Government. The design, configuration and attributes of this titleblock shall not be altered in any way. The Government uses a file management software program, “Adept”, which extracts data from the attributes in each of the titleblock fields. If the attributes are changed, the data will not be extractable. The Contractor’s electronic drawing files will be checked at each submission for compliance, and if they are not acceptable, the Contractor will be required to insert new titleblocks and edit the fields appropriately.

7. The CADD program to be used to generate the design drawings shall be compatible with and provided in AutoCad Release 2009 using the model and layout space format. (.dwg format). Submit all CADD files for each design submittal on CD ROM disks.

7.1 CADD disks containing the RFP drawing files will be made available to the Contractor upon request for use in preparing the Contractor-produced Construction Design Drawings.

8. CEU Cleveland Drawing Numbers

8.1 The Contractor-produced Construction Design Drawings shall be numbered with CEU Cleveland-furnished drawing numbers.

8.2 Seal on Documents: All Final Contractor-produced Construction Design Drawings and calculations shall be signed, dated, and shall bear the seal of a registered Architect and or Engineer. The seal shall be the seal of the Designer of Record for that drawing.

9. Construction DESIGN technical SPECIFICATIONS

9.1 It is preferred that the Contractor-produced Construction Design Technical Specifications be incorporated into the Construction Drawings, in lieu of producing a separate bound specification manual. Specifications included on the Construction Drawings shall identify materials, and methods or standards of installation and execution.

9.2 Specifications Furnished with this RFP: Even though a separate bound specification is not required, the requirements of Section 01158, “Design/Build Criteria”, establish a minimum level of material/product quality and execution quality expected by the Government. Where product manufacturers and brand names are indicated in the RFP documents, manufacturers offering products that do not substantially differ from those specified and which comply with the specified requirements may be provided.

9.3 Submittal Reduction Procedures: Construction product and equipment submittals required by the Contractor's Construction Design Documents, such as manufacturer's product data, may be waived for this project if the Contractor provides proprietary materials, methods, or systems as specified below.

9.4 Contractor Specified Proprietary Materials or Methods: Contractor Construction Design Documents may list manufacturer's names and model numbers for products. Each product description shall include manufacturer, product name, model number, options, and alterations to the standard manufacturer's product.

10. VARIATIONS FROM RFP REQUIREMENTS

10.1 Variations from RFP requirements shall not appear on Contractor-produced Construction Design Document submittals unless the variation has been previously submitted to, reviewed by, and approved by the Contracting Officer. Variations shall be clearly presented so that these differences are easily identifiable during the review process.

10.2 The review of design submittals does not constitute approval or acceptance of any variations from the RFP, unless such variations have been specifically pointed out in writing by the Contractor and specifically approved in writing by the Contracting Officer.

11. DESIGN SUBMITTAL APPROVAL PROCESS

11.1 Construction Design Documents, when approved by the Contracting Officer, shall be considered approved for use for construction. The Contracting Officer's approvals of design documentation as well as authorization to commence construction must be in writing.

11.2 Submittal Phases

11.3 Fast Track: This project is a fast track project. The design and construction process, and each design phase shall be submitted and approved separately. Procurement, fabrication or construction shall not commence on any fast track phase until that phase design submittal has been approved.

11.4 The design packages shall consist of the following submittals:

- a. Pre-final Construction Design Documents Submittal
- b. Final Construction Design Documents Submittal

11.5 Design Reviews by CEU Cleveland: Submit copies of all submittals required by this specification section to:

Contracting Officer
CEU Cleveland
1240 East 9th St.

Room 2179
Cleveland, OH 44199

11.6 Duration of Reviews: The Contractor shall allow the number of consecutive calendar days specified below, as the time required by the Government to review each design submittal. The time for review begins upon receipt of the submittal at CEU Cleveland and ends when submittal leaves CEU Cleveland.

a. Pre-final Construction Design Submittal: 7 calendar days

b. Final Construction Design Submittal: 7 calendar days

11.7 Quantities of Construction Design Documents:

a. Pre-final Construction Design Submittal: Submit four copies of half-size (11"x17") design drawings, calculations, manufacturer's product catalog data, and supporting data. Provide one CD with CADD files.

b. Final Construction Design Submittal: Submit one full-size set of sealed and signed vellum original drawings, and four copies of half-size drawings reproduced from the full-size originals. Submit any revisions to Pre-final calculations and other supporting data. Return the comments from the Pre-final submittal. Provide one CD with final CADD files.

12. Revisions to Final Construction Design Drawings

12.1 Any revisions to Final Construction Design Documents, after having been approved by the Contracting Officer, must be brought to the attention of the Contracting Officer, and approval received prior to implementing revisions. Revisions must be annotated on the drawing, logged in the revision block and must clearly indicate the specific scope and location of the revision. Drawing revisions shall be accomplished either by revised drawings or revision sketches, and incorporated into as-builts drawings.

13. SITEWORK AND CIVIL WORK DESIGN SUBMITTAL

13.1 Sitework Drawings Accompanying the RFP: The sitework drawings accompanying this RFP present the baseline requirements to be used by the Contractor to develop the project design. The Contractor shall add to, supplement, and complete these RFP drawings to fully comply with the specified RFP sitework and civil work design/build criteria. The design and design data presented on the RFP drawings shall not be changed unless the requirements of the paragraph "Variations From RFP Documents" are met.

13.2 The Contractor shall complete the sitework drawings by revising the RFP drawings as specified below. If additional drawings are required, they shall be generated in compliance with paragraph "Design Drawings" of this section.

13.3 Civil Construction Design Documents: The contractor may annotate, by pen, dimensions from the enclosure, sidewalk, or bends in trenching to fixed points. Alternatively, the contractor may modify the RFP documents.

14. MECHANICAL DESIGN

14.1 General: Construction Design Documents shall be in sufficient detail to show compliance with the RFP contract requirements.

14.2 Mechanical Construction Design Documents:

a. Heating, Ventilating and Air Conditioning Plans:

Provide floor plan(s) showing functional layouts of mechanical features such as equipment location, ductwork, and all associated sizes and accessories.

Provide complete schedules for all equipment. Provide legend, symbols and abbreviations for each item indicated on the drawings.

Location of room thermostats, ventilation air control, and timed setback override switches shall be shown on the drawings.

HVAC Testing Adjusting and Balancing: The Contractor's designer shall indicate on the drawings (in addition to the duct class, seal class, and leakage class) the leakage test pressure to be used to test ductwork, or duct sections. Refer to SMACNA HVACADLTM, Appendix B, "Sample Leakage Analysis" for guidance in determining leakage test pressures. TAB's testing personnel shall be from an independent, certified NEBB or AABC authorized, testing firm and test report shall be in the form of one of these organization's samples.

HVAC Calculations: Provide HVAC Load Analysis and pressure calculations at Pre-final Construction Design Submittal.

15. ELECTRICAL DESIGN

15.1 General: Construction Design Documents shall be in sufficient detail to show compliance with the RFP contract requirements.

15.2 Electrical Construction Design Documents:

a. Legend and Symbols

Provide legend and symbols for each item indicated on the drawings, and a listing of all abbreviations used on drawings with their meanings.

b. Floor plans showing locations of all electrical equipment

c. Riser Diagram

Power One-Line/Riser Diagrams: Provide a power and/or one-line diagram showing the service from the point of connection to the existing electrical system to the equipment enclosure service panel including service feeder, distribution transformer and equipment with associated wire and conduit quantities and sizes shown on the diagram.

d. Schedules

(1) Panel-board Schedules

(2) Lighting Fixture Schedule

15.3 Electrical Design Calculations

Submit design calculations for the following requirements:

(1) Short Circuit Current Analysis: Provide calculations for the electrical distribution system based on the one-line/riser diagram.

(2) Lighting: Provide interior lighting calculations keyed to the lighting floor plan and the lighting fixture schedule.

SECTION 01200 PROJECT MEETINGS

1. **LOCATION:** Project meetings will be conducted either on-site or with a conference call. The following meetings may be held:

1.1 Pre-Construction Conference: After award of a contract, the Coast Guard will arrange a conference with the contractor, and necessary Coast Guard personnel. The purpose of this conference is to orient the Contractor to Government procedures for wage rates, contractual and administrative matters, and to discuss specific issues regarding actual construction.

1.2 Progress and Technical Review Meetings: These meetings generally take place at the project site. Either party may request a meeting to review the progress of the project and/or review or clarify the technical requirements of the specifications.

SECTION 01300
SUBMITTALS

1. GENERAL: The Contractor shall submit to the Contracting Officer (4) copies of submittals required by this specification and/or itemized on the "**List of Submittals**" found at the end of this division.

2. REQUEST: A "**CONTRACT ITEM ACCEPTANCE REQUEST**" shall accompany all submittals. All items shall be individually listed and clearly identified, referencing the applicable Section and Paragraph. A copy of this form is located at the end of this division and may be reproduced as needed.

2.1 Up to eight (8) items may be listed on an individual acceptance request. Number each Contract Item Acceptance Request consecutively (*Submittals # 1, 2, etc.*) and re-submittals with letters (*Submittal #1A is the first re-submittal of Submittal #1*).

2.2 Submittals shall be forwarded to the Contracting Officer. The contractor **shall allow 14 calendar days**, excluding mailing time, for the review process in the Construction Schedule and all project planning. In instances where submittal review must be expedited, the Contractor may annotate the Contract Item Acceptance Request as "Urgent" and provide a FAX number for prompt return. The Coast Guard will make every effort to accelerate the review of each urgent submittal; however, the Contractor should not anticipate a reduced time schedule and shall plan project progress accordingly.

3. ACCEPTANCE: Submittals will be stamped "Accepted," "Accepted with Comments," or "Resubmit". Acceptance, Acceptance with comments or Resubmit for each item will be indicated on the Contract Item Acceptance Request form and one copy returned to the Contractor.

3.1 **Prompt re-submittal of items is required.** The Contractor shall furnish a new Contract Item Acceptance Request numbered in accordance with the requirements of paragraph 2.1.

4. DEFECTIVE WORK: Acceptance of Submittals **does not** restrict the Government's right to reject departures from contract requirements, use of damaged or improperly installed items/materials, or latent defects, nor does it prejudice the Government's rights of rejecting any work found defective at Final Inspection and Acceptance.

4.1 Work started or completed prior to submittal acceptance is **solely** at Contractor's risk and may jeopardize contract performance.

SECTION 01310
CONSTRUCTION SCHEDULE, SCHEDULE OF VALUES,
AND PROGRESS SCHEDULE

1. In accordance with the Notice to Proceed letter, the Contractor shall submit the following:

a. **Construction Schedule**-This schedule shall be prepared using a horizontal bar graph with time scale. It shall be in an industry accepted Project Management format and shall accurately display:

1. All major categories of work to be performed within the required contract completion date broken out in sufficient detail to track progress throughout the life of the contract. Major work categories should include but are not limited to mobilization, carpentry, plumbing, mechanical, electrical, roofing, concrete, site work, and demobilization. In addition to construction activities, procurement times for critical items, submittal turnaround time, mobilization, final inspection, punchlist work, and demobilization shall be shown on the schedule.
2. The duration of each work category.
3. Any concurrent work categories.

b. **Schedule of Values**-This schedule shall be prepared as a **detailed** cost breakdown of the contract price and be submitted with the Construction Schedule. This schedule shall include but not be limited to costs of materials, equipment, and labor for all major work categories shown on the Construction Schedule. The Contractor shall adhere to the following guidelines when developing the Schedule of Values.

1. **Format** - The line items in the Schedule of Values **shall** be the same as that of the Construction Schedule.
2. **Bonds** - Bonding costs will only be paid in a lump sum if they are broken out separately and included with the schedule of values. The Contractor shall provide evidence that he has furnished full payment to the surety.
3. **Materials** - To request progress payments for materials delivered to the construction or fabrication site, the particular category of work associated with the materials must be broken down into separate material and labor costs.

2. UPDATES: Each month and /or with each progress payment request, the Contractor **shall** submit the following:

a. **Progress Schedule**-This schedule shall be an update of the Construction Schedule. It shall show the current schedule of all work.

1. **Modifications** - If modifications are made to the contract, the work added shall be tracked separately from the original Construction Schedule and shall maintain its individuality on the Progress Schedule throughout the life of the contract. Progress Payment requests shall not lump modification costs into the original contract price.

SECTION 01370 CONSTRUCTION DAILY REPORTS

1. GENERAL: The Contractor shall complete a Daily Report for each and every day after mobilization. The importance of an accurate, fully detailed Daily Report, promptly delivered to the designated On-Site Representative can not be overemphasized. The report shall provide an

accurate cumulative summary of the history and performance of the work. The Daily Report shall document weather; work hours; work in-place; inspections and tests conducted, and their results; dimensional checks; equipment and material checks; data on workers by classification; the mobilization and demobilization of construction equipment; materials delivered to the site; and any other pertinent noteworthy event; e.g., personnel injury, site visit by Coast Guard personnel, etc.

2. **RESPONSIBILITY:** The Daily Reports play an important role in settling disputes and claims for both parties. For this reason the On-Site Representative and the Contractor's Superintendent, together, should review the report to ensure its completeness and accuracy. Each day's report shall be submitted to the On-Site Representative no later than 10:00 a.m. the following morning. The maximum allowable retainage will be enforced for late, sporadic or non-submission of Daily Reports. In the absence of an On-Site Representative the Contractor shall mail the Daily Reports directly to the Contracting Officer every Friday. Should the Daily Report indicate an accident, environmental issue, OSHA violation or any crisis the On-Site Representative deems important, the Report should be faxed to the Contracting Officer at (216) 902-6278 immediately.

3. **DESIGNATED ON-SITE REPRESENTATIVE RESPONSIBILITY:** After a Notice to Proceed for site work has been issued the On-Site Representative shall complete a Daily Report for each day until the Contractor mobilizes. After the Contractor is at the site, the On-Site Representative shall ensure that the Contractor completes the Daily Report in accordance with Paragraphs 1 and 2 above. Any items of dispute or other notes the On-Site Representative feels appropriate shall be added to the Daily Report. The On-Site Representative is also responsible for informing the COTR when the contractor fails to submit daily reports.

SECTION 01510 TEMPORARY UTILITIES

1. **GENERAL:** All temporary utility connections shall be compatible with existing materials and equipment to provide safe and efficient installation, operation and removal.

2. **ELECTRICITY AND WATER:** Electrical power and water are available on the site. The Contractor will be permitted to utilize these utilities in performing the work, provided that the existing systems are not overloaded. The Contractor is responsible for installing and removing all connections to existing systems and shall ensure work and materials are in accordance with local codes. The use of the electricity shall be limited to tools that can be operated on 60 Hertz, single phase, 20 ampere, 120 volt circuits.

3. **TELEPHONE:** Telephone services will not be available for use by the Contractor.

4. **WATER HOOKUP:** All connections to the water system shall be equipped with back flow protection. Temporary potable water pipes and hoses shall be sterilized before being placed in operation and every time the system is opened to the atmosphere for repair or relocation.

5. **SANITARY FACILITIES:** It shall be the Contractor's responsibility to furnish and maintain

approved portable toilet facilities for all Contractor personnel. The On-Site Representative will designate the physical location for the facility and the Contractor shall maintain the toilet facility to the satisfaction of the Government. Contractor personnel are forbidden to use toilet facilities within existing buildings.

SECTION 01520
PROTECTION FROM WEATHER AND CONSTRUCTION OPERATIONS

1. TEMPORARY ENCLOSURES: Protect existing facilities/equipment and new construction, whether in progress or newly completed, from the adverse effects of the weather and construction operations. Provide temporary enclosures, coverings and barriers as required to afford protection against exposure, weather and wind damage and from construction operations which could degrade, stain, age, or reduce the finished quality of new work or damage existing facilities and equipment.
2. REAPPLICATION: All temporary closures or enclosures shall be made ready for immediate re-application in the event of sudden storms or man-made conditions requiring protection of existing facilities or completed construction.
3. CLIMATE CONTROL: Where temporary heat is required during construction to protect work completed or to heat facilities in operation by the Coast Guard, all openings shall be made weather tight to allow the maintenance of 68 degrees F heat minimum with the existing or temporary heating equipment or 78 degrees F. maximum with existing or temporary cooling. NOTE TO OFFEROR: CLIMATE CONTROL SPECIFICALLY REQUIRED BY THIS CONTRACT WILL BE SPECIFIED IN THE STATEMENT OF WORK AND/OR ASSOCIATED DRAWINGS.
4. PIPING: Prevent water-filled pipes or tanks from freezing for both interior and exterior systems installed or in storage.

SECTION 01540
SAFETY PROGRAM

1. GENERAL: The Contractor is wholly responsible for work site safety. The Contractor shall implement a safety program that protects the lives and health of personnel in the construction area, prevents damage to property, and avoids work interruptions. The Contractor shall provide appropriate safety barricades, signs, signal lights, etc. (see SECTION 01570) as well as complying with the requirements of all applicable Federal, State and Local safety laws, rules and regulations.
2. COMPLIANCE: The Contractor is specifically required to comply with the requirements of the U. S. Army Corps of Engineers "Safety and Health Requirements Manual" (EM 385-1-1, *latest version available*) and the "Accident Prevention" clause (FAR 52.236-13). Once accepted, this safety plan shall become part of the contract requirements. **Note: This**

review/acceptance does not in any way relinquish the Contractor from responsibility for work site safety nor the obligation to comply with the OSHA regulations found in 29 CFR 1910 & 1926 or any other State or Local safety law, rule or regulation applicable to the contract work. The Coast Guard will cooperate fully with the Department of Labor (Occupational Safety and Health Administration) in their enforcement of OSHA regulations.

3. **SAFETY PLAN**: The Contractor **shall submit a written safety plan**. At a minimum, this plan shall describe the Contractor's general safety program and identify specific safety provisions for hazards incidental to the contract work; e.g., elevated working surfaces, working over water, working from floating work platforms, overhead crane operations, etc.

SECTION 01541 EQUIPMENT/UTILITY LOCKOUT AND TAGOUT REQUIREMENTS

1. **GENERAL**: The Contractor shall comply with OSHA 29 CFR 1910.147, “The Control of Hazardous Energy “ (Lockout/Tagout). The Contractor shall provide a Lockout/Tagout Plan to the Contracting Officer prior to starting any work affected by the energy in the equipment/utility system.

2. **APPLICATION**: The Contractor shall be responsible for locking out and tagging out of service, all equipment/utility systems involved in the work under this contract. After the Contracting Officer’s Technical Representative has approved an outage, Government personnel and the Contractor shall independently secure the equipment/utility system and tag the respective system out of service. The Contractor shall provide their own locks and chains that are required to secure the equipment/utility systems; e.g., steam, water, air, and/or electricity.

SECTION 01542 MATERIAL SAFETY DATA SHEETS AND MATERIAL HANDLING PROCEDURES

1. **DATA SHEETS**: Submit a Material Safety Data Sheet (MSDS) for all materials containing hazardous substances required for contract execution. Information provided in MSDS’s shall meet the requirements of 29 CFR 1910.1200. MSDS’s require Contracting Officer review and acceptance prior to bringing these materials on site.

2. **MATERIAL STORAGE**: Limit the quantity of these materials stored on site to the amount needed for execution of work. Storage of excess materials will not be permitted. Assure that the storage of these materials comply with all applicable federal, state, and local laws and regulations and provide additional storage facilities (paint lockers, etc.) as required for the storage of such materials. Coordinate the physical location of storage areas with the On-site Representative prior to bringing these materials on site.

3. **PROTECTIVE MEASURES**: The contractor shall take all protective measures outlined on the MSDS’s and as required by federal, state, and local regulations to protect all personnel in the vicinity of the work area from exposure to these materials. The Contractor shall //submit a

separate plan outlining the measures required. //include any required protective measures in the Safety Plan (See SECTION 01540)//. The Contracting Officer's Technical Representative shall review protective measures prior to allowing use of these materials.

4. DISPOSAL OF EXCESS MATERIAL: The Contractor shall dispose of all excess hazardous materials as required by the MSDS and all applicable federal, state, and local laws and regulations.

SECTION 01543 CONFINED ENTRY

1. COMPLIANCE: The Contractor shall comply with OSHA 29 CFR 1910.146, Permit-Required Confined Space. The Contractor shall provide a Confined Space Entry Plan to the Contracting Officer prior to entering, or starting any work, in a confined space. The Contractor shall provide all equipment and materials as required to comply with OSHA and complete the work under this contract.

SECTION 01544 TEMPORARY FIRE PROTECTION

1. TEMPORARY FIRE PROTECTION: Install and maintain temporary fire-protection facilities to protect against predictable and controllable fire loss. Comply with NFPA 10 "Standard for Portable Fire Extinguishers" and NFPA 241 "Standard for Safeguarding Construction, Alterations and Demolition Operations".

1.1 Locate fire extinguishers where convenient and effective for their intended purpose, but not less than one extinguisher at each floor stairwell and one at each building construction opening for personnel egress.

1.2 Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire-protection facilities, stairways and other access routes for fighting fires.

1.3 Provide independent supervision of welding, flame cutting and other open flame work. Provide each fire supervisor with an appropriate fire extinguisher.

1.4 Provide training for all personnel on-site in the proper operation of each type of fire extinguisher provided. Provide all personnel with the proper notification procedure to summon the local fire department or emergency medical service.

1.5 There shall be NO SMOKING or unsupervised open flame permitted inside any structure, temporary or permanent; nor within 25 feet of combustible material or within 50 feet of flammable liquids or compressed gasses.

SECTION 01550
ACCESS ROADS AND PARKING

1. ACCESS: Access to the site is available from public roads. Any damage to these roads by the Contractor's vehicles shall be repaired without cost to the Government.
2. PARKING: Vehicular operations and parking shall comply with all applicable government orders and regulations. All driveways and entrances serving the Government shall be kept clear and available to emergency vehicles at all times.
3. VEHICLE AND VEHICLE OPERATION: All vehicles, owned by the Contractor or employees of the Contractor, and operators of these vehicles, shall meet all state regulations for safety, noise, loading and minimum liability insurance. All vehicle operators demonstrating reckless or careless operation in the opinion of the Government shall not be allowed to operate vehicles on government property for the duration of the contract.
4. VISITORS: No visiting vehicles will be permitted on government property unless the operator is employed by a subcontractor or supplier.

SECTION 01566
GENERAL CLEANUP & SITE RESTORATION OF WORK AREAS

1. GENERAL: The Contractor shall remove and properly dispose of all trash and debris incidental to the contract work from the limits of government property, as well as all adjacent affected areas. The Contracting Officer shall determine the extent and interval of these cleanups.
2. WORK AREA CLEANUP: At the end of each day the entire work area and all adjacent affected areas shall be thoroughly cleaned by removing all trash, debris, dust, etc. caused by the contract work. Any floor, wall or ceiling surfaces that may have been stained or soiled by the contract work shall be restored to pre-construction condition.
3. SITE RESTORATION: If at any time while performing the contract the Contractor causes damage or destruction to any portion of any Government facility or grounds; e.g., bulkheads, pavement, lawns, shrubbery, etc., it shall be the Contractor's responsibility to replace and/or restore the damage as approved by the Contracting Officer's Technical Representative at no additional cost to the Government.
4. POST CONSTRUCTION CLEANUP: Upon completion of the job, the Contractor shall clean up the job site, returning it to a state of cleanliness equal to or exceeding that in which it was found. The Contractor shall properly dispose of any trash, extra materials, dirt, debris, or other litter that remains. If the job site appearance is not to the satisfaction of the Contracting Officer's Technical Representative, final acceptance will not be approved.

SECTION 01567
POLLUTION CONTROL

1. VOLATILE ORGANIC COMPOUND (VOC) REGULATIONS: Contractors are required to comply with local, state and federal VOC compliance laws and regulations in the foregoing order of precedence. In order to comply with the provisions of the Clean Air Act, each state must have a State Implementation Plan. Some contractors may be required to abide by the provisions of a Title V Permit. Some contractors may be required by state or local law to operate under the terms of a Compliance Plan to reduce VOC Emissions.

1.1 In accordance with the Notice To Proceed Letter, the contractor will submit copies of any local, state or federal implementation plans, permits or compliance plans required/applicable to the use/application of VOCs at contractor's facility or offsite work places.

1.2 If no local, state or federal implementation plans, permits or compliance plans are required/applicable to the use/application of VOCs, then the contractor shall submit to the designated Contracting Officer a letter, notarized under oath, that such documents are not required.

1.3 If the use of paint is required the contractor shall submit to the Contracting Officer and in accordance with the Notice to Proceed Letter, certificates, specifications or manufacturing data verifying the VOC rating.

2. SPILL RESPONSE PLAN: The Contractor shall submit a Spill Response Plan covering all regulated materials brought to the site for execution of work and all wastes generated as a result of the work to the Contracting Officer. The plan shall include, at a minimum, the following: types and quantity of all substances covered under this plan; the reportable quantity (RQ) for each substance; the on site storage location of each substance; the Contractor's spill response equipment, if applicable; procedures to be followed for responding to a spill, including initial responses to be taken; procedures to be followed in reporting a spill, including the names and telephone numbers for all federal, state, and local agencies/authorities to be notified; and the name, address, and telephone number (work, home, cell and pager) of all Contractor response and media relations personnel.

2.1 In the event of a spill or release, the Contractor shall be responsible for immediate implementation of the spill response plan and restoration of the site to pre-spill condition at no cost to the Government. The Contractor shall also immediately notify the Contracting Officer to coordinate further notifications.

SECTION 01569
HAZARDOUS WASTE

1. GENERAL: The Contractor shall comply with all federal, state, and local environmental regulations dealing with the generation, management, storage, and disposal of solid, toxic, and

hazardous wastes. The Contractor shall ensure that all wastes are properly containerized, labeled and placarded, managed, tested, stored, transported and disposed of in accordance with all applicable regulations.

2. USED ELECTRIC LAMPS: 40 CFR 273 requires that electric lamps, including incandescent, fluorescent, neon and high intensity discharge (mercury vapor, high/low pressure sodium, metal halide) lamps that are no longer of use be recycled or treated as hazardous waste. The Contractor shall not dispose of any used electric lamps as solid waste. The Contractor shall recycle all waste electric lamps generated as a result of this work only at a licensed recycling facility
3. METALS: Unless noted otherwise, scrap metal shall not be landfilled or treated as hazardous waste. Recycle all scrap metal by smelting or any other acceptable recycling process. Scrap metal includes ductwork, light fixture housings, pipe, mechanical and electrical equipment, doors and frames, etc.
4. SUBMITTALS: The Contractor shall provide the Contracting Officer with signed and fully executed originals of all hazardous waste profiles, test results, hazardous waste manifests and/or other shipping papers, electric lamp disposal documents and all other required documentation. Maximum payment retention shall be withheld until this documentation is received.

SECTION 01620 STAGING AREAS AND ACCESS

1. LOCATION: The Contractor shall store materials and operate equipment within the confines of the staging area identified by the Government. Storage of materials outside of the staging area will not be permitted.
2. COORDINATION: Two weeks prior to construction, the Contractor shall contact Mr. David Aydlett at (252) 335-6870, david.p.aydlett@uscg.mil, to verify the condition of the staging area.
3. ADJACENT AREAS: The Contractor shall ensure that all land and vegetation adjacent to the staging area and access drive remain undisturbed and undamaged; all damages shall be repaired at no cost to the Government.

SECTION 01650 RECOVERED MATERIALS NOTICE

1. GENERAL: It is the intent of CEU Cleveland to comply with the requirements of Section 6002 of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (RCRA or the Act) as amended, 42 U.S.C. 6962 and Executive Order 12873 as they apply to the procurement of the materials designated in paragraph 2.

2. DESIGNATED RECOVERED MATERIALS It is the purpose of this section to designate items that are or can be made with recovered materials. These designated items can be found at <http://www.epa.gov/epaoswer/non-hw/procure/products.htm> .

3. CONTRACTOR RESPONSIBILITY: The contractor should provide recycled materials to the extent practical, provided the materials meet all other requirements of the applicable specification section.

SECTION 01720 AS BUILT DRAWINGS

1. GENERAL: Maintain one full size set of contract drawings to record variations from the original design. **All deviations shall be neatly and clearly marked in RED** on these drawings to show work and/or materials actually provided. As Built drawings shall be **updated** as work progresses and kept at the work site for the duration of the contract. These drawings shall be available for Contracting Officer Technical Representative review upon request.

2. DISCOVERED UTILITIES: Indicate the exact location of any **underground utility lines discovered in the course of the work** on the As-Built drawings.

3. PERMITTED VARIATIONS: As Built drawings shall reflect the actual construction and materials provided when alternative materials or work methods are allowed in the specifications and/or drawings or if the scope is altered by award of bid items, subsequent changes or modifications.

4. STANDARDS: Variations shown on As Built drawings shall be neat, clear and conform with standard drafting practices. Mark-ups shall include supplementary notes, legends, and details necessary to convey the exact representation of construction actually provided. **To comply with Computer Assisted Design (CAD) practices, only full size AS BUILT drawings are acceptable.**

5. SUBMITTAL: Submit As Built drawings for Contracting Officer's Technical Representative acceptance upon completion of the contract. **Final payment will not be until all required As Built drawings are accepted.** Maximum retention shall be withheld for late or incomplete As Built drawings.

SECTION 01730 OPERATING INSTRUCTIONS AND TRAINING

1. MANUALS: Upon completion of the work, but before the work is accepted by the Government, the Contractor must forward two complete bound sets of instructions, tabbed and identified for reference, for all equipment and/or systems provided under this contract. The instructions shall include component parts, manufacturer's certificates, warranty slips, parts lists, descriptive brochures, and manufacturer's maintenance and operating instructions.

2. TRAINING: The Contractor shall provide two hours of training, which shall explain to the Government's personnel all procedures necessary to operate and maintain all equipment and systems on a continuing basis. A verification of training shall be provided

CONTRACT ITEM ACCEPTANCE REQUEST

Contract Number: HSCG83-
Contract Specialist:
Contractor Name:

DO/TO: HSCG83-
Project Number:

URGENT YES NO (if yes) **CONTRACTOR FAX #:** _____

Submittal # _____ **Job Location:** _____

NOTE: Contractor must mark Deviation column if submittal deviates from contract requirements

Item No.	Spec Section and Paragraph	Description of Material Include Type, Model #, Manufacturer, Etc.	Deviation	Status

STATUS ABBREVIATION GUIDE:

- AC - Accepted
 - AC w/ CMT - Accepted with Comment
 - R-Resubmit
- Comments:**

Typed Name & Title	Signature	Date
--------------------	-----------	------

NOTE: Review and acceptance of submittals by the Government is intended to verify general conformance with the design intent as shown on the contract drawings and in the specifications. Acceptance by the Contracting Officer Technical Representative does not relieve the Contractor of responsibility for any errors and/or omissions in the submittals, nor from the responsibility for complying with the requirements of the contract, except with respect to variations described and approved in accordance with FAR 52.243-4 CHANGES

