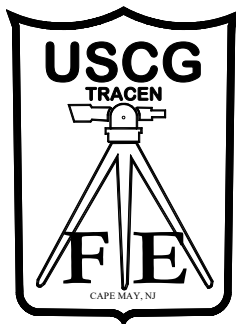


PROJECT DESIGN/BUILD SPECIFICATIONS
FOR
MUNRO HALL FIRE PROTECTION SYSTEM
AT
U.S. COAST GUARD TRAINING CENTER
CAPE MAY, NEW JERSEY

PROJECT No. 3581616
CMS-1566
March 2019

DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD
TRAINING CENTER CAPE MAY

U.S.C.G. TRAINING CENTER
1 MUNRO AVENUE
CAPE MAY, NJ 08204



U.S. Department of
Homeland Security

United States
Coast Guard



PROJECT RFP REQUIREMENTS

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SECTION 01100
LIST OF RFP DRAWINGS, EXHIBITS, AND ATTACHMENTS

PART 1 GENERAL

1.1 SUMMARY

1.1.1 This section lists the Request for Proposal (RFP) Drawings, Supplemental Drawings, Exhibits and Attachments for the project.

1.2 RFP DRAWINGS

1.2.1 RFP Drawings illustrate approximate building site plans and floor plans, not design. Contractor shall be responsible for all design requirements based on their own site investigations. Following award and at the Contractor's request, RFP Drawings will be provided to the Contractor in AutoCad format.

| <u>DRAWING #</u> | <u>TITLE</u> | <u>SHEET #</u> |
|------------------|-------------------|----------------|
| T-7065-CD | SITE PLAN | 1 OF 4 |
| T-7066-AD | FIRST FLOOR PLAN | 2 OF 4 |
| T-7067-AD | SECOND FLOOR PLAN | 3 OF 4 |
| T-7068-AD | THIRD FLOOR PLAN | 4 OF 4 |

1.3 SUPPLEMENTAL DRAWINGS, EXHIBITS AND ATTACHMENTS

1.3.1 The following reference drawings are for informational purposes only and shall not be used for investigative or design purposes. Drawings are the property of the Government and shall not be used for any purpose other than that intended by the contract. The Government does not guarantee that these drawings reflect present conditions and the Contractor is responsible for verifying actual conditions. Drawings will be provided to the Contractor in electronic (PDF) format.

| <u>ATTACHMENT No.</u> | <u>TITLE</u> |
|-----------------------|---|
| Attachment A | Munro Hall Original Construction Drawing Set, dated February 8, 1966. |
| Attachment B | Munro Hall Rehabilitation Drawing Set, dated September 30, 1987. |
| Attachment C | Munro Hall 1 st Floor Alterations Drawing Set, dated July 28, 1992. |
| Attachment D | Munro Hall REBI Classroom Drawing Set, dated May 21, 1999. |
| Attachment E | Munro Hall Learning Resource Center Drawing Set, dated June 27, 2001. |
| Attachment F | Munro Hall New Mechanical Room (Steam Plant Decentralization) Drawing Set. |
| Attachment G | Munro Hall HVAC Additions & Squad Bay Renovations Drawing Set, dated November 15, 2004. |
| Attachment H | Munro Hall 2 nd Floor Renovations Drawing Set, dated January 5, 2007. |

**SECTION 01110
DESIGN-BUILD GENERAL PARAGRAPHS**

PART 1 GENERAL

1.1 SCOPE OF WORK

Project includes all materials, labor, equipment, services, and all operations necessary for the Design and Installation of a new fire suppression sprinkler system at Munro Hall, Building #261, at the United States Coast Guard Training Center (TRACEN) in Cape May, New Jersey.

Major work items include, but are not limited to, the following:

- A. Design fire sprinkler system to cover entire building in accordance with all applicable codes;
- B. Produce construction documents including full drawings and specifications;
- C. Tie into existing water distribution system and bring new dedicated fire main into building;
- D. Install complete fire sprinkler system throughout building;
- E. Incorporate existing isolated fire sprinkler system into new fire sprinkler system. Disconnect existing sprinkler system from potable water source;
- F. Monitor new fire sprinkler system via the existing Siemens Model XLS fire alarm system control panel;
- G. Pressure test entire sprinkler system;
- H. Provide As-Built drawings;
- I. Mobilization, demobilization and clean up;
- J. Supervision, materials, equipment, transportation, labor and all other incidentals necessary to complete the work in a professional manner in accordance with the intent of the project whether explicitly stated in the Request for Proposal or not.

1.2 PRE-BID SITE VISITS

- 1.2.1 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".
- 1.2.2 SITE VISIT: During the Solicitation Phase of this Project, two Pre-Bid site visits will be scheduled by the Owner. The first pre-bid site visit will held approximately two weeks after the release of the Solicitation. The second Pre-Bid site visit will be held approximately three weeks after the release of the Solicitation. It is the responsibility of the contractor to contact the Project Engineer, Steve McKaig, Facilities Engineering, Design Section, at (609) 898-6408 or Steven.C.McKaig@uscg.mil to obtain the specific dates, as no other site visits will be schedule.

1.3 CONTRACTOR RESPONSIBILITY

This contract contains both prescriptive and performance-based criteria. The design and subsequent construction shall incorporate all ancillary components as necessary to provide a complete and functional facility for the intended purpose. Where direction is given, it is directed to the Contractor. In each case the meaning is as though written "the Contractor shall...."

1.4 WORK HOURS

- 1.4.1 WORK HOURS: The Contractor will be permitted to perform construction work through the hours of 8:00 AM and 4:30 PM Mondays through Thursdays. The Coast Guard base hosts

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recruit graduations on most Fridays year round. The Contractor shall expect increased automobile and pedestrian traffic on Fridays. Contractor may work on Fridays. However, excessive noise and other disruptive activities shall be limited on Fridays between the hours of 10:00 am and 12:00 pm during graduation ceremonies unless otherwise approved by the Contracting Officer's Representative (COR). No major deliveries shall be scheduled on Fridays between 8:00 am and 12:00 pm. Note any departures from these work hours on the Daily Reports.

1.4.2 SATURDAY, SUNDAY AND HOLIDAYS: The Contractor shall provide the Contracting Officer's 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.

1.4.3 CONTRACT COMPLETION: The Contractor shall complete work within the time frame indicated upon issuance of the Notice to Proceed for Submittals. 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".

1.5 CONTRACTOR USE OF PREMISES

1.5.1 Become familiar with and obey station fire, traffic, and security regulations. Personnel shall not stray from the immediate area of work or direct avenues of ingress and egress unless authorized in advance by the Contracting Officer's Representative (COR). Only U.S. Citizens may enter the base. Contractor shall submit a list of all personnel who will be working on site for security reasons. The list shall include the following minimum items: Name of employee, current address, and social security number, date of birth, citizenship and gender. The list shall be submitted to the COR, a minimum of two weeks prior to starting work. The Contractor may submit a revised list at any time during the project. Only personnel on the approved listing will be allowed on the site.

1.5.2 All personnel shall carry proper identification (ID) when on site. Proper ID is defined as either the individual's driver's license, or a company issued ID. The identification must be laminated, and show a facial picture of the individual. Individuals without proper ID will be escorted off the Coast Guard premises.

1.5.3 Access to Site: Work on this contract shall be performed while the unit is in partial operational status. Work shall be conducted around all government functions. No work can begin until a construction progress schedule, is approved by the Coast Guard. Refer to the contract drawings for further details.

1.5.4 Training Center Regulations: The Contractor, his employees, and subcontractors shall become familiar with and obey all Training Center 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.

1.5.5 All lay down or staging areas for materials, equipment and Contractor vehicle parking must be located within a Contractor staging area. The Contracting Officer's Representative will determine exact location and boundaries of staging areas. Under no circumstances shall materials be stored in areas that will interfere with Coast Guard operations.

1.6 COORDINATION

1.6.1 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 Representative at least five working days in advance of any planned outages of water, electrical, telephone, or sanitary facilities. Notify the Contracting Officer's Representative at least one week prior to beginning construction.

1.7 DEFINITIONS

The following terms are defined as follows:

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- Day(s): calendar day(s), unless otherwise noted
- CEU: Civil Engineering Unit, Cleveland
- TRACEN: Training Center Cape May
- KO: Contracting Officer
- PM: TRACEN Project Manager
- COR: TRACEN Contracting Officer's Representative
- CI: TRACEN Construction Inspector
- A/E: Architect-Engineering Firm
- EIC: TRACEN Engineer-in-Charge
- QAM: Contractor's Quality Assurance Manager
- DOR: Contractor's Design Engineer of Record and central point of contact for all design issues and questions
- KR: Contractor
- DCR: Design Clarification Request to the Government clarifying contract/RFP requirements
- RFI: Request for Information sent internally between Construction Contractor and the Contractors DOR clarifying design
- RFP: Request for Proposal

1.8 REFERENCES AND ORDER OF PRECEDENCE

Where specifications or standards documents are referenced in these Contract documents, they apply as if they were incorporated into the contract, except if specifically noted otherwise. If there are differences between referenced documents and any contract documents the following precedence applies.

- A. Contract
- B. RFP Specification
- C. RFP Drawings
- D. References
- E. Applicable code or standard governing the work in question

1.9 SECURITY

- 1.9.1 Access to Base: Prior to commencement of the contract, the Contractor and all sub-contractors are required to register with the USCG TRACEN Cape May Security Office. Background screenings will be performed by TRACEN Security for all employees of the Contractor and sub-Contractors working on the Base. The Contractor shall contact USCG TRACEN Cape May Security Office at (609) 898-6915 for detailed requirements.

1.10 OTHER WORK AND CONTRACTORS

- 1.10.1 The Coast Guard and other Contractors may be performing work at and adjacent to the project site during the time of this Contract. Cooperate and coordinate deliveries, access, and work with the Coast Guard and other Contractors in accordance with Contract Clause FAR 52.236-8.
- 1.10.2 Work by other Contractors or Service Companies: Contractor personnel and equipment associated with another construction or maintenance contracts in progress may require access to the site during execution of this contract. The contractor shall coordinate work and ensure that work operations do not interfere with the contract currently in progress. The contractor shall

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allow service contract personnel access to the site for trash removal, snow removal, grounds maintenance or the performance of other related service contracts. The Coast Guard will advise the contractor of the trash removal, grounds maintenance or other recurring maintenance schedules.

1.11 PERMITS

No building permits or fire protection permits will be required for this project.

1.12 DRAWINGS FURNISHED

One electronic copy of the plans and specifications will be furnished to the Contractor without charge.

1.13 GOVERNMENT-FURNISHED ITEMS

Not Applicable.

1.14 RELOCATED EQUIPMENT AND ITEMS

Not Applicable.

1.15 UTILITY OUTAGES

Before interrupting or shutting down any utility, make a request for the interruption to the COR at least 5 days before the anticipated interruption. Identify the utility, reason for interruption, proposed time of interruption, and duration of interruption. Do not interrupt utilities until authorized by the COR.

1.16 UNDERGROUND UTILITIES

The underground utility locations shown on the drawings are not exact. Training Center has a dig request policy created to help prevent accidents and interruptions to vital underground facilities.

At least ten (10) business days prior to any excavation greater than 6 inches deep, the Contractor shall submit a completed Dig Request form. In addition, provide a sketch of the area needed. The Training Center will then provide utility mark-outs in the project area. The Contractor shall maintain the mark-outs throughout construction. A copy of the approved Dig Request shall be posted at the job site throughout construction for the benefit of subcontractors.

At least ten (10) business days prior to any excavation greater than 6 inches deep, the Contractor shall contact New Jersey One Call at 1 (800) 272-1000 for mark-out of utilities not owned by the Training Center. The Contractor shall maintain the mark-outs throughout construction. Submit copy of mark-out request to Quality Assurance Office (609) 898 6409, Contracting Officer and COR.

Contractor shall not proceed with excavation unless an approved dig request has been received.

1.17 WEATHER

1.17.1 Delays caused by unusually severe weather (FAR Clause 52.249-10). Unusually severe weather will be considered unforeseeable and unusually severe if it is more severe than the statistical 3-year average for the appropriate weather parameters established by the National Weather Service. See Section or 01321 "Anticipated Weather Delays" for additional requirements.

1.18 STORM PROTECTION

1.18.1 Should warnings of winds of gale force or stronger be issued, the Contractor shall take every practicable precaution to minimize danger to person, the work, and to adjacent property. Precautions shall include, but not be limited to, closing all openings, removing all loose materials, tools and equipment from exposed locations, and removing or securing scaffolding and other temporary work.

1.18.2 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

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which could degrade, stain, age, or reduce the finished quality of new work or damage existing facilities and equipment.

- 1.18.3 **CONTRACTOR'S STAGING AND STOCKPILING:** The Contractor is responsible for the protection and use of materials for the project inside or outside the facility, including his dumpster and spot a pot used on site. Should the USCG notify the Contractor of a weather emergency such as an impending Hurricane, the Contractor will need to tie-down or move these temporary facilities to higher ground. Hurricane season is from June 1 - November 30.
- 1.18.4 **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.
- 1.18.5 **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.
- 1.18.6 **PIPING:** Prevent water-filled pipes or tanks from freezing for both interior and exterior systems installed or in storage.

1.19 RECEIPT OF MATERIALS

Shipments of equipment, materials, and supplies shall be addressed to the Contractor - not the Government. The Contractor must be on hand to accept shipments; the Government will not accept shipments.

1.20 DELIVERY, STORAGE, AND HANDLING OF MATERIALS

Deliver, store, and handle products and materials according to the manufacturer's printed instructions and as follows:

- A. Deliver products and materials in manufacturer's original unopened packages or containers bearing manufacturer's labels.
- B. Store products subject to damage from the elements in weather tight enclosures; maintain temperature and humidity within the ranges stated in the manufacturer's printed instructions.
- C. Store fabricated products off the ground on platforms, blocking, or skids. Cover or protect products that may discolor or deteriorate due to exposure to the elements. Provide ventilation to avoid condensation.
- D. Store loose granulated material on solid surfaces such as paving, plywood, or sheet material to prevent mixing with foreign matter. Provide drainage to prevent sheet material from mixing with foreign matter. Provide drainage to prevent flow or ponding of rainwater. Prevent mixing of materials.

1.21 MINOR DEMOLITION, CUTTING, AND PATCHING:

- A. Provide COR 24 hour notice before commencing demolition.
- B. Cut surfaces in straight lines at natural points of division.
- C. Materials for patching, filling-in, repairing, and extending work shall be new, and shall be similar in appearance and equal in quality to the materials used in the adjoining construction or the removed materials when they were new.
- D. Protect existing construction, surfaces, and equipment from damage. Damaged existing construction, surfaces, or equipment shall be restored or replaced to match existing conditions or new adjoining work.
- E. Disassemble, disconnect, cut, remove, and alter existing construction and equipment without damaging other construction or equipment that is to remain or be reused. Cut

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and remove to the limits shown on the drawings, or, if not shown, to the minimum extent necessary for the proper installation of new work.

- F. Cut, move, and remove existing construction as necessary to do the work; replace and restore when work is completed.
- G. Patching: Patch to provide a neatly finished installation and to restore surfaces and items to the condition they were in before the work started. Where removals leave holes and damaged surfaces that will be exposed in the finished work, patch and repair these holes and damaged surfaces to match adjacent finished surfaces and to provide surfaces that are suitable for the provision of the new work. Install materials according to standard trade practice. Provide a smooth, even line of transition where patched work adjoins existing construction or new work. Patches or repairs shall match existing conditions or new adjoining work and shall provide a uniform finish and texture over the entire surface. When existing finish cannot be matched, refinish the entire surface to the nearest intersection.
- H. Transitions: Make smooth and even transitions where new work abuts or aligns with existing construction. Where finished surfaces are cut such that a smooth transition with new work is not possible, terminate the existing surface along a straight line at a natural point of division and submit written recommendations to the COR on how to proceed.
- I. Adjustments: Where removal of partitions results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, and bulkheads.

1.22 CONTRACTING OFFICER'S AUTHORITY

In no event shall any understanding or agreement between the Contractor and any Government employee other than the Contracting Officer on any contract, modification, change order, letter or verbal direction to the Contractor be effective or binding upon the Government. All such actions must be formalized by a proper contractual document executed by an appointed Contracting Officer. The Contractor is hereby put on notice that in the event a Government employee, other than the Contracting Officer, directs a change in the work to be performed, or increases the scope of the work to be performed, it is the Contractor's responsibility to make inquiry to the Contracting Officer before making the deviation. Payments will not be made without being authorized by an appointed Contracting Officer with the legal authority to bind the Government.

1.23 SAFETY PROGRAM

- 1.23.1 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. as well as complying with the requirements of all applicable Federal, State and Local safety laws, rules and regulations.
- 1.23.2 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.
- 1.23.3 HEALTH AND SAFETY PLAN: The Contractor shall submit a written health and 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.

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1.24 EQUIPMENT/UTILITY LOCKOUT AND TAGOUT REQUIREMENTS

- 1.24.1 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.
- 1.24.2 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 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.

1.25 TEMPORARY FIRE PROTECTION

- 1.25.1 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".
- 1.25.2 HOT WORK PERMIT
 - 1.25.2.1 Prior to performing "Hot Work" (welding, burning, lead melting, blowtorches, tar pots, etc.) or operating other flame-producing devices, the contractor shall request a Hot Work permit. This permit will be issued by the Training Center Fire Department through the Contracting Officer's Representative (COR). This permit will be issued only after job site inspection by a member of the Fire Department for a specific task.
 - 1.25.2.1.1 All Hot Work will be shut down 30 minutes before the end of work and a fire watch shall be kept at the scene of operation during this 30 minutes.
 - 1.25.2.1.2 Extinguishers and Fire Watch Personnel: The contractor shall furnish, in accordance with all applicable requirements of the NFPA (National Fire Protection Association) Standards, sufficient fire extinguishers and fire watch personnel to protect the area in which his work is being performed. The size and type of fire extinguisher used will be subject to review by the Training Center Fire Department through the COR.
 - 1.25.3 BURNING
 - 1.25.3.1 The burning of trash or other waste material shall be prohibited.
 - 1.25.4 HEATING
 - 1.25.4.1 All sources of temporary heat shall carry an "Underwriters Laboratory" label and portable heaters shall be located to avoid ignition of combustible materials.
 - 1.25.4.2 Electrical heaters shall not be connected to extension cords.
 - 1.25.4.3 Open drumfires are prohibited.
 - 1.25.5 ELECTRICAL
 - 1.25.5.1 All portable electric devices (saws, sanders, compressors, lights, extension cords) not required to be left on shall be disconnected at the close of work each day.
 - 1.25.5.2 All wires plugged into electrical outlets shall be equipped with male plugs. The inserting of the bare ends of wires into outlets is prohibited.
 - 1.25.6 FLAMMABLES

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- 1.25.6.1 Oil painting materials (paint, brushes, empty paint cans, rags, paint clothes, drop cloths, etc.) and flammable liquids shall be removed from the building at the close of work each day.
- 1.25.6.2 Highly flammable liquids such as paints, thinner, etc. that are to be kept inside buildings shall be held to an absolute minimum except in buildings authorized and designed for such storage.
- 1.25.6.3 Storage of gasoline in excess of (5) gallon containers shall be permitted only by specific approval from the Training Center Fire Chief through the Contracting Officer's Representative.
- 1.25.6.4 All storage areas containing flammable liquids shall be marked with signs indicating "FLAMMABLES" and "NO SMOKING".

1.25.7 FIRE HYDRANTS

- 1.25.7.1 Fire hydrants shall not be used without approval of the Training Center Fire Department through the Contracting Officer's Representative. Where permission is granted for the use of fire hydrants, the contractor shall be required to furnish a gate valve and backflow preventer to fit the 2 1/2-inch outlets.
- 1.25.7.2 The Training Center Fire Department through the Contracting Officer's Representative will have control of the opening and closing of fire hydrants.
- 1.25.7.3 A clear space of 15 feet on both sides of fire hydrants shall be maintained at all times.

1.25.8 EXISTING FIRE DEVICES

- 1.25.8.1 Fire hose or extinguishers in existing buildings shall not be removed from their locations, unless specifically indicated to be relocated or removed by the plans and specification for the project. No fire hose or extinguishers shall be used for any purpose other than combating a fire.

1.25.9 SMOKING:

- 1.25.9.1 Smoking is strictly prohibited in all Government buildings. Smoking is only permitted in designated smoking areas. 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.

1.25.10 FIRE REPORTING

- 1.25.10.1 All contractors providing office space or trailers with telephone service shall place or post the fire reporting phone number by the phone. All contractor personnel shall be instructed how to report a fire. Any fire, no matter how small, shall be reported, including those already extinguished, to the Training Center Fire Department immediately. If a Training Center telephone is used, dial extension 6911. If any other telephone is used, dial 911.

1.26 CONFINED SPACE ENTRY

- 1.26.1 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 and the COR and notification to the USCG Training Center Fire Department 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.

1.27 ACCESS ROADS AND PARKING

- 1.27.1 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.

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- 1.27.2 **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.
- 1.27.3 **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.
- 1.27.4 **VISITORS:** No visiting vehicles will be permitted on government property unless the operator is employed by a subcontractor or supplier.

1.28 RECOVERED MATERIALS NOTICE

- 1.28.1 **GENERAL:** It is the intent of Training Center Cape May 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.
- 1.28.2 **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/smm/comprehensive-procurement-guideline-cpg-program#products>.
- 1.28.3 **CONTRACTOR RESPONSIBILITY:** The contractor should provide recycled materials to the extent practical, provided the materials meet all other requirements of the applicable specification section.

1.29 GENERAL CLEANUP & SITE RESTORATION OF WORK AREAS

- 1.29.1 **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.
- 1.29.2 **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.
- 1.29.3 **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 Representative at no additional cost to the Government.
- 1.29.4 **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 Representative, final acceptance will not be approved.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

**SECTION 01200
DESIGN-BUILD PROGRESS PAYMENTS**

PART 1 GENERAL

This section covers the submittal requirements for design-build progress payments.

1.1 RELATED CONTRACT CLAUSE

Section I contract clause 52.232-5 "Payments under Fixed-Price Construction Contracts."

1.2 SUBMITTALS

- A. Design Phase Submittals
 - Schedule of Prices for surveys, design, and construction activities.

1.3 DESIGN SUBMITTALS

See Section 01820 Construction Design Documents for additional submittal requirements.

- A. Building / Site Surveys
- B. Initial 35% Design Submittal
- C. 95% Design Submittal
- D. Final Design Submittal
- E. Corrected Final Construction Design Submittal
- F. Construction Submittal Reviews
- G. Site Visit Reports During Construction (see section 01802)
- H. Final Inspection Reports (see section 01802)
- I. As-Built Design Drawings (see section 01802)

1.4 SUBMITTALS DURING CONSTRUCTION

1.4.1 Request for Progress Payment

Payment requests during design may be made upon submission of each design submittal, and will be based on the portion of the Base Item for Design Services indicated in Part 3 of this section. Apply for progress payments using "Contractor's Monthly Estimate for Payment Voucher" which includes CEU Payment Request Form and the required payment certification that are available from the Contracting Officer. Electronic copies are available.

1.4.1.1 Documentation for Materials Delivered But Not Installed

Payment requests for services provided for construction submittal review, site visits during construction, and final inspections may be made monthly based on the portion of the Base Item for Design Services indicated in Part 3 of this section.

Payment request for As-Built Drawings may be made after review of conformance with the design drawings and construction submittals (see Section 01802 Construction Design Documents), and will be based on the portion of the Base Item for Design Services indicated in Part 3 of this section.

1.4.1.2 Required Schedule Updates

In accordance with FAR Clause 52.236-15, Schedules for Construction Contracts and Section 01321, submit updated progress documentation along with the request for payment, including request for final payment.

1.5 TIMING FOR SUBMITTALS DURING CONSTRUCTION

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1.5.1 Initial Submission

Submit an original schedule of prices with the progress documentation required by Section 01321 for the Government's approval.

1.5.2 Progress Payments

Progress payment requests may be submitted once a month to coincide with the progress update.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 SCHEDULE OF PRICES

The schedule of prices shall be prepared in conjunction with the development of the complete performance schedule. The Contractor shall separate the design activities from the construction activities. However, the items listed on the schedule of prices (construction portion) shall match the activities listed on the complete network schedule. Prepare and deliver to the Contracting Officer a schedule of prices on the forms furnished by the Government. Provide a detailed breakdown of the contract price, giving quantities for each of the various kinds of work, design phases, unit prices and extended prices therefore.

3.1.1 Design Phase Schedule of Prices during Design

A. Initial Design Phase - The following design and permit sub-categories shall be included and values provided on the schedule of prices:

- Building / Site Survey
- 35% Construction Design Submittal
- 95% Construction Design Submittal
- Final Construction Design Documents Submittal
- Corrected Final Construction Design Documents Submittal

B. Design Phase Schedule of Prices during Construction

The following design sub-categories shall be included and values provided on the schedule of prices:

- Construction Submittal Reviews
- Site Inspections During Construction & Final Inspection*
- As-Built Drawings

* See Section 01802, Construction Design Documents, Paragraph 1.11 Site Inspections, for Scope of Work for Site inspections by the Designer of Record. The entire section (3.1.2) should not exceed twenty percent (20%) of the total design price

3.1.2 Construction Phase Schedule of Prices

As noted in paragraph 3.1, the schedule of prices shall be prepared in conjunction with the development of the complete performance schedule. The items listed on the schedule of prices (construction portion) shall match the activities listed on the complete network schedule. When a lump sum price is used, a single payment will be made after the item is 100 percent complete. Allocate overhead expenses such as field superintendent, temporary facilities and general conditions across all line items; do not show as individual expenses in the schedule of values. Bonds can be paid separately if accompanied by "evidence of payment to surety". Once approved, the values listed in the schedule of prices shall not be changed.

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3.1.3 Contract Modifications

Each contract modification shall be added to the end of the approved schedule of prices.

3.2 CONTRACTOR MONTHLY VOUCHER ESTIMATE

The Contractor's monthly voucher estimate consists of the approved schedule of prices and the data elements below.

- a. Percent of Installation Complete To Date: Insert the percent complete value for this activity.
- b. Material Invoices Submitted To Date: The sum of the paid material invoices for the specific activity shall be placed in this field.
- c. Amount Payable To Date: The value in this field shall be automatically calculated and shall not be overtyped. The amount payable to date for stored material equals the greater of (1) the material invoices submitted to date column or (2) the material activity cost multiplied by the percent of installation complete to date value for the activity. The total amount shall not exceed the material activity cost. The labor value payable to date is calculated by multiplying the labor value activity cost by the percent of installation complete to date.
- d. Amount Payable to Date Last Month: The value in this field is carried over from the previous months approved invoice amount payable to date column.
- e. Amount Payable This Month: This value shall be automatically calculated and shall not be overtyped. The value is calculated by subtracting the amount payable to date last month value from the amount payable to date column. This value represents the amount earned for a specific activity without regard to retainage.
- f. Required Calculations: The last page of the Contractor monthly voucher estimate shall include the following calculated values - (1) The Total Contract Value which is the sum of the activity cost field column values which shall also equal the current total contract price, including approved modifications; (2) Subtotals of the amount payable columns (to date, to date last month, this month); (3) Percent Complete Based On Installed Material which is the sum of the activity cost labor column multiplied by the percent of installation complete to date and then divided by the sum of all of the values listed in the activity cost labor column; and, (4) Percent Earned To Date which is the total amount payable to date divided by the total contract value.
- g. Signature of Inspector: During construction phase, voucher should be reviewed (and signed) by Government's inspector or COR with Contractor's superintendent indicating agreement with requested percentage of work complete.

End of section

**SECTION 01321
DESIGN-BUILD PROGRESS SCHEDULE**

PART 1 GENERAL

1.1 PROGRESS SCHEDULE REQUIREMENTS

Prepare a schedule for each work location. Prepare a horizontal bar graph progress schedule using a time scale. The project should be divided and subdivided into a sufficient number of work activities that can accurately graphically display the work sequence, design and construction activity duration, and interplay of activities.

1.2 RESPONSIBILITY

The Contractor is responsible for executing the work within the time stated in the contract.

1.3 SUBMITTALS

1.3.1 Submit design progress schedule no later than 15 days after award. Submit final construction progress schedule no later than 30 calendar days after award and after design progress schedule is submitted.

1.3.2 Submit updated design-build progress schedule every month along with the request for payment.

PART 2 PRODUCTS

2.1 PROGRESS SCHEDULE

Progress schedule shall have project name, location, contract number, and company name.

2.1.1 Establish the time schedule across the top of the sheet for the entire project duration. Divide the project into months, weeks, or days depending on the length of the project and an appropriate time scale.

2.1.2 Lay out a bar graph opposite each activity, corresponding to the schedule start date and extended for the scheduled duration of the activity.

2.1.3 The following specific activities shall be shown on the progress schedule. The durations indicated are a minimum.

- a) Design Elements
 - Design Kickoff Meeting
 - Building / Site Survey
 - 35% Design Submission
 - Government Review (14 days)
 - 95% Design Submission
 - Government Review (14 days)
 - Final Design submission
 - Government Review (14 days)
 - Corrected Final Design Submission
- b) Construction Elements
 - Pre-mobilization meeting
 - Submittal Submission requiring Government review
 - Procurement time for critical items
 - Request for Final Inspection (minimum of 14 days prior to the requested date)
 - Final Inspection (3 days)
 - Correct Punchlist (14 days)
 - As-Built drawings
 - Coast Guard Acceptance (On or before contract completion date)

2.1.4 Anticipated Weather Delays:

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Schedule activity duration(s) shall be formulated with allowance for normal adverse weather conditions. Any activity duration, which could be impacted by normally anticipated adverse weather (precipitation, high or low temperature, wind, etc.), due to the time period that the Contractor has scheduled the work, shall include an adjustment to include the anticipated weather delay. The Contractor shall anticipate adverse weather delays. The number of anticipated adverse weather delays allocated to an activity will be reflected in the activity's calendar. The definition of weather day is as follows: A weather day must prevent work for 50 percent or more of the Contractor work day and delay work critical to the timely completion of the project. The Contractor shall immediately notify the Contracting Officer when a lost day has occurred due to weather, will record on the Daily Reports the occurrence of adverse weather and resultant impact to the normally scheduled work. If the number of actual weather days exceeds the number of days anticipated by the Coast Guard, then the Contracting Officer may convert the qualifying days to calendar days and issue a modification in accordance with the contract clause entitled "Default (Fixed Price Construction)."

2.1.5 Construction Activities

Construction Activities: Construction activities shall include, but are not limited to: Tasks related to mobilization or demobilization; the installation of temporary or permanent work by tradesman; testing and inspections of installed work by technicians, inspectors or engineers; start-up and testing of equipment; commissioning of building and related systems; scheduling of specified manufacturer's representatives; Punch Out Inspection; Pre-Final Inspection, Final Acceptance Inspection; final clean-up; training to be provided; and administrative tasks necessary to start, proceed with, accomplish or finalize the contract. No onsite construction activity shall have a duration in excess of 20 working days. Contractor activities will be driven by calendars that reflect Saturdays, Sundays and all Federal Holidays as non-work days.

2.1.6 Final Inspection

The final inspection activity will only be held after the following events have occurred. Contractor shall ensure that all applicable activities are indicated as predecessors:

- a. Facility ready for use for intended purpose.
- b. All Test & Inspection Reports received.
- c. All submittals approved.
- d. Up to date as-built drawings at the site.
- e. Corrected O&M Manuals submitted to the Government.
- f. Receipt of a letter request from the Contractor at least 2 weeks in advance, requesting the inspection.

PART 3 EXECUTION

3.1 UPDATING SCHEDULE

Update and submit progress schedule every month with progress payment showing actual progress. Updated progress schedules shall include the original information and an updated actual progress curve using a broken line.

3.2 DELAYS

If the Contractor knows or has reason to believe that the delivery of any material or equipment, the shortage of qualified labor, delays caused by others, or the occurrence of any other difficulty may cause delay in executing the work as scheduled. He shall notify the Contracting Officer, in writing, within 3 calendar days.

3.3 PROGRESS REPORT

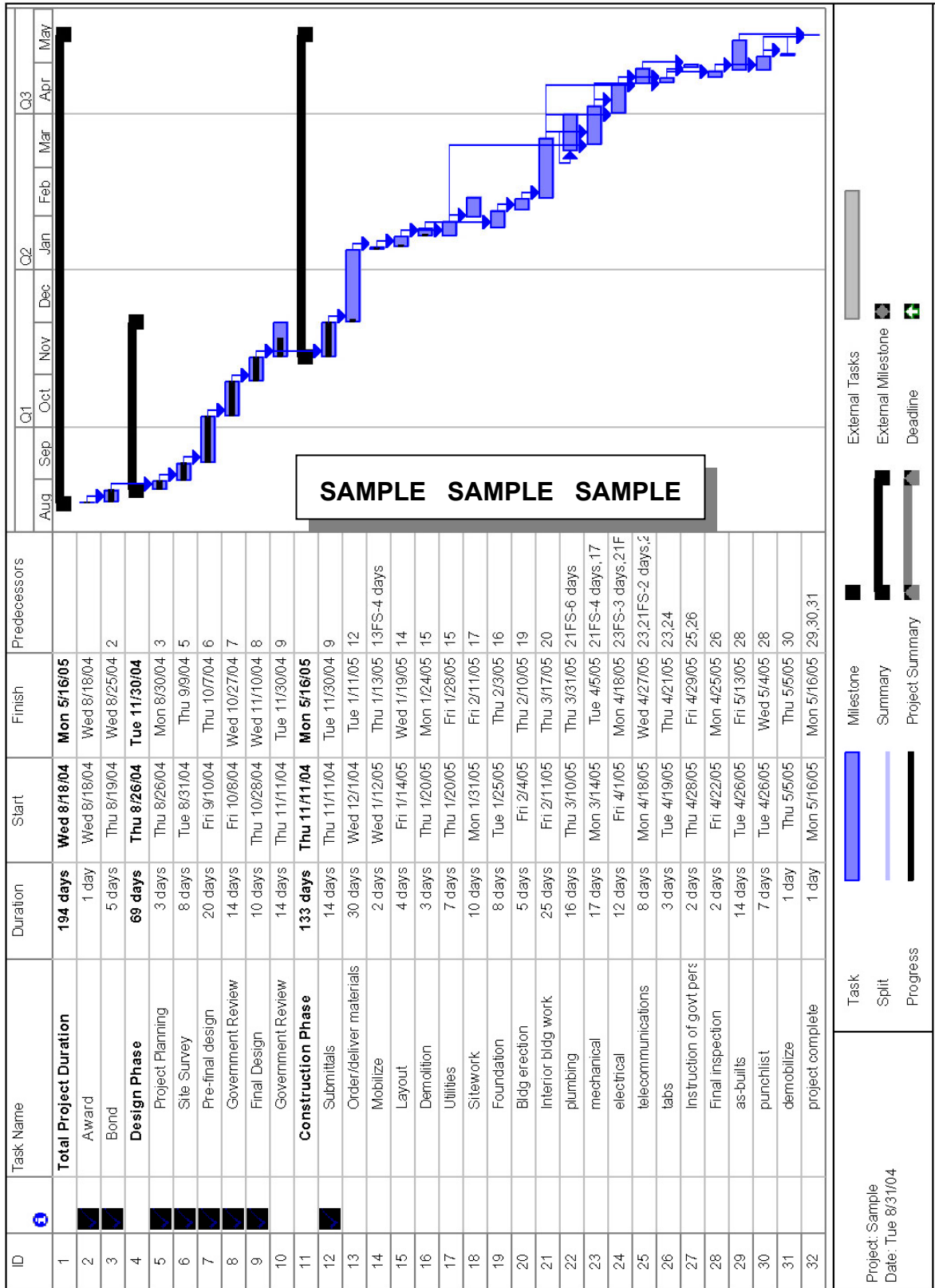
A sample design-build progress schedule is shown on the following page. This should only be used as a guide. It displays the "type" of information that should be included in the submitted progress schedules.

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-- END OF SECTION --

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**SECTION 01330
DESIGN-BUILD SUBMITTAL PROCEDURES**

PART 1 GENERAL

1.1 DESIGN, PRE-CONSTRUCTION, AND CONSTRUCTION SUBMITTALS REQUIRED

1.1.1 It is expressly understood the actions taken by the Coast Guard are for general conformity to the contract documents and shall not relieve the Contractor from the responsibility for error in design, dimensions and compliance with all terms stipulated by contract.

1.1.2 Design Submittals

1.1.2.1 The approving authority during the Design Phase shall be the Government. Design submittals shall be submitted to the Contracting Officer and EIC. Design submittals will be reviewed and approved by the Government's EIC.

1.1.2.1.1 Environmental Submittals. See requirements in Section 01800, Paragraph 1.5, titled "ENVIRONMENTAL PERMITS, CONTROLS, AND PROTECTION" for required submittals.

1.1.2.1.2 Design Submittals. See requirements in Section 01802 for required design submittals, quantities of design submittals and other pertinent requirements.

1.1.3 Pre-Construction Submittals

1.1.3.1 The approving authority during the Pre-Construction phase shall be the Government. Pre-Construction submittals shall be submitted to the Contracting Officer and COR. Pre-Construction submittals will be reviewed and approved/accepted/acknowledged by the COR.

1.1.4 Construction Submittals

1.1.4.1 The approving authority during the Construction phase shall be the Contractor's DOR. Construction submittals shall be submitted to the Contractor's DOR. The DOR shall be responsible for ensuring the Contractor and subcontractors, suppliers, etc are conforming to the approved design documents. All submittals during the construction phase including but not limited to technical data, catalog cuts, shop drawings, manufacturers test reports, concrete trip tickets, etc are required to be reviewed and approved by the DOR.

1.1.4.2 The Contractor's DOR shall return reviewed copies to the Contractor and provide copies to the Contracting Officer and COR at the same time. This also applies to substitutions, deviations and modifications.

1.1.5 Use the standard Coast Guard submittal forms as cover sheets on all submittals required and approved by the designer of record when submitting for information only copies of submittals. Number submittals sequentially. When re-submitting a submittal due to rejection, keep the same submittal number with the suffix "rev (#)", where the # is the appropriate revision number. Keep track of all submittals sent and received on the submittal register. The In-Progress submittals will be determined and numbered by the designer of record.

1.1.6 See section 01321 Design-Build Schedule Progress for additional information. Update the design-build schedule and equipment delivery schedule at weekly intervals or when schedule has been revised. Reflect any changes occurring since the last update.

1.1.7 Shop Drawings are defined in FAR clause 52.236-21 "Specifications and Drawings for Construction."

1.2 TIMING OF SUBMITTALS

Submit submittals in sufficient time and in such sequence to avoid delays in the work. Submittals, test reports and certifications shall be submitted and approved prior to payment for the applicable item.

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Except when substitutions or deviations are involved, submittals requiring approval by the contracting officer will be reviewed and returned to the Contractor within 14 calendar days.

1.3 DEFINITIONS

1.3.1 Types of Submittals

All submittals are classified as indicated in paragraph "Submittal Descriptions (SD)". Submittals also are grouped as follows:

- 1.3.1.1 Shop drawings: As used in this section, drawings, schedules, diagrams, and other data prepared specifically for this contract, by Contractor or through Contractor by way of subcontractor, manufacturer, supplier, distributor, or other lower tier Contractor, to illustrate portion of work.
- 1.3.1.2 Product data: Preprinted material such as illustrations, standard schedules, performance charts, instructions, brochures, diagrams, manufacturer's descriptive literature, catalog data, and other data to illustrate portion of work, but not prepared exclusively for this contract.
- 1.3.1.3 Samples: Physical examples of products, materials, equipment, assemblies, or workmanship that are physically identical to portion of work, illustrating portion of work or establishing standards for evaluating appearance of finished work or both.
- 1.3.1.4 Administrative submittals: Data presented for reviews and approval to ensure that administrative requirements of project are adequately met but not to ensure directly that work is in accordance with design concept and in compliance with contract documents.

1.3.2 Submittal Descriptions (SD)

1.3.2.1 Design Submittals

- a) Project Schedule for Design and Construction.
- b) Schedule of Prices/Values.
- c) Management System.
- d) Personnel Qualifications.
- e) Design/Build Quality Assurance & Quality Control Plan.
- f) Laboratory Accreditation.
- g) Basis of Design Narrative.
- h) Environmental Protection Plan.
- i) Available Utility Water Pressure and Flow Rate Test Results.
- j) Water Flow Calculations.
- k) 35% Design Submission Construction Drawings and Specifications.
- l) 95% Design Submission Construction Drawings and Specifications.
- m) Final Design Submission Construction Drawings and Specifications.
- n) Revised Final Design Submission Construction Drawings and Specifications.

1.3.2.2 SD-01 Preconstruction Submittals

- a) List of Proposed Subcontractors.
- b) List of Proposed Products.
- c) Construction Progress Schedule.

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- d) Construction Phase Submittal List.
- e) Health and Safety Plan.
- f) Construction Site Plan.
- g) Sequence of Construction and Demolition.
- h) Record of Existing Site Conditions and Photographs.
- i) TRACEN Dig Request.
- j) NJ One Call Markout Request.
- k) Environmental Protection Plan.

1.3.2.3 SD-02 Shop Drawings (Construction Phase Submittal)

- a) Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work.
- b) Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the Contractor for integrating the product or system into the project.
- c) Drawings prepared by or for the Contractor to show how multiple systems and interdisciplinary work will be coordinated.

1.3.2.4 SD-03 Product Data (Construction Phase Submittal)

- a) Catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials or equipment for some portion of the work.
- b) Samples of warranty language when the contract requires extended product warranties.

1.3.2.5 SD-04 Samples (Construction Phase Submittal)

- a) Physical examples of materials, equipment or workmanship that illustrate functional and aesthetic characteristics of a material or product and establish standards by which the work can be judged.
- b) Color samples from the manufacturer's standard line (or custom color samples if specified) to be used in selecting or approving colors for the project.
- c) Field samples and mock-ups constructed on the project site establish standards by which the ensuring work can be judged. Includes assemblies or portions of assemblies which are to be incorporated into the project and those which will be removed at conclusion of the work.

1.3.2.6 SD-05 Design Data (Construction Phase Submittal)

- a) Calculations, mix designs, analyses or other data pertaining to a part of work.

1.3.2.7 SD-06 Test Reports (Construction Phase Submittal)

- a) Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. Testing must have been within three years of date of contract award for the project.
- b) Report which includes findings of a test required to be performed by the Contractor on an actual portion of the work or prototype prepared for the project before shipment to job site.
- c) Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.
- d) Investigation reports

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- e) Daily checklists
- f) Final acceptance test and operational test procedure

1.3.2.8 SD-07 Certificates (Construction Phase Submittal)

- a) Statements signed by responsible officials (including DOR for design data) of manufacturer of product or design, system or material attesting that product or design system or material meets specification requirements. Must be dated after award of project contract and clearly name the project.
- b) Document required of Contractor, or of a supplier, installer or subcontractor through Contractor, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel qualifications.
- c) Confined space entry permits.

1.3.2.9 SD-08 Manufacturer's Instructions (Construction Phase Submittal)

- a) Preprinted material describing installation of a product, system or material, including special notices and Material Safety Data sheets concerning impedances, hazards and safety precautions.

1.3.2.10 SD-09 Manufacturer's Field Reports (Construction Phase Submittal)

- a) Documentation of the testing and verification actions taken by manufacturer's representative to confirm compliance with manufacturer's standards or instructions.
- b) Factory test reports.

1.3.2.11 SD-11 Closeout Submittals (Construction Phase Submittal)

- a) Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.
- b) As-built drawings.
- c) Final Inspection Reports.

1.3.2.12 Additional Construction Phase Submittals

- a) Weekly Progress Update Meeting Minutes.
- b) Monthly Progress Meeting Minutes.
- c) Site Inspection Reports During Construction.

1.3.3 Request for Information (RFI)

An RFI is a request from the Contractor or a subcontractor to the Government seeking an interpretation or clarification of some requirement of the contract documents. The Contractor shall clearly and concisely (e.g. citing specifications and/or drawing references) set forth the issue for which clarification or interpretation is sought and why a response is needed from the Government. The Contractor shall, in the written request, set forth their interpretation or understanding of the contract's requirements, along with reasons why such an understanding has been reached. Responses from the Government will not change any requirements of the contract documents unless so noted in the Request for Information response by the Government. RFI procedures are outlined in Paragraph 3.3 of this section.

1.3.4 Drawing/Plan Clarification

An answer from the Government, in response to an inquiry from the Contractor, intended to make some requirement(s) of the drawings or plans clearly understood. Drawing/plan clarifications may be sketches, drawings, or in narrative form and do not change any requirements of the drawings or plans. Responses to Contractor inquiries shall be as outlined in paragraph 3.3.4 of this section.

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1.3.5 Field Changes/Adjustments

Field Change/Adjustment is a bilateral agreement between the Government and prime Contractor which involve minor changes in the plans and specifications to facilitate the proper execution of work; does not change scope, time, quality or price; and, does not affect terms or conditions of the contract. The Contracting Officer's 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. Combining of changes to achieve the no impact requirement is not allowable. Deviations in material or means and methods of execution shall not be authorized by use of field changes.

1.4 SUBMITTAL REGISTER

- 1.4.1 A submittal register will be provided by the Contractor on or before the pre-design conference following award of the contract. The submittal register shall be divided into Design Phase; Pre-Construction Phase and Construction Phase submittals. The Construction Phase submittals shall require approval from the Contractor's Designer of Record. The Contractor shall indicate critical submittals to the Contracting Officer with dates to be submitted and critical dates for approval prior to the pre-design conference. Maintain at the site an up-to-date Submittal Register showing the status of all submittals.
- 1.4.2 The DOR shall prepare a submittal list for specific construction phase submittals that require his review and approval. The construction phase submittal list shall be submitted to the Contracting Officer and COR for review.

1.5 SUBMITTALS IN ELECTRONIC FORMAT

Provide submittals electronically via email unless specifically noted otherwise. Submittals requiring review for conformance and/or clearance for construction by the Contracting Officer will be returned via email with scanned copies of any items requiring signatures. Hard copies of product data requiring review may be submitted if electronic copies are not feasible. Submittals shall be submitted as follows:

| Item | Submitted to for Approval | Copies Required |
|--|-----------------------------------|---|
| Design Submittals per section 01802 | Contracting Officer & COR at Site | See 01802 for quantity of design submittals |
| Submittals required by sections 01110 or 01330 or FAR clause (i.e. Schedule of Values, Progress schedules, Payment vouchers, etc.) | Contracting Officer & COR at Site | See paragraph 1.7 |
| Technical Construction Type: catalog cuts, shop drawings, calculations and certificates required by the DOR | Designer of Record (DOR) | Contracting Officer & COR at Site (with Designer's annotations) |
| Test Reports (Factory & Field), Certificates required by DOR | DOR | Contracting Officer & COR at Site (with DOR's annotations) |

1.6 IDENTIFYING SUBMITTALS

Identify submittals requiring contracting officer approval with the following information permanently adhered to or noted on each separate component of each submittal and noted on the transmittal form. Mark each copy of each submittal identically, with the following:

- A. Project title and location.
- B. Construction contract number.

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- C. The section number of the specification from which the submittal is required.
- D. The submittal description (SD) number of each component of the submittal.
- E. When a resubmission, an alphabetic suffix on the submittal description, for example, SD-10A, to indicate the resubmission.
- F. The name, address, and telephone number of the subcontractor, supplier, manufacturer and any other second tier Contractor associated with the submittal.

1.6.1 Format for Design Data (only for design data requiring Contracting Officer approval)

1.6.1.1 Present design data submittals for each section as a complete, bound volume. Include a table of contents listing design data.

1.6.1.2 Supplement design data with material prepared for the project to satisfy submittal requirements for which design data does not exist. Identify this data as developed specifically for the project.

1.6.2 Format for Product Data (only for product data requiring Contracting Officer approval)

1.6.2.1 Present product data submittals for each section as a complete, bound volume. Include a table of contents listing page and catalog item numbers for product data.

1.6.2.2 Indicate, by prominent notation, each product which is being submitted; indicate the specification section number and paragraph number to which it pertains.

1.6.2.3 Supplement product data with material prepared for the project to satisfy submittal requirements for which product data does not exist. Identify this material as developed specifically for the project.

1.6.3 Format for Shop Drawings (only for shop drawings requiring Contracting Officer approval)

1.6.3.1 Shop drawings shall not be less than 8 1/2 by 11 inches nor more than 24 x 36 inches and shall be drawn to a minimum scale of 1/8-inch equals 1 foot.

1.6.3.2 Present 8 1/2 x 11 inches sized shop drawings as part of the bound volume for the submittals required by the section. Present larger drawings in sets.

1.6.3.3 Include on each drawing the drawing title, number, date, and revision numbers and dates, in addition to the information required in the paragraph entitled "Identifying Submittals."

1.6.3.4 Dimensional drawings, except diagrams and schematic drawings; prepare drawings demonstrating interface with other trades to scale. Identify materials and products for work shown.

1.6.4 Format of Administrative Submittals:

When the submittal includes a document that is to be used in the project or becomes a part of the project record, other than as a submittal, do not apply the Contractor's approval stamp to the document, but to a separate sheet accompanying the document.

1.7 QUANTITY OF SUBMITTALS

1.7.1 Number of Copies of Design Data:

Submit one electronic copy of all design data requiring review and approval by the Contracting Officer. In addition, submit one hard copy of the 35% Design documents, 95% Design documents, Final Design documents, and Corrected Final Design documents. One copy with approval or comments will be returned to the Contractor.

1.7.2 Number of Copies of Product Data:

Submit one electronic copy of product data requiring review and approval by the Contracting Officer. If electronic format is not feasible, submit four hard copies. One copy with approval or comments will be returned to the Contractor.

1.7.3 Number of Copies of Shop Drawings

Submit shop drawings in compliance with the quantity requirements specified for product data.

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1.7.4 Number of Copies of Administrative Submittals:

1.7.4.1 Unless otherwise specified, submit the administrative submittals in compliance with the quantity requirements specified for product data.

1.7.4.2 Submit as-built drawings required in compliance with Section 01803 "Record Documents and Drawings".

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS FOR SUBMITTALS REQUIRING CONTRACTING OFFICER REPRESENTATIVE APPROVAL

3.1.1 Contractor Review and Certification

Review and certify all submittals before submitting them to the Contracting Officer Representative (COR). Word the certification as follows:

I certify that the material or equipment shown and marked in this submittal is the same as that proposed to be incorporated into Contract Number [_____], complies with the contract documents, can be installed in the allocated space, and is submitted for Government approval.

Certified by _____ Date _____

The certification shall be signed by the person designated in writing by the Contractor as having that authority. Stamp each sheet of submittals except that data submitted in a bound volume or on one sheet printed on two sides may be stamped on the front of the first sheet only. The signature shall be in original ink. Stamped signatures are not acceptable. Submittals will not be processed unless this review and certification has been provided by the Contractor.

3.1.2 The Approving Authority during the Design Phase and the Pre-Construction Phase shall be the Government. The Approving Authority during the Construction Phase shall be the Contractor's Designer of Record (DOR). The government reserves the right to overrule the DOR if the DOR approves materials and/or construction methods that are not in conformance with the RFP, approved construction documents, or Code.

3.1.3 Design Phase

3.1.3.1 Every design submittal shall be accompanied by a Design Submission Transmittal form completed in full.

3.1.4 Pre-Construction Phase

3.1.4.1 Every Pre-Construction submittal shall be accompanied by a Contract Item Acceptance Request form completed in full.

3.1.5 Construction Phase

3.1.5.1 Every construction phase submittal shall be accompanied by a Contract Item Acceptance Request form completed in full (even if approved by the Designer of Record).

3.1.5.2 All construction phase submittals shall be reviewed and approved by the Designer of Record. Immediately after each review, the Designer of Record shall provide the Contracting Officer and COR one copy of each submittal.

3.1.5.3 For construction submittals requiring Government review only, do not submit items from more than one specification section on the same Contract Item Acceptance Request Form.

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3.1.6 Design Submission Transmittal forms and Contract Item Acceptance Request forms will be provided to the Contractor either as hardcopy or electronic format.

3.1.7 As far as practical, submit all submittals for each section as one submission. Each item included with each submittal shall be listed as a separate line item on the Contract Item Acceptance Request form.

3.1.7.1 In addition to the information to be provided on the Contract Item Acceptance Request form, submittals shall include the following information:

- a) Names of Contractor, supplier, or manufacturer, as applicable.
- b) Identification of revisions on resubmittals.
- c) Identification of Substitution or Deviation: Refer to Paragraph 3.2 below for additional requirements.

3.1.8 Resubmittals

Make changes and corrections required by Approving Authority. . Indicate changes made which were not requested. Resubmit as originally specified. Use same submittal number as initial submittal except add a suffix of -A, -B, etc. for each subsequent resubmittal. Contractor may be subject to payment of costs incurred by the Government for the review of design or construction resubmittals. Stamp/mark resubmittals as "RESUBMITTAL".

3.2 SUBSTITUTION OR DEVIATION:

If an item submitted is a substitution or deviation from contract requirements, stamp "Substitution" on the submittal and note and explain the reasons for and details of the substitution or deviation, a list of sources contacted to obtain specified product, a cost comparison, identify variations from contract requirements and changes required in other work or products.

- A. In submitting substitutions or deviations, the Contractor represents that he/she will coordinate the installation of accepted substitutions or deviations, and additional costs or delays caused by the substitution or deviation will not constitute grounds for any adjustments to the contract price.
- B. Substitutions or deviations require approval of the Contracting Officer and if allowed will require a contract modification. Substitutions or deviations may increase the processing time for reviewing submittals.

3.3 REQUESTS FOR INFORMATION (RFI)

3.3.1 RFIs during Bid Phase:

3.3.1.1 Bidders shall submit all questions, in writing, to the Contracting Officer. Requests for Information (RFI) shall be submitted no later than five (5) business days prior to the bid due date. RFIs will be addressed by the USCG three (3) business days prior to the bid due date.

3.3.2 RFIs during Design and Construction Phases:

3.3.2.1 When the Contractor is unable to determine from the Contract Documents, the material, process or system to be installed, the Contracting Officer shall be requested to make a clarification of the indeterminate item.

3.3.2.2 Wherever possible after contract award, such clarification shall be requested at the next site visit with the Contracting Officer's Representative (COR), with the response entered on the daily reports. When clarification at the COR's site visit is not possible either because of the urgency of the need, or the complexity of the item, Contractor shall prepare and submit an RFI to the Contracting Officer.

3.3.2.3 Contractor shall endeavor to minimize the number of RFIs. In the event that the process becomes unwieldy, in the opinion of the Contracting Officer because of the number and

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frequency of the RFIs submitted, the Contracting Officer may require the Contractor to abandon the process and submit future requests as either submittals, substitutions or requests for change.

- 3.3.2.4 RFIs shall be originated by the Prime Contractor. RFIs from subcontractors or material suppliers shall be submitted through, reviewed by, and signed by the Prime Contractor prior to submitting to the Contracting Officer. The Contracting Officer will neither act on nor respond to RFIs received directly from subcontractors or suppliers.
- 3.3.2.5 Contractor shall carefully study the Contract Documents to assure that the requested information is not available therein. RFIs which request information available in the Contract Documents will be deemed either Improper or Frivolous as defined below.
- 3.3.2.6 In cases where RFIs are issued to request clarification of coordination issues, for example, pipe and duct routing, clearances, specific locations of work shown diagrammatically, and similar items when feasible, Contractor shall fully lay out a suggested solution using drawings or sketches drawn to scale, and submit with the RFI.
- 3.3.2.7 RFIs shall not be used for the following purposes:
 - 3.3.2.7.1 To request approval of submittals.
 - 3.3.2.7.2 To request approval of substitutions.
 - 3.3.2.7.3 To request changes which entail additional cost or credit.
 - 3.3.2.7.4 To request different methods of performing work than those drawn and specified.
- 3.3.2.8 In the event the Contractor believes that a clarification by the Contracting Officer results in additional cost or time, the Contractor shall not proceed with the work indicated by the RFI until a modification is prepared and approved. RFIs do not automatically justify a cost increase in the work or a change in the project schedule.
 - 3.3.2.8.1 Answered RFIs shall not be construed as approval to perform extra work.
- 3.3.2.9 Contractor shall prepare and maintain a log of RFIs, and at any time requested by the Contracting Officer, Contractor shall furnish copies of the log showing outstanding RFIs. Contractor shall note unanswered RFIs in the log.
- 3.3.2.10 The Government reserves the right to issue a change order to expedite the work per FAR Clause 52.243-4, Changes.
- 3.3.3 RFI Submittal
 - 3.3.3.1 Requests for Information may only be submitted by the Contractor and shall only be submitted on the Request for Information form provided by the Government. A properly prepared request for information shall include a detailed written statement that indicates the specific Drawings or Specification in need of clarification and the nature of the clarification requested.
 - a) RFIs shall be sequentially numbered.
 - b) Drawings shall be identified by drawing number and location on the drawing sheet.
 - c) Specifications shall be identified by Section number, page and paragraph.
 - d) The Contractor shall clearly and concisely set forth the issue for which clarification or interpretation is sought and explain why a response is needed from the Government.
 - e) In the Request for Information, the Contractor shall set forth their interpretation or understanding of the requirement, along with reasons why such an understanding has been reached.

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3.3.3.2 The Government will review all Requests for Information to determine whether they are requests for information within the meaning of this term. If the Government determines that the document is not a Request for Information or missing required information from the Contractor, it will be returned to the Contractor, unreviewed as to content, for resubmittal in the proper manner (i.e. submittal, request for deviation, etc.).

3.3.3.3 Improper RFIs are improperly prepared RFIs and will not be processed by the Contracting Officer, but will be returned unprocessed

3.3.3.4 Frivolous RFIs are RFIs that request information that is clearly shown on the Contract Documents. Frivolous RFIs may be returned unprocessed.

3.3.4 RFI Response

3.3.4.1 Contractor shall allow up to 14 days review and response time for RFIs, however, the Contracting Officer will endeavor to respond in a timely fashion to RFIs.

3.3.4.2 Responses from the Government will not change any requirement of the contract documents unless so noted in the response to the Request for Information. If noted as a change, the Government will issue either a no-cost Field Adjustment or formal modification under the Changes clause of the contract. If the Contractor believes that a response to a Request for Information will cause a change to the requirements of the contract documents, the Contractor shall immediately give written notice to the Contracting Officer stating that the Contractor considers the response to be a change order. Failure to give such written notice immediately shall waive the Contractor's right to seek additional time or cost under the Changes clause of the contract.

3.3.4.3 Contracting Officer will respond to RFIs on one or more of the following forms:

3.3.4.3.1 Proper RFIs:

3.3.4.3.1.1 Answers to properly prepared RFIs will be made directly upon the RFI form with supplementary instructions as necessary.

3.3.4.3.1.2 If necessary, Change Order

3.3.4.3.1.3 If necessary, Request for Proposal

3.3.4.3.2 Improper or Frivolous RFIs:

3.3.4.3.2.1 Unprocessed RFIs will be returned with a stamp or notation: Not Reviewed.

END OF SECTION

**SECTION 01450
QUALITY CONTROL**

PART 1 GENERAL

1.1 QUALITY PROGRAM

1.1.1 This contract will be administered under Section E contract clause 52.246-12 "Inspection of Construction."

1.1.2 Quality assurance and quality control is the responsibility of the Contractor. Establish a method for monitoring the work to ensure compliance with contract requirements. Quality Assurance will be administered under Contract Clause FAR 52.246-12, Inspection of Construction. The Contractor's Quality Assurance Manager (QAM) must keep separate files on the quality assurance actions taken. These files should include internal non-compliance records, verification of material compliance with the approved submittals, verification of compliance with testing requirements, and remedial direction provided for non-compliant work. These files must be made available to the Contracting Officer and COR for review upon request. Failure to perform quality assurance will result in removal of the QAM, and the Contractor must provide a replacement at no cost to the government.

1.1.3 Submit your management system indicating the QAMs reporting role that demonstrates the QAMs performance reviews are separate from the specific project profitability and schedule and are tied to corporate goals of safety and a quality product.

1.1.4 The objective is to guarantee performance of the work to the required Contract standards for materials, workmanship, construction, finish, functional performance and identification. Quality assurance requirements apply to both on-site and off-site fabrication, all construction materials and operations, and specifically includes all required inspections, tests and submittals.

1.1.5 Note: for an activity to be considered one-hundred percent complete the required testing must be complete and the work must fully comply with the Contract requirements.

1.2 APPLICABLE PUBLICATIONS

1.2.1 AMERICAN SOCIETY for TESTING and MATERIALS (ASTM):

ASTM C1077 Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation

ASTM D3666 Standard Practice for Evaluation of Inspection and Testing Agencies for Bituminous Paving Materials

ASTM D3740 Standard Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction

ASTM E329 Standard recommended Practice for Inspection and-Testing Agencies for Concrete, Steel, and Bituminous Materials Used in Construction

ASTM E543 Standard Practice for Determining the Qualifications of Nondestructive Testing Agencies

ASTM E548 Standard Practice for Preparation of Criteria for Use in the Evaluation of Testing Laboratories and Inspection Bodies

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1.3 PERSONNEL QUALIFICATIONS

1.3.1 Superintendent: The superintendent must have experience managing at least 3 prior design-build projects of a similar size and complexity as this project as a superintendent.

1.3.2 Quality Assurance Manager (QAM). The QAM role may be designated as a supplemental role to a team member, or as a dedicated individual. The QAM must submit proof of successful completion of at least 3 design-build projects of a similar size, complexity, and type (fire sprinkler system) as this project where his/her role was the Quality Assurance Manager over both the design and construction phases. The Quality Assurance Manager must report directly to the principles of the company not to the on-site superintendent.

1.3.3 Project Manager (PM). The project manager must have experience managing at least 3 prior design-build projects of a similar size and complexity as this project as the project manager. The PM must demonstrate prior experience managing both design and construction contracts as direct management in design-build contracts.

1.3.4 The Government reserves the right to accept or reject any team member substitution after award of this contract. Changes to the design-build team and organization require Contracting Officer's approval.

1.4 SUBMITTALS

Submit the following as specified in section 01330 "Submittal Procedures":

1.4.1 Management System

1.4.2 Personnel Qualifications

1.4.3 SD-07 Certificates:

Laboratory Accreditation

1.4.4 Construction Quality Control Documents, Test Reports, Factory Test Reports, Field Test Reports, and Field Inspections

1.4.5 FIELD TESTING LOG

1.4.5.1 Review the project documents and prepare a list of the required field tests. Create a field testing log and submit the annotated log with your other Preconstruction submittals. Tie the testing into the Project Schedule Baseline. The testing log shall be signed by your Quality Assurance Manager.

1.4.5.2 Field test reports and field inspections conducted and submitted at the job-site on the same day shall be attached to the Daily Construction Report in lieu of submission using a Contract Item Acceptance Request form.

1.4.5.3 Consider this list an As-Built for the Contract and maintain it daily as a log of testing. In the event of a discrepancy between the list and the contract documents, the contract documents take precedence. Submit the As-Built test log at Final Inspection.

PART 2 PRODUCTS

2.1 QUALITY ASSURANCE AND QUALITY CONTROL DOCUMENTATION

2.1.1 CONTRACTOR'S DAILY REPORTS (CONSTRUCTION)

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- 2.1.1.1 During construction, the Contractor shall complete a Daily Report using TRACEN "Contractor's Daily Report to Inspector" for each and every day after mobilization. Utilize the activity number from the approved progress schedule baseline, and the actual start and finish dates for the work performed. The importance of an accurate, fully detailed Daily Report, promptly delivered to the designated CI cannot 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.
- 2.1.1.2 The Daily Reports play an important role in settling disputes and claims for both parties. For this reason the CI 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 CI 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 a CI, 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 immediately to the Contracting Officer at (216) 902-6278.
- 2.1.1.3 After a Notice to Proceed for site work has been issued the CI shall complete a Daily Report for each day until the Contractor mobilizes. After the Contractor is at the site, the CI shall ensure that the Contractor completes the Daily Report in accordance with Paragraphs 2.1.1.1 and 2.1.1.2 above. Any items of dispute or other notes the CI feels appropriate shall be added to the Daily Report. The CI is also responsible for informing the COR when the contractor fails to submit daily reports.

2.1.2 DESIGN-BUILD QUALITY ASSURANCE AND QUALITY CONTROL PLAN

Submit the intended method to maintain quality control and quality assurance during both the design and construction phases of this contract. Indicate the prior experience of all key individuals responsible for Quality Assurance and Quality Control. Describe the intended flow of information and key check points that will provide the quality on this project.

2.2 TEST REPORTS

2.2.1 Reports must cite the Contract requirements, the test or analysis procedures used, and the actual test results. For each report, stamp conspicuously on the cover sheet in large red letters "CONFORMS" or "DOES NOT CONFORM." Reports must be signed by the authorized representative of the testing laboratory.

2.2.2 Unless otherwise specified, certified tests performed earlier than one year prior to the Contract Award date are not acceptable.

2.2.3 Information Required

After each inspection or test, provide the COR/CI with a report that includes the following.

- a) date of report
- b) project title and contract number
- c) name of inspector
- d) date and time of test, sampling or inspection
- e) product identification and applicable specification section and paragraph

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- f) location of inspection or test
- g) type of inspection or test
- h) results of inspection or test
- i) statement of conformance or nonconformance with contract requirements
- j) signature of Contractor reviewer.

PART 3 EXECUTION

3.1 TESTING, INSPECTION AND LABORATORY ACTIVITIES

3.1.1 Provide all necessary equipment, instruments, qualified personnel, facilities, and test fluids and gases, and perform all inspections, sampling, testing, and certifications specified in the individual sections. Provide the services of independent testing laboratories, subject to the Contracting Officer's approval, to perform all specified inspection and testing.

3.1.2 Advance Notification and Documentation

Notify the COR at least 48 hours in advance of the dates and times scheduled for all field tests. Note in block 11 of the Daily Construction Report and submit separate reports for each field test or inspection conducted indicating the following information on the report:

- a) Specification Section
- b) Paragraph Number
- c) Name of the Test or Inspection
- d) Location of Test (provide sketch if necessary to clearly document location at the site)
- e) Name of Inspector/Technician
- f) Name of Laboratory, if applicable
- g) Date and Time of the Inspection/Test
- h) Minimum Requirements/Acceptable Test Results
- i) Actual Inspection/Test Results
- j) Statement indicating whether or not the work meets the specified requirements

3.1.3 Testing Labs

Provide an independent construction materials testing laboratory accredited by a laboratory accreditation authority to perform sampling and tests required by this Contract. Laboratories engaged in testing of construction materials shall meet the requirements of ASTM E329. Laboratories engaged in Hazardous Materials Testing shall meet the requirements of OSHA and EPA.

3.1.4 Repeated Tests and Inspections

Repeat tests and inspections after each correction made to nonconforming materials and workmanship until tests and inspections indicate the materials, equipment, and workmanship meet contract requirements. Repeated tests and inspections shall be performed at no additional cost to Government.

3.1.4.1 Do not cover or conceal work until required tests and inspection results indicate that the work conforms to contract requirements.

3.2 DAILY INSPECTION REPORTS

3.2.1 Fill out Contractor's Daily Report (CDR) as documentation and submit the forms to the CI by 10:00 a.m. on the first work day after the day the work was performed. The CDR shall include

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the description and activity number from the approved progress schedule, and the actual start and finish dates for the work performed. Sample forms are at the end of this Section. Contractor's Daily Report (CDR) form will be furnished to the Contractor.

3.3 NONCONFORMANCE NOTICE

- 3.3.1 Non-compliant work on any activity can be halted by the COR. No payment will be made for an activity that is non-compliant. A Notice of Non-Compliance will be issued for non-compliant work. A Notice of Non-Compliance should be issued by the Contractor's Quality Assurance Manager as an indication he/she is performing their duties correctly. It may also be issued by the Contracting Officer. In such cases there will be two notices of non-compliance issued: one for the non-compliant activity work; and one for non-compliant Quality Assurance/Quality Control.
- 3.3.2 A notice issued by the Contracting Officer's Representative documenting that the work, or some portion thereof, has not been performed in accordance with the requirements of the contract documents. Payment shall not be made on any portion of the work for which a nonconformance notice has been issued and the work not corrected to the satisfaction of the Contracting Officer's Representative. Upon receipt of a Nonconformance Notice, the Contractor shall provide a written response within 7 days. The Contractor's response shall detail either (a) why they believe that the work was performed in accordance with the contract documents, or (b) what corrective action they intend to take, at their sole expense, to correct the nonconforming work. If the Contractor disputes issuance of the notice, the Government will respond by either (a) withdrawing the Notice of Nonconformance or (b) directing the Contractor to correct the work. If directed to correct the work, the Contractor shall do so within 7 days after receipt of such direction from the Contracting Officer, or such other time as may be agreed to with the Contracting Officer.

3.4 FIELD CHANGE/REQUEST FOR DEVIATION/REQUEST FOR VARIATION

- 3.4.1 Variations are changes to Contractor's approved design or construction processes that do not affect compliance with meeting terms of the contract or request for proposal. Provide a record of the variations to ensure the as-built documents are accurate. **Deviations** are requests for changes to the contract terms that must be authorized by the contracting officer and a formal change order issued before they may be implemented. **Field changes** involve minor changes, which are necessary for the proper execution of work, that do not affect the quantity, quality, price, or time of performance of the Contract. Should the Contractor feel a field change represents a cost or additional time, he should notify the COR and request a formal change to the contract.

END OF SECTION

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USCG TRAINING CENTER FACILITIES ENGINEERING (609) 898-6945
 CONTRACTOR'S DAILY REPORT TO INSPECTOR

CONTRACT NUMBER: _____ REPORT NUMBER: _____ DATE: _____

CONTRACTOR: _____

TITLE & LOCATION: _____

CONTRACT COMPLETION DATE: _____

NUMBER OF REMAINING WORK DAYS: _____

WEATHER CONDITIONS: AM _____ TEMP. _____
 PM _____ TEMP. _____

PERCENT OF COMPLETION (in fiscal terms): _____ %

WORK FORCE INFORMATION:

| TRADE | NUMBER | WORK-HOURS | EMPLOYER | WORK PERFORMED |
|-------|--------|------------|----------|----------------|
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MATERIALS DELIVERED TO THE JOB SITE:
 (Record quantity per load and number of loads if applicable)

| MAJOR EQUIPMENT ON THE JOB SITE | HOURS OPERATED |
|---------------------------------|----------------|
| | |
| | |
| | |
| | |
| | |

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LOCATION & DESCRIPTION OF DEFICIENCIES:
(Materials, Equipment, Safety, and/or Workmanship)

ACTION TAKEN OR TO BE TAKEN:

CONTRACTOR REMARKS:

Signature of authorized Contractors on site superintendent

printed name _____

signature _____ date _____

FOR CONTRACTING OFFICER'S AUTHORIZED REPRESENTATIVES USE ONLY

COR REMARKS:

Contracting Officers Representative Signature: _____ Date: _____

| |
|-------------------------------|
| CORRECTION INFORMATION |
|-------------------------------|

RESOLUTION:

GOVERNMENT REPRESENTATIVE: _____

(SIGNATURE)

DATE

Routing: Original to Contracting Officer Copy – Contractor Copy - COR

**SECTION 01500
TEMPORARY FACILITIES**

PART 1 GENERAL

Provide and maintain temporary facilities during the contract as required by BOCA, NEC, OSHA, and NFPA codes, the Coast Guard station's regulations, other health and safety codes, and the requirements of Section 01800 Paragraph 1.6. Obtain the approval of the COR before installing or relocating temporary facilities. Install and/or relocate temporary facilities before starting work unless otherwise approved by the COR. All temporary utility connections shall be compatible with existing materials and equipment to provide safe and efficient installation, operation and removal.

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.

FHWA MUTCD (latest edition) Manual on Uniform Traffic Control Devices

1.2 SUBMITTALS

Submit the following in accordance with section 01330, "Submittal Procedures."

1.2.1 SD-01 Preconstruction Submittals

1.2.1.1 Construction Site Plan: Prior to the start of work, submit a site plan showing the locations of temporary facilities including layouts and site adaptation drawings and details, on-site equipment and material storage area and access and haul routes used for this contract. Show locations of safety and construction fences, site trailers, construction entrances, trash dumpsters, temporary sanitary facilities, and worker parking areas.

1.3 TEMPORARY CONSTRUCTION

1.3.1 UTILITY USAGE

1.3.1.1 Electricity for Use During Construction

The Contractor may utilize electrical power from the nearest electrical receptacle or panelboard, subject to availability. OSHA requirements will govern the use of such utility. All equipment used shall be supplied by the Contractor. US Coast Guard does not make any guarantee against any voltage variation or service interruption.

1.3.1.1.1 Utility Outages and Shutdown: Needed power outages shall be arranged only with prior approval from Contracting Officer's Representative (COR), with duration and affected areas held to a minimum.

1.3.1.2 Potable Water for Use During Construction

Water will be made available at the nearest hydrant or exterior hose bib. 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.

1.3.1.3 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.

1.3.1.4 Telephone

Telephone services will not be available for use by the Contractor.

1.4 CONSTRUCTION HAZARD FENCE

Provide a minimum 4' foot high safety hazard fence around any construction operation that poses any type of hazard if area is left unattended. Provide gates, with hasps and padlocks, as required for access. The fence must, at a minimum, be of a durable reflective UV resistant material. Remove the fence upon completion and acceptance of the work.

1.5 RAMPS, STAIRS, LADDERS, STAGING AND SIMILAR ACCESS ELEMENTS

Provide as required to perform work and facilitate its inspection during installation. Comply with requests of Government authorities (such as OSHA inspectors) performing inspections. When permanent stairs or elevators are available for access during construction, cover and protect finished surfaces from damage and deterioration.

1.6 BARRIERS AND TRENCH PLATES

1.6.1 Provide temporary barriers with warning lights where construction work intersects existing roads, walkways, at open excavations, and where pedestrian and driver safety may be endangered in the area of work. Provide barriers and warning signs to re-route pedestrians and drivers around potentially dangerous areas. Barriers shall be manufacturer's standard A-frame, barrel, or Jersey style with flashing amber lights and reflective orange/white striping on both sides of the barrier. Minimum barrier height shall be 42".

1.6.2 Provide trench plates for excavations in roads left open overnight on Coast Guard property. Comply with local city, state requirements off Coast guard property.

1.7 INTERRUPTION OF VEHICULAR TRAFFIC

If during the performance of work it becomes necessary to modify vehicular traffic patterns at any locations, notify the Contracting Officer at least 15 days prior to the proposed interruption date, and provide a Traffic Control Plan detailing the proposed controls to traffic movement for approval. The plan shall be in accordance with State and local regulations. Provide cones, signs, barricades, lights, or other traffic control devices and personnel required to control traffic.

Contractor is required to submit a traffic control plan detailing the proposed controls to traffic movement prior to start of construction. The plan shall be approved prior to the start of construction.

1.7.1 Traffic Modification

1.7.1.1 Provide cones, signs, barricades, lights, or other traffic control devices and personnel required to control traffic. Traffic control plan shall minimize interruptions to permanent traffic patterns. Traffic control plan shall specify alternate traffic patterns proposed, as well as the phases in the project for which they will be used.

1.8 WARNING SIGNS

Provide warning signs at the limits of construction stating that access is restricted to authorized personnel and hard hats are required. Also provide warning signs to warn pedestrians and drivers around potentially dangerous areas.

1.9 DISPOSITION OF TEMPORARY FACILITIES

Relocated Coast Guard facilities and Contractor-furnished facilities shall become property of the Contractor and shall be removed from the site upon completion of the project.

1.10 STAGING AREAS AND ACCESS

1.10.1 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. A lay down and parking area for Contractor's vehicles, trailers and personnel will be designated by the Contracting Officer's Representative at the Pre-construction meeting.

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1.10.2 **COORDINATION:** Obey all U.S. Coast Guard Parking Signs and traffic rules. Vehicles shall not travel or park on grass. If travel or parking on grass is necessary, grass shall be restored to original condition after completion of the project at no cost to the Government.

1.10.3 **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.

1.11 LIGHTS, SIGNS & BARRICADES

1.11.1 **GENERAL:** The contractor shall provide and maintain all warning lights, sign, and barriers to insure the safety of pedestrians or vehicles traveling near or through any hazardous area caused by the execution of the Contract work.

1.11.2 TRAFFIC REGULATION

1.11.2.1 Traffic Control Signs and Devices:

1.11.2.1.1 Post Mounted and Wall Mounted Traffic Control and Informational Signs: Shall comply with the Manual on Uniform Traffic Control Devices, latest edition.

1.11.2.1.2 Traffic Cones and Drums, Flares and Lights: Shall comply with the Manual on Uniform Traffic Control Devices, latest edition.

1.11.2.1.3 Provide signs at approaches to site and on site, at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.

1.11.2.1.4 Relocate as Work progresses, to maintain effective traffic control.

1.11.2.2 Removal:

1.11.2.2.1 Remove equipment and devices when no longer required.

1.11.2.2.2 Repair damage caused by installation.

1.11.3 **BARRICADES:** Any stored debris, equipment and all areas dangerous to foot or vehicular traffic shall be barricaded by the Contractor. At night and during other times of poor visibility, barricades shall be illuminated. All barricading, including night illumination shall be maintained by the Contractor. All barricades shall be constructed in accordance with ANSI D6-1.

1.11.4 **PEDESTRIAN TRAFFIC:** The Contractor shall arrange his equipment and/or progression of work, so as not to interfere with the normal flow of pedestrian traffic. Where interference is unavoidable, the contractor shall provide a marked, safe, and clean route around the obstruction

1.11.5 BARRIERS

1.11.5.1 Provide barriers to prevent unauthorized entry to construction areas to protect existing facilities and adjacent properties from damage from construction operations and demolition.

1.11.5.2 Provide protection for plants designated to remain. Replace damaged plants.

1.11.5.3 Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.12 EROSION AND SEDIMENT CONTROL

1.12.1 **GENERAL:** The Contractor shall plan and execute all earthwork to minimize the duration of exposure of unprotected soils. Temporary protection shall be provided on side and back slopes as soon as rough grading is completed or when sufficient soil is exposed to require protection to prevent erosion. All earthwork brought to final grade shall be finished immediately.

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1.12.2 **METHODS:** The Contractor shall prevent erosion, control sedimentation, and prevent waterborne soil from entering surface waters, ditches, and storm drain inlets by use of any or all of the following methods.

- 1.12.2.1 **Mechanical Control:** Divert runoff by constructing ditches or berms. Filter runoff using straw bale dikes, filter fabric dams or other methods.
 - 1.12.2.2 **Sediment Basins:** Trap sediment in temporary basins sized to accommodate the runoff of a local 25-year storm. Pump basins dry and remove accumulated sediment after each storm. Use a paved weir or vertical overflow pipe for overflow. Establish effluent quality monitoring programs as required by federal, state, and local regulations.
 - 1.12.2.3 **Vegetation and Mulch:** Protect slopes by accelerated growth of vegetation, mulching, or netting. Stabilize slopes by hydroseeding, sodding, anchoring mulch or netting in place.
 - 1.12.2.4 **Geotextiles:** Protect and stabilize slopes by anchoring geotextile fabric or matting. The Contractor shall use a geotextile designed and sized for the particular application.
 - 1.12.2.5 **Storm Sewer Inlets:** Filter out sediment by installing a 6" layer of $\frac{3}{4}$ " clean, crushed stone over geotextile filter fabric on the inlet grate. Remove and clean silt and sediment build up as required or as direct by the COR.
- 1.12.3 **OTHER METHODS:** Other erosion and sediment control methods may be used, as authorized by the Contracting Officer.

1.13 POLLUTION CONTROL

1.13.1 **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.

- 1.13.1.1 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.
- 1.13.1.2 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.

PART 2 PART 2 PRODUCTS

Not used.

PART 3 PART 3 EXECUTION

Not used.

END OF SECTION

**SECTION 01505
PROJECT MEETINGS**

PART 1 GENERAL

1.1 DESIGN KICK-OFF CONFERENCE

The Design Kick-Off Conference, will be to go over the project scope after your design team has visited the site and is well informed on the overall intent of the project. This meetings purpose is to insure that there is reasonable alignment on the scope of work prior to the 35% submission.

1.2 PRECONSTRUCTION CONFERENCE

1.2.1 General Requirements: The Preconstruction Conference will be held at the site. Attendees will include the following.

Contractor's project management team

Subcontractors, as deemed necessary by the Contractor or the Contracting Officer

Government project management team

1.2.2 See Section 01330 for a description of required preconstruction submittals. Preconstruction submittals must be received and approved prior to the Preconstruction Conference. See Section 01330 for the required timing of those submittals.

1.2.3 On-site work and any request for progress payments depend on successful completion of the preconstruction requirements and the approval of preconstruction submittals by the Government.

1.2.4 Scope of Meeting Discussion will cover the following.

Proposed Project Schedule

List of Technical Submittals

Contract administration Issues

Request For Information process

Any request for variance from original contract

1.2.5 Meeting Minutes: The Contractor will receive Government drafted minutes of the Preconstruction Conference for review and agreement.

1.3 WEEKLY PROGRESS UPDATES (CONSTRUCTION PHASE)

1.3.1 Submit a method to impart information to the Contracting Officer and COR and receive Contracting Officer and COR input on a weekly basis. The proposed method will provide the required information listed in the weekly look ahead schedule (section 01320) and provide and solicit input on safety, provide current status of DCR's, RFIs and CMRs, updates on submittal status and review quality assurance/control items. The proposed method shall include an update from the minutes of the previous weekly progress update and any open issues unresolved. The proposed method will be used to review status of the work and to discuss current concerns, of Contracting Officer and COR.

1.3.2 Proposed Method shall include face to face participation of the Superintendent, QAM and other Contractor personnel as needed and Subcontractors or suppliers as determined by the Contractor or the COR/CI. Proposed method shall be during normal working hours and include concurrence on time by participants listed above.

1.3.3 Weekly Progress Update Minutes: Minutes of the progress updates will be recorded by the Contractor and approved by the COR /CI and distributed with daily reports, by the Contractor. Provide the minutes within 2 working days of the update.

1.3.4 Submit proposed method to the CM for review and acceptance as in conformance with this section prior to the Preconstruction Meeting.

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1.4 MONTHLY PROGRESS MEETINGS (CONSTRUCTION)

1.4.1 General Attend monthly coordination meetings at the COR/CI's on-site office. Meetings will be used to review the following.

Project Schedule update

Status of submittals/catalog cuts and RFI's

Pending modifications

Request for Progress Payment

Safety Issues

Compliance issues

1.4.2 Pre-meeting Submissions

1.4.2.1 Comply with the following activity requirements to ensure a productive monthly meeting.

1.4.2.2 Three working days prior to the meeting complete the following:

Deliver the Project Schedule monthly up-date reports to the CM, COR/CI and your DE

Review your Request for Progress Payment with the COR/CI, and deliver to the Contracting Officer

1.4.2.3 Two days prior to the meeting notify the CM and COR/CI of any other agenda items for discussion.

1.4.3 Required Attendance. Attendance at the meeting will include the following:

Your on-site project management team, including Managing Officer, and Design Engineer

Subcontractors or suppliers, as determined by the Contractor or the Contracting Officer

CM and/or COR/CI

1.4.4 Meeting Minutes of the meetings will be recorded by the Contractor and approved by the COR/CI and distributed with the daily reports by the Contractor. Submit minutes within 2 working days of meeting.

1.5 ON-SITE SAFETY MEETINGS

Hold weekly Safety meetings with your on-site workers. Discuss safety issues related to the work being performed. Submit copies of the Safety meeting minutes to the COR/CI and the CM.

1.6 LABOR INTERVIEWS

The Government may conduct periodic Labor Standard interviews pursuant to applicable F.A.R. clauses. Insure that access to employees and on-site trade personnel is provided upon request.

PART 2 PRODUCTS Not used.

PART 3 EXECUTION Not used.

END OF SECTION

**SECTION 01550
CONSTRUCTION WASTE MANAGEMENT**

PART 1 GENERAL

1.1 WASTE MANAGEMENT GOALS FOR THE PROJECT

- 1.1.1 The Government has established that this Project shall minimize the creation of construction and demolition waste on the job site. Processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors shall be employed. Of the inevitable waste that is generated, recycle as many of the waste materials as economically feasible. Minimize waste sent to landfills.
- 1.1.2 Diversion Goals: A minimum of 75% of total project waste shall be diverted from landfill. Material diversion may be quantified by weight or volume, but the method chosen must be used consistently throughout the project. The following waste categories, at a minimum, shall be diverted from landfill.
 - 1.1.2.1 Land-clearing debris
 - 1.1.2.2 Clean dimensional wood, pallet wood
 - 1.1.2.3 Concrete
 - 1.1.2.4 Rock
 - 1.1.2.5 Cardboard, paper, packaging
 - 1.1.2.6 Metals

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 MANAGEMENT IMPLEMENTATION

- 3.1.1 Manager: The design-build team shall designate an on-site party (or parties) responsible for instruction of workers and overseeing Waste Management for the project. The design-build team shall coordinate waste materials handling and separation for all trades.
- 3.1.2 The design-build team shall provide on-site instruction of appropriate separation, handling separation, handling and recycling, salvage, reuse and return methods to be used by all parties at the appropriate stages of the project.
- 3.1.3 Separation Facilities: The design-build team shall lay out and label a specific area to facilitate separation of materials for potential recycling, salvage, reuse and return. Recycling and waste bin areas are to be kept clean and clearly marked in order to avoid contamination of materials.
- 3.1.4 Hazardous Wastes: Hazardous wastes shall be separated, stored and disposed of according to local regulations.

3.2 HAZARDOUS WASTE

- 3.2.1 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, documented/manifested, transported and disposed of in accordance with all applicable regulations. The manifest for all hazardous waste shall be signed by an authorized Coast Guard representative.

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- 3.2.2 **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 universal 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.
- 3.2.3 **RECYCLABLES:** Recycling is a mandatory law of the State of New Jersey.
- 3.2.4 At the discretion of the COR, certain items of copper (including insulated cable), aluminum and steel shall remain the property of the Training Center. The Contractor shall separate and deliver these materials to a location at the Training Center designated by the COR. The Contractor shall place these materials in their respective bins or dumpsters.
- 3.2.5 The contractor shall recycle or reuse all other material designated as recyclable or prohibited from landfilling. Definitions for recyclables and landfill prohibited material can be obtained from the CMCMUA regulations.
- 3.2.6 **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.

3.3 SAFETY DATA SHEETS AND MATERIAL HANDLING PROCEDURES

- 3.3.1 **DATA SHEETS:** Submit a Safety Data Sheet (SDS) for all materials containing hazardous substances required for contract execution. Information provided in SDS's shall meet the requirements of 29 CFR 1910.1200. SDS's require Contracting Officer review and acceptance prior to bringing these materials on site.
- 3.3.2 **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.
- 3.3.3 **PROTECTIVE MEASURES:** The contractor shall take all protective measures outlined on the SDS'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 include any required protective measures in the Safety Plan (See Section 01 35 29, "Safety Program"). The Contracting Officer's Representative shall review protective measures prior to allowing use of these materials.
- 3.3.4 **DISPOSAL OF EXCESS MATERIAL:** The Contractor shall dispose of all excess hazardous materials as required by the SDS and all applicable federal, state, and local laws and regulations.

3.4 MEASUREMENT & PAYMENT

No separate measurement and payment will be made for special environmental requirements. The cost shall be considered incidental to, and included in, the lump sum price for the project.

End of Section

**SECTION 01800
DESIGN/BUILD CRITERIA
PARAGRAPHS 1.1 THRU 1.3**

PART 1 GENERAL

1.1 PROJECT REQUIREMENTS AND DESCRIPTION

1.1.1 PROJECT DESCRIPTION

- 1.1.1.1 Project includes all materials, labor, equipment, services, and all operations necessary for the Design and Installation of a new fire sprinkler system at Munro Hall, Building #261.
- 1.1.1.2 Munro Hall is a three story building containing approximately 47,800 square feet. The vast majority of the building consists of masonry construction with some stud / gypsum board interior walls. Suspended ceilings with 2x2 acoustical tiles are prevalent throughout the building. However, some spaces have suspended gypsum board ceilings while other spaces do not have a suspended ceiling.
- 1.1.1.3 Building functions are varied and consist of Office spaces; Barrack style living spaces; Motel style living spaces; Classrooms; and Mechanical spaces.
- 1.1.1.4 A 2004 project provided a complete overhaul of the building HVAC systems. New ductwork / chases were added and extend from the roof mounted air handling units to the first floor. Soffits were added in several spaces, lowering the suspended ceiling height.

1.1.2 PROJECT SITE

Munro Hall is located at the U.S. Coast Guard Training Center (TRACEN), 1 Munro Avenue, Cape May, New Jersey 08204. The project is located on a secure military base and public access to the site is not permitted. The site is bordered by Cold Spring Harbor on the north; the Atlantic Ocean on the south and Cape May Inlet on the east.

1.1.3 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, unless noted otherwise.

New construction and modification to existing construction shall comply with requirements of:

- 1.1.3.1 American Association of State Highway and Transportation Officials (AASHTO) Manual on Uniform Traffic Control Devices (2009 or latest edition)
- 1.1.3.2 American Society of Civil Engineers- Min Design Loads for Buildings and Structures (ASCE-7)
- 1.1.3.3 New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, 2007 (NJDOT Specs)
- 1.1.3.4 DOD Unified Facilities Criteria - UFC 3-201-01 Civil Engineering
- 1.1.3.5 DOD Unified Facilities Criteria - UFC 3-250-01FA (Pavement Design for Roads, Streets, Walks, and Open Storage Areas)
- 1.1.3.6 International Building Code (IBC)
- 1.1.3.7 Occupational Safety and Health Association (OSHA)
- 1.1.3.8 Code of Federal Regulations (CFR)
- 1.1.3.9 National Life Safety Code (NFPA 101)

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1.1.3.10 Standard for the Installation of Sprinkler Systems (NFPA 13)

1.1.3.11 Uniform Federal Accessibility Standards (UFAS)

1.2 ROLES OF RFP (REQUEST FOR PROPOSAL) SPECIFICATIONS AND DRAWINGS

1.2.1 GENERAL

Section 01800, "Design/Build Criteria," and Drawings contain abbreviated minimum facility requirements. The Contractor shall provide all necessary materials, equipment, labor and services required to provide complete and useable facilities for its intended purpose.

1.2.2 CONTRACTOR-PRODUCED CONSTRUCTION DESIGN DOCUMENTS

The Contractor shall provide construction design documents in compliance with Section 01802 "Construction Design Documents".

1.2.3 RFP DRAWINGS

The design and design data indicated on the RFP drawings are the minimum requirements, i.e.; baseline 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 01802, "Construction Design Documents." The design and design data on the RFP drawings shall not be changed unless the requirements of paragraph "Deviations from Procurement Documents" of Section 01802, "Construction Design Documents" are met.

1.2.4 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.

1.2.4.1 The provisions of the Requests For Proposal (RFP) issued in connection with this contract including all addenda, amendments, or other modifications issued there under.

1.2.4.2 The Government reviewed Contractor-produced Design Drawings and Specifications, except to the extent that any deviation therein has been specifically approved in writing pursuant to the provisions of Section 01802, "Construction Design Documents."

1.2.5 DESIGN RELATED ENVIRONMENTAL REQUIREMENTS

1.2.5.1 See Paragraph 1.5 "ENVIRONMENTAL CONTROLS AND PROTECTION"

1.3 SUSTAINABLE DESIGN AND LEED NC CERTIFICATION

1.3.1 Not Applicable

END OF PARAGRAPH

**SECTION 01800
DESIGN BUILD CRITERIA
DEMOLITION
PARAGRAPH 1.4**

1.4 DEMOLITION

1.4.1 GENERAL

1.4.1.1 This project includes incidental minor demolition.

1.4.1.2 Before beginning any demolition work, survey the site and examine the drawings and specifications to determine the extent of the work. Record existing conditions showing the condition of structures and other facilities adjacent to areas, prior to demolition. Photographs sized 4 inch will be acceptable as a record of existing conditions. It is the Contractor's responsibility to verify and document all required utility outages which will be required during the course of work, and to note these outages on the record document. Submit survey results.

1.4.1.3 All deleterious materials are to be removed from the construction site.

1.4.1.4 Comply with USACE EM 385-1-1 and OSHA requirements for all demolition activities.

1.4.2 Existing Work

1.4.2.1 Protect existing improvements, which are to remain in place. Repair improvements that are to remain and which are damaged during performance of the work to their original condition, or replace with new. Do not overload structural elements. Provide new supports and reinforcement for existing construction weakened by demolition or removal work. Repairs, reinforcement, or structural replacement must have COR approval.

1.4.2.2 All materials shall be disposed of off-site in accordance with all applicable state and federal regulations, codes and ordinances. Any materials commonly recycled locally shall be disposed of by the Contractor in an approved recycle site for that type of material. All demolished debris and construction waste materials shall be diverted from landfills in accordance with the principles of integrated sustainable design contained in the latest LEED-NC rating system. Construction waste management is to be prepared in accordance with LEED principles and practices but LEED submittal and accreditation is not required.

END OF PARAGRAPH

**SECTION 01800
DESIGN BUILD CRITERIA
ENVIRONMENTAL CONTROLS AND PROTECTION
PARAGRAPH 1.5**

1.5 GENERAL

During all phases of this project the Contractor shall comply with all applicable federal, state, and local environmental requirements. Contractor shall incorporate environmental requirements early in the design phase and ensure environmental compliance throughout all project phases.

The US Coast Guard has prepared the required NEPA documents.

1.5.1 APPLICABLE PUBLICATIONS

The publications listed below form part of this specification. The Contractor shall comply with all applicable federal, state, and local regulations and laws.

1.5.1.1 ENVIRONMENTAL PROTECTION AGENCY (EPA) REGULATIONS:

| | |
|----------------|--|
| 40 CFR | Protection of the Environment |
| 40 CFR 112 | Oil Pollution Prevention |
| 40 CFR 136-143 | Water Programs |
| 40 CFR 204 | Noise Emission Standards for Construction Equipment |
| 40 CFR 260-279 | Solid Waste Regulations |
| 40 CFR 311-374 | Worker Right-to-Know |
| 40 CFR 761 | Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions |

1.5.1.2 U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATION:

| | |
|-------------|----------------------------|
| 29 CFR 1910 | Worker Safety Requirements |
|-------------|----------------------------|

1.5.1.3 U.S. DEPARTMENT OF TRANSPORTATION REGULATIONS:

| | |
|----------------|---|
| 49 CFR 100-199 | Hazardous Materials Transportation, Handling, and Storage Regulations |
|----------------|---|

1.5.1.4 ADDITIONAL STATUTES

The statutes listed below form part of this specification:

- Clean Air Act (CAA) - (42 U.S.C. 7401 to 7642)
- Clean Water Act (CWA)
- Safe Drinking Water Act (SDWA)
- Pollution Prevention Act (PPA) - (42 U.S.C. 13101 to 13109)
- Resource Conservation and Recovery Act (RCRA) - (42 U.S.C. 6901 to 6991i)
- Solid Waste Disposal Act (SWDA) - (42 U.S.C. 6901 to 6991i)
- Toxic Substance Control Act (TSCA) - (15 U.S.C. 2601 to 2654)
- Energy Independence and Security Act of 2007 (EISA)
- Emergency Planning and Right-to-Know Act (EPCRA)

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1.5.2 ENVIRONMENTAL SUBMITTALS

Provide the following submittals to the Contracting Officer in accordance with Section 01330, "Design-Build Submittal Procedures."

1.5.2.1 Environmental Protection Plan

The purpose of the Environmental Protection Plan is to describe in detail methods and procedures by which the Contractor intends to minimize/mitigate adverse impact to the environment resulting from this work. As a minimum the plan shall document the Contractor's means and methods for complying with the specification requirements with the following elements included:

- 1.5.2.1.1 General Information: Provide a general overview of the environmental plan including its purpose, general site information, and a letter designating an Environmental Manager for the project signed by an officer of the firm.
- 1.5.2.1.2 Waste Management: Discuss the project's anticipated solid waste streams (to include any hazardous waste) and how these solid wastes will be managed. Include a discussion of any identified waste streams targeted for recycling (scrap metal, cardboard, plastic, concrete rubble, etc.). Discuss on-site storage of solid waste and recyclables and anticipated disposal strategies.
- 1.5.2.1.3 Hazardous Materials Management: Discuss management of anticipated hazardous materials that will be used on-site as part of this project. Include information on hazardous material on-site storage, appropriate Hazardous Communication Plans, release prevention, and how all OSHA and EPA requirements related to Hazardous Material Management will be met. Include the management of any Volatile Organic Compounds (VOCs) and refrigerants to be used as part of this project.
- 1.5.2.1.4 Noise and Dust Control: Discuss project specific anticipated noise and dust concerns and controls to be incorporated into the design. As applicable include a discussion of paint over spray.

Submit the Environmental Protection Plan as part of the first design submittal package.

1.5.3 TEMPORARY ENVIRONMENTAL CONTROLS

Protect the environment and preserve natural and cultural resources during construction. Comply with all Federal, State and Local regulations that pertain to the environment.

1.5.3.1 NATURAL RESOURCE PROTECTION

1.5.3.1.1 Dust Control

Keep dust down at all times including non-working hours. Dry power brooming is not permitted; instead use vacuuming, wet mopping, or wet brooming. Air blowing is permitted only for cleaning non-particulate debris such as steel reinforcing bars. When sandblasting or spray painting, provide tarp drop cloths and windscreens under and around blasting and painting operations to confine and collect dust, sand, paint, and debris. Concrete blocks, concrete, and asphalt shall be wet cut.

1.5.3.1.2 Volatile Organic Compounds (Voc)

The Contractor and all subcontractors are required to comply with the local VOC laws and regulations and shall have an acceptable VOC compliance plan. The plan shall demonstrate that the use of paints, solvents, adhesives, and cleaners comply with local VOC laws and regulations governing VOC materials, and that all required permits have been obtained or will be obtained prior to starting work involving VOC's, in the air quality district in which the work will be performed. An acceptable compliance plan shall contain, as a minimum, a listing of each material subject to restrictions in the air quality management district in question, the rule governing its use, a description of the actions which the Contractor will take, a description of the actions which the Contractor will use to comply with the laws

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and regulations, and any changes in the status of compliance during the life of the contract. Alternatively, if no materials are subject to the restrictions in the air quality management district where the work will be performed, or if there are no restrictions, the compliance plan shall so state.

1.5.3.1.3 Waste Management

Pick up waste and debris and place in covered containers furnished by the Contractor. Empty containers and remove waste and debris from Government property at least weekly. Do not allow containers to become overfilled. Remove wastes without spilling or contaminating streets, the site, and other areas. Offsite disposal shall be at a licensed landfill and shall comply with all local, state and federal requirements.

1.5.3.1.4 Control and Disposal Of Hazardous Wastes

The Contractor shall identify all activities that may generate hazardous waste and provide documented waste determination for the waste stream to the Contracting Officer and COR. Hazardous wastes that are produced as a result of performing work under this contract shall be handled, stored, transported, and disposed of according to 40 CFR 262, where applicable. Prevent hazardous wastes from entering the ground, drainage areas, and surface waters. Immediately notify the COR of any spills. Hazardous wastes generated on Government property shall be identified as being generated by the Government. All necessary documentation including hazardous waste manifests shall be signed by an authorized representative of the facility prior to removal of waste from the site. This will require coordination with local Coast Guard Base representative to determine shipping manifest information. Under no circumstances shall hazardous waste be brought onto Government property.

1.5.3.1.5 Noise

Comply with federal, state, and local noise control laws and regulations.

END OF PARAGRAPH

**SECTION 01800
DESIGN BUILD CRITERIA
CIVIL AND SITE WORK
PARAGRAPH 1.6**

1.6 CIVIL AND SITEWORK DESIGN

1.6.1 General

Contractor shall investigate the existing asbestos water distribution line; design interconnection with new fire protection water main; propose location for building penetration and main shutoff; and provide for site restoration.

1.6.2 Existing Utilities

All base wide utilities, including potable water, are owned by the US Coast Guard except for Cable TV and Natural Gas. Cable TV lines are owned by Comcast. Natural Gas lines are owned by South Jersey Gas.

The existing utilities shown on the RFP drawings are based on record drawings and their locations are approximate. The Government is not responsible for the accuracy of the information provided. Contractor shall perform test pits to determine exact locations of utilities.

1.6.3 Site Design

1.6.3.1 Paving Restoration

All existing asphalt and concrete paving damaged during construction shall be restored. Lines and grades shall match existing. Materials and execution shall comply with the New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, 2007, latest edition.

1.6.3.2 Concrete Sidewalk, Curb & Gutter Restoration

All existing sidewalk, curb and gutter damaged during construction shall be restored. Lines and grades shall match existing. Materials and execution shall comply with the New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, 2007, latest edition.

1.6.3.3 Fill Material

Fill materials and execution shall comply with the New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, 2007, latest edition. General and select fill shall come from off-base sources.

1.6.4 Site Clearing, Earthwork, Drainage and Seeding

The Contractor shall clear and grub all vegetation necessary for construction and haul off-site. Landscaping stone shall be removed, stored and reinstalled over a new weed barrier. Vegetative areas shall be restored using topsoil, fertilizer, and seed. Seed mix shall comply with the TRACEN specification.

1.6.5 Construction Laydown Areas

See Section 01500 Temporary Facilities for field office trailers, materials, and equipment storage and lay down areas. Upon construction completion, laydown areas shall be returned to their original condition as directed by the Contracting Officer.

END OF PARAGRAPH

**SECTION 01800
DESIGN BUILD CRITERIA
FIRE SUPPRESSION WORK
PARAGRAPH 1.7**

1.7 FIRE SUPPRESSION DESIGN

1.7.1 General

Contractor shall design and install an automatic wet pipe sprinkler system for Munro Hall, Building #261, in accordance with the codes listed below. Sprinkler system shall cover the entire building except the crawl space.

1.7.2 Applicable Codes

The codes listed below form part of this specification. The latest editions, at the time of bid proposal, shall be used.

1.7.2.1 International Building Code (IBC)

1.7.2.2 NFPA 13 Standard for the Installation of Sprinkler Systems

1.7.2.3 NFPA 72 National Fire Alarm and Signaling Code

1.7.3 Designer of Record (DOR) Qualifications

New Jersey licensed fire suppression system professional engineer with a minimum of 3 years experience. Submit DOR qualifications to COR for approval prior to start of design.

1.7.4 Installer Qualifications

New Jersey licensed fire sprinkler company with a minimum of 3 years experience. Submit installer qualifications to COR for approval prior to start of construction.

1.7.5 Building Occupancy Classification

Building occupancy classification(s) shall be determined by the Designer of Record (DOR) in accordance with the IBC. DOR shall document and support their classification(s) determinations as part of the 35% submittal.

1.7.6 Design

Design of the automatic wet pipe fire suppression sprinkler system shall be by hydraulic calculations for uniform distribution over the entire building area and shall conform to NFPA 13. Calculations shall be provided/approved by a licensed professional engineer. Detail drawings shall conform to the requirements established for working plans as prescribed in NFPA 13. All contract requirements that exceed the minimum requirements of NFPA 13 shall be incorporated into the design. The construction plans shall be prepared by a NICET IV technician and sealed by a licensed professional engineer.

1.7.7 Utility Water Main Hydraulic Tests

Hydraulic tests performed previously at a fire hydrant in the vicinity of Munro Hall yielded the following results: Static Pressure 64 psi; Residual Pressure 62 psi; Residual Flow 1163 gpm. These results shall be used for bidding purposes. Following award, contractor shall verify results with additional testing. Include verification hydraulic test results as part of the 35% submittal. If verification test results are significantly different than the previous results and require the installation of a fire pump, this will be handled as a Change Request.

1.7.8 Piping Installation

Sprinkler piping shall be run above the suspended ceiling throughout the building. Suspended ceilings may be acoustical ceiling tile or gypsum wallboard. For rooms without suspended ceilings, surface mounted pipe is acceptable. In finished rooms without suspended ceilings, paint exposed pipes to match surface.

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Batt insulation is installed on top of the third floor suspended ceiling. Provide insulation on all sprinkler pipes installed above the suspended ceiling on the third floor as necessary to keep the pipes from freezing.

1.7.9 Clearance and Obstacle Issues

There are multiple soffits installed for HVAC ductwork throughout the building. Some of these soffits lower the suspended ceiling height substantially.

Unless specifically approved by the COR, the minimum floor to bottom of sprinkler height shall be 7'-4". When the minimum height can be obtained, exposed sprinkler heads are acceptable. Otherwise, use concealed type sprinkler heads.

Where individual sprinkler heads are approved by the COR to be installed exposed below the stated minimum height, provide sprinkler head guards.

1.7.10 Fire Department Connection

Provide an easily accessible fire department connection for each new fire main.

1.7.11 Piping and Bypass Valves for Testing Water Flow

Provide piping and bypass valves as necessary to easily test each fire main for water flow.

1.7.12 Curb Valve

If an outside fire main shutoff valve is required, provide a standard, electronically monitored, curb valve with valve box. Post Indicating Valves (PIV) are not required or desired.

1.7.13 Suspended Ceiling Repair

Replace damaged acoustical ceiling tiles in kind. Repair damaged gypsum wallboard ceilings to match existing.

1.7.14 Acceptance Testing

Final inspection and acceptance testing of the wet pipe sprinkler system shall be done in accordance with NFPA 13. The system shall be considered ready for such testing only after all necessary preliminary tests have been made and all deficiencies found have been corrected to the satisfaction of the equipment manufacturer's technical representative. Submit the request for formal acceptance testing a minimum of 5 working days prior to the tentative date. Experienced technicians regularly employed by the Contractor in the installation of both the mechanical and electrical portions of the systems shall be present during the inspection and shall conduct the testing. The COR shall witness all acceptance testing.

Provide copies of the acceptance testing certificate to the Contracting Officer and COR.

1.7.15 Training

Provide instruction to Coast Guard personnel for all fire protection systems and equipment.

END OF PARAGRAPH

**SECTION 01800
DESIGN BUILD CRITERIA
FIRE ALARM SYSTEM WORK
PARAGRAPH 1.8**

1.8 FIRE ALARM SYSTEM DESIGN

1.8.1 Existing Configuration

The existing Munro Hall fire alarm system consists of a Siemens Model XLS fire alarm control panel which reports back to a centralized Siemens network command center (NCC) located at the on-base firehouse. All modifications to the existing fire alarm system shall be fully compatible with the current campus software platform, Zeus Version 8.

1.8.2 General

Contractor shall modify the existing fire alarm system to monitor the required sprinkler system flow and tamper switches. All modifications shall be in accordance with the codes listed below.

1.8.3 Applicable Codes

The codes listed below form part of this specification. The latest editions, at the time of bid proposal, shall be used.

1.8.3.1 NFPA 70 National Electrical Code

1.8.3.2 NFPA 72 National Fire Alarm and Signaling Code

1.8.4 Installer Qualifications:

NJ licensed electrician or NICET Level II fire alarm systems certified technician. The licensed electrician or certified technician shall have a minimum of three years documented experience installing fire alarm systems of the same scope, type and design as specified.

1.8.5 Demolition of Existing Equipment

There is one existing water flow switch and one tamper switch installed on the existing isolated fire sprinkler system. These switches are monitored by the existing fire alarm control panel. Demolish existing switches, wiring back to panel, and abandoned conduit.

1.8.6 New Equipment

1.8.6.1 Device Loop Card (DLC)

Provide one new Siemens DLC printed circuit board with two separate circuits to interface with intelligent, addressable initiation devices via Class A or Class B wiring. Install DLC in existing fire alarm control panel. The existing card cage has a spare slot available. Manufacture shall be Siemens Building Technologies. No alternate manufacturer's equipment is acceptable.

1.8.6.2 Dual Intelligent Interface Module

Provide new Siemens Model HTRI-D dual intelligent initiating device interface module(s) to supervise non-addressable initiating devices such as water flow and tamper switches on the building's sprinkler system. Manufacture shall be Siemens Building Technologies. No alternate manufacturer's equipment is acceptable.

1.8.6.3 Combination Horn / Strobe

If required by code, provide one Siemens Model MTH-HMC-R-WP weatherproof, red, wall mount, combination horn/strobe unit. Mount horn/strobe on outside wall above fire department connection. Manufacture shall be Siemens Building Technologies. No alternate manufacturer's equipment is acceptable.

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1.8.6.4 Water Flow and Tamper Switch

Provide a new electronically monitored water flow switch for each fire main. Provide a new electronically monitored tamper switch for each shutoff valve in the fire main. Switches shall be sized for application and be compatible with specified Siemens dual interface module.

1.8.7 Fire Alarm Wiring Method

Fire alarm initiation and notification wiring circuits shall be Class B (two wire).

Provide 3/4" galvanized electrical metallic tubing (EMT) with Type FPLP, 2 Conductor, #16 AWG, Solid Copper, Twisted Pair, Non-Shielded, Plenum, Red Jacket, 300V Cable.

As an alternative to EMT in non-exposed areas only (ie above suspended ceilings), contractor may provide Dual rated 300V, plenum, Type FPLP and 600V Metal Clad (MC) Cable. Wire shall be solid, copper, 2 conductor, #16 AWG, twisted pair. Metallic interlocked armor shall be colored Red.

Fire alarm wiring shall be installed in one continuous length from one termination point to the next. Splices and T-taps are not acceptable. Wiring for tamper and water flow switches shall run back to the fire alarm control panel. If a new horn/strobe is required, connect wiring to nearest existing horn/strobe.

1.8.8 Programming

All required fire alarm system programming changes will be completed by Coast Guard personnel.

1.8.9 Testing

Perform a functional test of the water flow and tamper switches. The COR shall witness all testing.

END OF PARAGRAPH

**SECTION 01802
CONSTRUCTION DESIGN DOCUMENTS**

PART 1 GENERAL

1.1 GENERAL DOCUMENTATION REQUIREMENTS

The Contractor shall provide design documents for the Munro Hall Sprinkler System at the U.S. Coast Guard Training Center, in Cape May, New Jersey (TRACEN) to representatives of the Contracting Officer for review and validation of conformance to specified project criteria. The design documents shall represent a project design that complies with the RFP Drawings and design/build criteria specified in Section 01800, "Design/Build Criteria." Construction Design Documents shall be provided as specified herein.

1.2 DESIGN OWNERSHIP

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.

1.3 QUALIFICATIONS OF DESIGNER

All of the work specified in this section, in the RFP Drawings, and in Section 01800, "Design-Build Criteria" shall be designed by and prepared under the direct supervision of the various licensed professionals as required by the project and part of the registered A/E Design Team submitted with the Contractor's Proposal.

1.4 SUBMITTALS

1.4.1 Construction Design Documents: Contractor-produced Construction Design Documents shall be submitted as specified and shall be accompanied by pertinent calculations and documentation as specified herein. (See Appendix D) – Industry Standards for Construction Design Documents. The Design Submission Transmittal Letter shall be utilized for transmittal of all Contractor design submittals.

1.4.2 Designer(s) Qualifications

1.5 BASIS OF DESIGN NARRATIVE SUBMITTAL REQUIREMENTS

Contractor's Designer shall include the Basis of Design Narrative which shall provide analyses and conclusions of alternatives considered, proposed systems, materials, and justification for architecture and engineered systems. Requirements for the Basis of Design Narratives are provided in Appendix D – Basis of Design Narrative.

1.6 CONSTRUCTION DESIGN DRAWINGS

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.

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.

1.6.1 Drawing and Computer Aided Drafting and Design Standards

1.6.1.1 Construction Design Drawings shall meet the applicable drawing standards contained in Appendix A - Criteria for Computer Generated Drawings. Electronic files ("dwg" and "pdf") shall meet the requirements of Appendix B - Criteria for Electronic Deliverables. Construction Design Drawings shall be considered to include any and all drawings prepared for use to construct the project. Design drawings such as pre-engineered metal building systems, fire protection systems, special construction, etc. shall all comply with the above referenced standards (including the use of the USCG's title block).

1.6.1.2 USCG TRACEN uses AutoCAD 2017 software to develop 2D design and construction drawings. At all submittals, drawings, specifications, calculations and data shall be supplied in Adobe "pdf" format.

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- 1.6.1.3 In the title block of each drawing, indicate the type (35%, 95%, Final, or Corrected Final) and the date of the design submittal. Edit the attributes in the 'ISSUE' fields for "MARK", "DATE" and "DESCRIPTION". These same fields shall be used to identify revisions to drawings after the "Corrected Final Design Submittal".
- 1.6.1.4 All As-built drawing files shall be 2D DWG files editable by AutoCAD 2017. Each As-built CAD drawing shall be a separate "dwg" file using the TRACEN title block; multiple sheets may not be combined into one file.
- 1.6.1.5 Electronic files of the RFP Drawings, Appendix D – Industry Standards for Construction Design Documents, Appendix A – Criteria for Computer Generated Drawings, Appendix B - Criteria for Electronic Deliverables, RFP Specifications, Reference Drawings, Subsurface Data and other data as listed in Section 01900 will be provided to the Contractor for use in preparing the Contractor-produced Construction Design Documents.

1.6.2 TRACEN Drawing Numbers

The Contractor-produced Construction Design Drawings shall be numbered in accordance with TRACEN's File Naming Guide, which will be provided to the Contractor prior to the Pre-design Meeting.

1.6.3 Seal on Documents

All Final Contractor-produced Construction Design Drawings and calculations shall be signed, dated, and shall bear the seal of a registered Engineer. The seal shall be the seal of the Designer of Record for that drawing. The Designers of Record shall also be responsible for validating design compliance of any and all design drawings prepared for construction of the project. This includes pre-engineered metal building systems, fire protection systems, special construction, etc.

1.6.4 Record Construction Design Drawings

Coordinate Record Drawing requirements with Section 01803 Record Documents and Drawings. The Contractor's Designer(s) of Record shall provide as-built CAD drawings. The modified Record Drawing CAD files shall be forwarded, along with the marked-up as-built drawings to the Contracting Officer at the completion of the contract. Record Drawing CAD files shall have all XREFs "bound" (inserted), so that there is only one electronic file required per drawing sheet.

1.7 CONSTRUCTION DESIGN TECHNICAL SPECIFICATIONS

Contractor-produced Construction Design Technical Specifications may 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.

1.7.1 Specifications Furnished with this RFP

Even though a separate bound specification is not required, the requirements of Section 01800, "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 unless otherwise noted.

1.7.2 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.

1.8 DESIGN SCHEDULE & POST AWARD / PRE-DESIGN MEETING

1.8.1 Design Schedule

See Section 01321 for schedule requirements. Unless otherwise directed during or prior to the Pre-design Kick-off Meeting, submit a Design Schedule no later than 30 days after award that covers the activities that will occur within the first 90 days of the Contract period.

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1.8.2 Fast Tracking

1.8.2 Fast tracking (ie Starting Site Work prior to completing Sprinkler System Design) is prohibited for the project. The design documents shall be complete and accepted prior to starting construction.

1.8.3 Post Award/Pre-design Meeting

Within 14 calendar days of Notice To Proceed, the Contractor and his design team, shall meet with the Contracting Officer's Representative at TRACEN to discuss the design requirements of this RFP.

1.9 DEVIATIONS FROM RFP/CONTRACT REQUIREMENTS

Deviations from RFP/Contract requirements shall not appear on Contractor-produced Construction Design Document submittals unless the deviation has been previously submitted to, reviewed by, and approved by the Contracting Officer. Deviation requests shall clearly present the proposed change and how the change differs from the RFP/Contract, why the change needs to be made or why the change is in the Government's best interest. These differences shall be easily identifiable to the Government during the review process. Any differences in cost (adds or deducts) shall be included in the request.

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

Refer to Sections 01330 paragraph 3.2 and 01450 paragraph 3.4 for procedures and documentation requirements.

1.10 VARIATIONS

A variation is considered to occur when there is a change to a Contractor's submitted design and/or construction method that does not affect compliance with the terms of the contract. Variations require endorsement from the A/E of record prior to implementation. Variations do not require Contracting Officer's approval, but notification of the planned change is required at least five working days in advance.

Refer to Sections 01330 paragraph 3.2 and 01450 paragraph 3.4 for procedures and documentation requirements.

1.11 SITE INSPECTIONS

Provide site inspections during construction. Representatives with the Contractor's Designers of Record (DOR) shall periodically visit the site during construction. They shall also be present during the final inspection. Inspection reports shall be prepared and signed by the DOR, and submitted to the Government within five working days of the visit. Inspection reports shall note the overall quality of construction, percent complete, and whether or not the construction is in conformance with the DOR's design documents.

In addition to the final inspection, a minimum of three site inspections for each DOR (civil, structural, geotechnical, etc.) shall be provided over the period of construction. Inspections shall be included as tasks in the Contractor's schedule. The Contractor shall provide seven working days notice to the Contracting Officers Representative prior to the inspections.

PART 2 DESIGN EXECUTION

2.1 DESIGN SUBMITTAL PROCESS

Provide design submittal packages for all work covered by each design submittal phase. Contractor shall use the Appendix E as guidance. Copies of each design submittal set of drawings shall include a Title Sheet and Index of Drawings sheet unique to that design submittal phase. Copies of each design submittal specification shall be bound and include a table of contents unique to that design submittal phase. The Cover Sheets for the drawings and specifications shall indicate the design phase submitted.

The design package shall consist of the following submittals:

- a. 35% Construction Design Submittal

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- b. 95% Construction Design Submittal
- c. Final Construction Design Submittal
- d. Corrected Final Construction Design Submittal

2.1.1 Design Reviews by the Government

Submit copies of all submittals required by this specification section to:

Facility Engineer
USCG Training Center Cape May
1 Munro Avenue
Cape May, NJ 08204-5092

In addition to the Training Center, distribute one (1) set each of the required submittals to other USCG units/persons. Other recipients are:

Contracting Officer
U.S. Coast Guard
CEU Cleveland
Contracting Section
1240 E. 9th Street
Cleveland, Ohio 44199-2060

2.1.1.1 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 Training Center Cape May and ends when submittal leaves Training Center Cape May.

- | | |
|---|------------------|
| a. 35% Construction Design Submittals: | 14 calendar days |
| b. 95% Construction Design Submittal: | 14 calendar days |
| c. Final Construction Design Submittal: | 14 calendar days |
| d. Corrected Final Design Submittal: | 14 calendar days |

2.1.1.2 Quantities of Construction Design Documents

Submit one electronic copy of all construction design documents. In addition, submit one full size (24"x36") hard copy of all construction design drawings and one hard copy of all specifications and calculations.

- a. For the 35% Construction Design Submittal: At a minimum, submit design drawings and all other documents required in Paragraph 2.2.
- b. For the 95% Construction Design Submittals: Submit design drawings, specifications, calculations, manufacturer's product catalog data, and supporting data.
- c. Final Construction Design Submittal: Submit design drawings and specifications. Submit any new (or revisions to 95%) calculations, manufacturer's product catalog data, and other supporting data. Return the comments from the 95% submittal with Contractor responses to each Government comment.
- d. Corrected Final Construction Design Submittal: Submit one set of full sized sealed and signed original drawings; and two hard copies of half-size drawings reproduced from the full-size originals. Submit one hard copy of specifications if changes to final submittal were required. Submit any revisions to final calculations and other supporting data. Return the comments from the Final submittal with Contractor responses to each Government comment.

2.1.2 Revisions to Corrected Final Construction Design Drawings

Any Variations to Corrected Final Design documents must be brought to the attention of the Contracting Officer in a timely manner. Approved Deviations from the Corrected Final Design drawings must be submitted for approval by the Contracting Officer. Deviations are considered revisions and must be

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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-built drawings.

2.2 MINIMUM REQUIREMENTS FOR 35% CONSTRUCTION DESIGN SUBMITAL

2.2.1 General: The purpose of the 35% Design Submittal is to provide an early review to ensure the direction of project design conforms to the RFP/Contract requirements.

2.2.2 Site Work and Civil Work Design Drawings

The 35% design submittal shall include: Dimensioned site plans; Proposed utility connections; and Concept plans.

2.2.3 Fire Protection Design

The 35% design submittal shall include: Test report on fire hydrant water flow rates and building pressure; Report detailing Building Occupancy Classification(s) selected for design and how selection was made with NFPA Code references; Codes and criteria being used for full design; Concept plan on how to route fire protection water mains throughout building; Discussion of available ceiling clearances with all potential problem areas; and preliminary hydraulic calculations.

2.2.4 Specifications and Materials

The 35% design submittal shall include product information on the type of sprinkler head(s) to be used throughout the project.

PART 3 EXECUTION

Not used.

End of Section

DESIGN SUBMISSION TRANSMITTAL LETTER

| | | | |
|---|----------------------------------|-------------------|---|
| To: US Coast Guard Contracting Officer CEU Cleveland Contracting Section 1240 E. 9th Street Cleveland, Ohio 44199-2060 | Date: | Contr. No. | From: (Prime Contractor Firm Name) |
| | Attn: | | Submitted by: (Prime Contractor Submitter's Name) |
| | Project Name: Project Number: | | |
| | Subm No: D- _____ | New ____ | Resubm. ____ |

We are forwarding the following for your review and concurrence. **By submission of these documents we are certifying that we coordinated, reviewed and approve them as complying with the Contract Requirements.**

| COPIES | DATE | DESCRIPTION <i>(Be specific: drawing numbers, specification paragraph numbers, type of calculations, etc.)</i> | TYPE OF SUBMITTAL | DOR APPROVED Yes/No/NA Date | GOVERNMENT ACTION | | | | |
|--------|------|---|-------------------|-----------------------------------|-----------------------|-----------------------------------|------------|----------|------|
| | | | | | Unacceptable Resubmit | Make Corrections Noted & Resubmit | Acceptable | Reviewer | Date |
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| Government Reviewer's Name _____ | Signature: _____ |

MUNRO HALL SPRINKLER SYSTEM

U.S.C.G. Training Center Cape May, New Jersey

| DHS-USCG TRAINING CENTER CAPE MAY, NJ | | CONTRACT ITEM ACCEPTANCE REQUEST | | |
|---|--------------------------------|---|--|-------------------------------|
| Contract Number | | Submittal Number | Submittal New Re-submittal | Date |
| Project Number | | | CONTRACTOR MARK IF DEVIATION FROM SPECIFICATIONS | FOR GOVERNMENT USE ONLY |
| Item No. | Specification Sect. & Para. | DESCRIPTION OF MATERIAL (Include Type, Model No., Catalog No., Mfg., etc.) | Deviation | Status |
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| Contractor | | By: (Signature and Date) | | |
| Request as indicated above was received in this office on _____ | | | | |
| Recommend Acceptance or Resubmit as indicated above and subject to any applicable comments. | | | | |
| Name and Grade | | Signature | | Date |
| Acceptance or Resubmit as indicated above and subject to any applicable comments. | | | | |
| Name and Grade | | Signature | | Date |

**SECTION 01803
RECORD DOCUMENTS AND DRAWINGS**

PART 1 GENERAL

1.1 GENERAL REQUIREMENTS

- 1.1.1 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 Representative review upon request. Do not use record drawings for construction purposes.
- 1.1.2 DISCOVERED UTILITIES: Indicate the exact location and depth of any underground utility lines discovered in the course of the work on the As-Built drawings.
- 1.1.3 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.
- 1.1.4 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. As Built drawings shall be clearly labeled "AS-BUILT" and dated.

1.2 SUBMITTALS

Submit in accordance with this section and Section 01330, "Design-Build Submittal Procedures."

1.2.1 SD-11 Closeout Submittals

As-Built Drawings - The record documents submitted during the design and construction process shall be submitted as electronic (digital) and hardcopies. Digital files shall be provided on CD-R disk, MS-DOS readable ISO 9660 format. Disks shall be labeled with project title and number, date and files identified (drawings, specifications, etc). Files shall not be compressed. AutoCad drawings shall have all xrefs bound to the drawing, and all extraneous model space data shall be removed. All files shall be scanned and free of virus. To meet the Coast Guard electronic file management software program, "Adept", all files shall follow a naming convention that will precede the software extensions such as AutoCad (.dwg), Adobe (.pdf) or Word (.doc) and picture files (.jpg or .tif), etc. The file name shall have a specific order of alphanumeric characters (identifiers) that shall be adhered to for project identification and type of document. See Appendix B Criteria for Electronic Deliverables. Contractor shall adhere to the requirements of Appendix B Criteria for Electronic Deliverables.

1.3 EXAMINATION BY THE CONTRACTING OFFICER

Record drawings shall be available at all times for examination by the Contracting Officer's Representative. Requests for partial payments will be approved only if the record drawings are kept current.

Deliver the record drawings to the Contracting Officer upon completion of the work and prior to final inspection.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 PROJECT RECORD DRAWINGS

Label each drawing "PROJECT RECORD" in neat, large, printed red letters. Record information daily as work progresses. Do not conceal work until information is recorded. Legibly and accurately mark each drawing in red to record actual construction. Information to be recorded includes but is not limited to:

- a. Exact location of buried water utility connection.
- b. Horizontal and vertical locations of improvements installed or encountered. Establish with dimensions to permanent surface improvements.
- c. Changes to pipe sizes and routing.
- d. Changes to installation details.
- e. Changes resulting from modification and field changes.
- f. Changes resulting from instructions issued by the Contracting Officer.
- g. Details not on original contract drawings.

3.2 FINAL AS-BUILT DRAWINGS

Submit one ".pdf" digital copy and one ANSI D sized (22"x34") paper copy of the As Built drawings for Contracting Officer and COR acceptance upon completion of the contract. Final payment will not be authorized until all required As-Built drawings are accepted. Maximum retention shall be withheld for late or incomplete As Built drawings.

END OF SECTION

LIST OF SUBMITTALS

| SECT. | PAR. | ITEM | STATUS | COMMENTS |
|--------------------------------|---------|--|--------|----------|
| DESIGN PHASE SUBMITTALS | | | | |
| 01200 | 1.2 | Schedule of Prices | | |
| 01321 | 1.3.1 | Design Progress Schedule | | |
| | 1.3.1 | Final Construction Progress Schedule | | |
| 01450 | 1.4.1 | Management System | | |
| | 1.4.2 | Personnel Qualifications | | |
| | 1.4.3 | Laboratory Accreditation | | |
| | 2.1.2 | Design/Build Quality Assurance & Quality Control Plan | | |
| 01800 | 1.4.1.2 | Existing Conditions Survey | | |
| | 1.5.2.1 | Environmental Protection Plan | | |
| | 1.7.3 | Sprinkler System DOR Qualifications | | |
| | 1.7.5 | Building Occupancy Classification | | |
| | 1.7.7 | Hydraulic Test Results | | |
| 01802 | 1.3 | Designer Qualifications | | |
| | 1.5 | Basis of Design Narrative | | |
| | 2.1.a | Drawings & Specifications: 35% Construction Design Submittal | | |
| | 2.1.b | Drawings & Specifications: 95% Construction Design Submittal | | |
| | 2.1.c | Drawings & Specifications: Final Construction Design Submittal | | |
| | 2.1.d | Drawings & Specifications: Corrected Final Construction Design Submittal | | |
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| PRE-CONSTRUCTION SUBMITTALS | | | | |
|--------------------------------------|---------|---|--|--|
| 01110 | 1.16 | TRACEN Dig Request | | |
| | 1.16 | NJ One Call Markout Request | | |
| | 1.23.3 | Health and Safety Plan | | |
| 01330 | 1.3.2.2 | List of Proposed Subcontractors | | |
| | 1.3.2.2 | List of Proposed Products | | |
| | 1.3.2.2 | Construction Progress Schedule | | |
| | 1.4.2 | Construction Phase Submittal List | | |
| 01500 | 1.2.1.1 | Construction Site Plan | | |
| 01800 | 1.4.1.2 | Record of Existing Site Conditions & Photos | | |
| | 1.5.2.1 | Environmental Protection Plan | | |
| | 1.7.4 | Sprinkler System Installer Qualifications | | |
| | 1.8.4 | Fire Alarm System Installer Qualifications | | |
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| CONSTRUCTION PHASE SUBMITTALS | | | | |
| 01330 | 1.1.4.2 | DOR Reviewed Copies of Submittals | | |
| 01450 | 1.4.4 | Construction Quality Control Documents | | |
| | 1.4.4 | Test Reports | | |
| | 1.4.4 | Factory Test Reports | | |
| | 1.4.4 | Field Test Reports | | |
| | 1.4.4 | Field Inspections | | |
| | 1.4.5 | Field Testing Log | | |
| | 1.4.5.3 | As-Built Test Log | | |
| | 2.1.1 | Daily Reports | | |
| 01505 | 1.3.3 | Weekly Progress Update Meeting Minutes | | |

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| | | | | |
|-------|--------|---|--|--|
| | 1.4.4 | Monthly Progress Meeting Minutes | | |
| 01550 | 3.2.6 | Hazardous Waste Manifest | | |
| 01800 | 1.7.14 | Acceptance Test Certificate | | |
| 01802 | 1.11 | Site Inspection Reports During Construction | | |
| | 1.11 | Final Inspection Report | | |
| 01803 | 1.2.1 | As-Built Drawings | | |
| | | | | |
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| | | | | |

Status Abbreviation Guide: AC-Accepted; AC w/CMT-Accepted with Comment; R-Resubmit; NA-Not Applicable

APPENDIX A: CRITERIA FOR COMPUTER GENERATED DRAWINGS

A. INTRODUCTION

TRACEN CAD Standards are intended to be simple and only address the most fundamental of requirements for 2D CAD drafting.

B. GOVERNMENT PROVIDE INFORMATION AND ITEMS

Before the development of any CAD drawings, TRACEN will provide the following electronic files:

Appendix A – Criteria for Computer Generated Drawings
Appendix B – Electronic Deliverables
Appendix C - TRACEN File Naming Guide
Appendix D – Design Narrative
Appendix E - Industry Standards for Construction Documents
Contract Drawings in AutoCad format
TRACEN Cape May Template Drawing in AutoCad format
Design Submission Transmittal Form

C. DRAWING SHEET FILES AND BORDERS

Standard paper space drawing sheets with borders/title blocks shall be used.
The following Paper Space AutoCAD templates shall be used:

CM D Size Title Sheet.dwt -“D” size sheet (34” x 22”)

All CAD drawings shall use the TRACEN title block templates furnished to the Contractor by the Government. The design, configuration and attributes of this title block 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 title block fields. If the attributes are changed, the data will not be readable by Adept and therefore make the drawing irretrievable. 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 title blocks and edit the fields appropriately.

D. SOFTWARE

TRACEN uses AutoCAD 2017 software to develop 2D design and construction drawings. Contractor produced design and construction drawings may be prepared in ArchiCad or Revit. If either ArchiCad or Revit are used to produce design or construction drawings, interim progress submittals must include editable 2D DWG AutoCAD 2017 electronic files. These plans may be used by TRACEN for developing other plans. All submittals, drawings, specifications, calculations and data shall also be supplied in Adobe “pdf” format.

All As-built drawing files shall be 2D DWG files editable by AutoCAD 2017. Each As-built CAD drawing shall be a separate “dwg” file using the TRACEN title block; multiple sheets may not be combined into one file.

E. LAYERS

Layers allow for graphic information to be grouped for display and plotting purposes. They are the BASIC CAD tool for managing visual information. Proper use of layers reduces drawing time and improves drawing coordination.

It is absolutely essential that layering is used, and that the naming format standards comply with the latest edition of **CAD Layer Guidelines** published by the American Institute of Architects.

F. COLORS AND LINE WEIGHTS

Colors: AutoCAD allows drawings to be plotted based on “Plot Styles” and “Color Dependent” plotting. TRACEN uses Style based plotting, but will accept drawings developed for Color Dependent plotting. If color dependent plotting is used, the A/E must provide their “ctb” file with their drawings files.

Line Weights: Line weights shall be assigned “By Layer” and shall be appropriate to produce a legible and easily read drawing when produced as half-size (11” x 17”).

G. TEXT AND FONTS

Text: The USCG requires the use of ROMANS.shx font for general notes and text entities on Construction Documents. ROMAND.shx may be used for titles and special text where a bold font is needed. All text should be placed to an appropriate LAYER. It is suggested that basic notes be 0.010” line weight. For larger text such as titles, the weight could be thicker. The Multi-line text feature of AutoCAD must be used for multi-line text so that word wrapping can be utilized.

The height of general annotation text when plotted full-size shall be no less than 0.10” high.

H. FILE NAMING & DRAWING NUMBERS

Files shall be named in accordance with the *Adept File Naming Guide* (see Appendix C).

I. PROJECT FILING STRUCTURE

All CAD Model and Sheet files, Xref files and attached or embedded files (jpg, bmp, tiff, etc.) shall be kept in one folder titled “Drawings”.

J. ABBREVIATIONS

The use of abbreviations in notes and annotations is acceptable. However, if they are used, a complete list of abbreviations with their meanings shall be provided on the drawings. Separate abbreviation lists may be used for each discipline as long as none conflict. Common abbreviations shall be used throughout disciplines. Do not use different abbreviations for the same meaning.

K. DRAWING UNITS & DIMENSIONS

All discipline drawings shall be drawn and dimensioned in feet and inches, with dimensions rounded to 1/8”. The exception is civil and site plans, which shall be decimals of a foot with dimensions rounded to 1/100 of a foot.

L. SYMBOLS & CONVENTIONS

The following symbols and conventions shall be utilized and provided:

1. North Arrow for every plan
2. Graphic scales for every sheet, for every scale used
3. Titles for each object or graphic drawn (e.g. floor plan, elevation, detail, section, etc.)
4. Legends to clearly define each line type, hatch pattern and symbol used
5. Location and vicinity maps shall be provided on the drawing cover/title sheet.
6. Section and detail bubble symbols shall be three-part symbols that provide: a number or letter for the section and detail, sheet number where the detail or section occurs, and at least one sheet where the detail or section is referenced from.

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M. USE OF EXTERNAL REFERENCES (XRFES)

External references for site plans and floor plans shall be used to ensure that all sheets that contain the same plan are the same. Xrefed plans shall be used across disciplines (i.e. mechanical, electrical, plumbing and other similar drawings shall utilize the architectural or civil xref plans). Do not use of Xrefs for details and other drawing items that are only used on one drawing sheet. Xrefs shall not have dimensions, text and other similar annotations contained within them; they shall essentially be graphic drafting. The exception to this is that civil Xrefs that contain data populated by survey software is permitted.

Photo images and other graphics (scanned TIFF or JPEG files) may be used where appropriate. External files such as schedules, lengthy text notes, graphs, etc. shall not be used unless approved by the TRACEN.

As-built/Record CAD DWG files: As mentioned previously, the USCG utilizes a file management and retrieval system that stores as-built/record drawing files. This system requires that each drawing be complete without the use of Xrefs. Therefore, after as-builts are complete, all Xrefs shall be "bound" into the drawing. Image files are an exception to one drawing being contained in one file, unless the images can be converted to "bmp" format and inserted into the drawing as OLE objects.

N. TITLE BLOCK FIELDS

Most Title block attribute fields are self-explanatory, but for the sake of clarifying those that are not, the following examples/guidance is provided:

| | |
|----------------------|---|
| Project Title: | Use the official title of the project as provided by the TRACEN |
| Unit Name: | Training Center Cape May |
| Unit City: | Cape May |
| Unit State: | New Jersey |
| Property Name: | Munro Hall, Building #262 |
| Sheet Discipline | Engineering Discipline (e.g. Civil, Mechanical, etc.) |
| Sheet Subject | Examples: Cover Sheet, Floor Plan, Details, etc. |
| Project Engineer: | (leave blank) |
| Branch Chief: | (leave blank) |
| Approving Officer: | (leave blank) |
| Date Approved: | Date TRACEN approved Final Drawings |
| Project Number: | Official USCG Project Number (e.g. 5125213) |
| Drawing Number: | Number will be provided by TRACEN upon request |
| Discipline/Sheet No. | See Appendix C |

| | |
|---------------|--|
| Issue Fields: | List each submission type and date |
| Mark: | Number (e.g. 1, 2, 3, 4, etc.) |
| Date: | Date of Submission or revision (mm/dd/yyyy) |
| Description: | Type of submittal (e.g. 35% Design, As-Built Drawings, etc.) |

O. DRAWING REVISIONS

Revisions to drawings after Final Approval shall be clearly annotated with revision clouds and symbols, and number. Each revision number (Mark), Description and Date shall be entered into the Issue field of the title block.

APPENDIX B: CRITERIA FOR ELECTRONIC DELIVERABLES

A. ACCEPTABLE DIGITAL MEDIA:

All electronic (digital) files shall be delivered on recordable compact disks (CD-R). Files shall not be compressed.

Compact Disk Requirements:

Each CD-R shall have an external label noting at a minimum, the Contractor's name, USCG project number, project title, type of submittal and date.

B. FILE FORMATS:

All files shall be saved on the CD-R in an organized manner using separate file folders for drawings, specifications, calculations, data files, permits, etc. Drawings, specifications and permit file names shall be in accordance with ***Adept File Naming Guide*** (See Appendix C). File types shall be saved in the following formats:

- | | |
|--------------------------|--|
| Specifications | - MS WORD ".doc" or ".docx", and Adobe Acrobat DC or earlier ".pdf" |
| Calculations and Reports | - Adobe Acrobat DC or earlier "pdf" |
| Drawings | - Autodesk ".dwg" Version 2017 or earlier and Adobe Acrobat DC or earlier ".pdf" (all submittals) |
| Data files, catalog cuts | - Adobe Acrobat DC or earlier "pdf" |

APPENDIX C: ADEPT FILE NAMING

A. OVERVIEW

TRACEN uses a file management and electronic file data base system, known as "Adept". This system will provide many benefits to each unit and the U.S. Coast Guard as a whole, with regard to management and access to facilities electronic documents. This Guide is intended to provide a standard system for naming of the different types of electronic files related to facility engineering for Adept.

B. GENERAL

Electronic document names must be unique in order to keep Adept data properly identified. To achieve this, several things will be done. First, each project is assigned unique number (SAM Project Number, not SFRL number). And secondly, unique codes and numbers will be included for each electronic file.

C. CAD "Model (xref)" FILE NAMES

Model File Names will be a modified version of the Tri-Services/National CAD Standard (NCS). The first group of numbers will be the USCG **Project Number**. The next character is the letter "**X**" for XREF. The next three characters shall consist of a **Drawings Type Code** and **single digit number**.

Drawing Type Codes (examples):

| | | |
|-----------------------|--------------------|----------------------|
| DG: Diagram | DT: Detail | EL: Elevation |
| FP: Floor Plan | SC: Section | SP: Site Plan |

Example:

5084491XFP1.dwg

| | |
|----------------|---------------------------------------|
| 5084491 | = Project Number assigned by USCG |
| X | = Indicates External Reference (XREF) |
| FP | = Drawing Type Code (Floor Plan) |
| 1 | = Single digit Consecutive Number |
| .dwg | = default AutoCAD file Extension |

D. CAD "SHEET" FILE NAMES & DRAWING NUMBERING CONVENTION

File names for individual files shall be T-0000-*.dwg. The "0000" represents the 4 digit drawing number assigned by the US Coast Guard. The asterisk represents a discipline designation i.e. A-Architectural, C-Civil, D-Demolition, E-Electrical, F-Fire Protection, M-Mechanical, P-Plumbing, S-Structural, T-Topographical, and Z-Miscellaneous. The # represents the size of the original drawing: i.e. D for an ANSI D size drawing. (e.g. T-1234-CD.dwg)

E. DISCIPLINE SHEET NUMBERING SYSTEM

Each drawing SHEET shall be numbered using a **Discipline Designator**, **Sheet Type Designator** and **sequential numbers**.

Example:

A101

| | |
|-----------|--|
| A | = Discipline Designator |
| 1 | = Sheet Designator for a plan |
| 01 | = Consecutive number beginning with 01 |

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Discipline Designators:

| | | | |
|-------------------------------|--------------------------------|-----------------------|-----------------------|
| G – General | H - Hazardous Materials | C - Civil | L – Landscape |
| S – Structural | A – Architectural | I – Interiors | Q – Equipment |
| F - Fire Protection | P – Plumbing | M - Mechanical | E - Electrical |
| T – Telecommunications | R - Resource | | |

Sheet Type Designators:

| | | |
|---------------------------------------|---------------------------------|---|
| 0 – General (symbols, legends) | 4 – Large Scale Plans | 8 - User Defined |
| 1 – Plans | 5 – Details | 9 – 3D View (isometrics, photos) |
| 2 – Elevations | 6 – Schedules & Diagrams | |
| 3 – Sections | 7 – User Defined | |

F. SPECIFICATIONS AND RELATED TEXT DOCUMENTS

Construction specification, permits or other text document file names shall begin with the USCG **Project Number**. The next characters are the letter “**SP**” for Specifications. The next characters shall be the **specification section number**.

Example:

5084491SP01158.doc

| | |
|------------------|--|
| 5084491 | = Project Number assigned by USCG |
| SP | = Indicates Specifications |
| 01158 | = Specification Section number |
| .doc, pdf | = .doc or .pdf document file extension |

G. PHOTO AND GRAPHIC FILES

The first group of numbers will be the USCG **Project Number**. The next characters are the letter “GR” for graphics. The next three characters shall be consecutive beginning with 001 (one number for each graphic file).

Example:

5084491GR001.doc

| | |
|----------------|--|
| 5084491 | = Project Number assigned by USCG |
| GR | = Indicates graphic |
| 001 | = Consecutive number |
| .jpg | = graphic file extension (or .bmp, .gif, .wmf, etc.) |

H. OTHER DOCUMENTS

The first group of numbers will be the USCG **Project**. The next three characters shall be consecutive beginning with 001 (one number for each file).

Example:

5084491xx001.xxx

| | |
|----------------|---|
| 5084491 | = Project or OpFac Number assigned by USCG |
| 001 | = Consecutive number or other distinguishing factor |
| .xxx | = applicable file extension |

APPENDIX D: BASIS OF DESIGN NARRATIVE

| Basis of Civil Design Narrative | |
|--|---|
| <i>Water Supply:</i> | Provide the following information: <ol style="list-style-type: none"> a. Explanation of existing system, covering the type, capacity, condition, present water use and unsatisfactory elements of component parts for major extensions. b. Statement of type of construction and materials for mains. c. For distribution systems, statement of design, domestic and fire flow, residual pressure, and elevation differentials (should include designer's estimate of pipe sizes). d. Statement of sizes, elevations, capacities, etc., as can readily be determined without long computations or design consideration for reservoirs, treatment units, pumping plants, well pumps, and such units. |
| <i>Demolition:</i> | A statement discussing proposed demolition of existing structures, suspected or tested hazardous materials, and special disposal requirements. |

| Basis of Fire Protection Design Narrative | |
|--|---|
| <i>Introduction:</i> | The Basis of Design shall list the building occupancy classification(s) selected and justify how the classification(s) was selected referencing NFPA codes. |
| <i>Designer Qualifications</i> | Provide the Designer of Record qualifications and information on the associated engineering firm. |

APPENDIX E: INDUSTRY STANDARDS FOR CONSTRUCTION DOCUMENTS

| Civil Design | |
|--|--|
| Drawings | |
| Record Submittal: | <p>The submission should include all drawings required for final design submittal plus all necessary detail sheets to complete the civil engineering portion of the project. In addition, other sheets required showing such information as profiles and cross sections for roads and ditches, profiles of sewer and drainage systems, and details of all appurtenances shall be included. The designer should review all Specifications to be used in connection with the Civil Drawings. Most of the Specifications contain design information in notes that indicate what must be shown on the drawings for proper coordination with the specifications. Some Specifications contain standard details which must be included on the drawings if they are applicable to the project.</p> <p>Drawings shall be fully coordinated with the other disciplines and the specifications.</p> |
| Existing Site and Demolition Plan and Detail Drawings: | <p>Show the following:</p> <ol style="list-style-type: none"> a. All items to be demolished clearly shown b. Limits of removal c. Complete description of items to be removed d. Details, where necessary, of items to be removed e. Depth and dimension of affected pipelines and foundations |
| Site Plan and Detail Drawings: | <p>Show the following:</p> <ol style="list-style-type: none"> a. All necessary layout dimensions b. Temporary facilities, locations and services c. Pavement repair details (i.e. utility crossings) d. Fencing and gates location and details including security barriers for openings beneath fences and gates e. Construction limits (if critical) f. All existing aboveground features which are not to be demolished |
| Utility Plans and Detail Drawings: | <p>Show the following:</p> <ol style="list-style-type: none"> a. Overall layout of systems, showing line sizes b. New and existing systems shown c. Valve and fire hydrant locations d. Trench details showing bedding, backfill and utility warning tape e. Sizes of all components of systems indicated f. Building services coordinated with building plumbing drawings g. Separation of water and sewer lines h. Back-flow preventers i. Locations coordinated with existing and other utilities j. Areas of hazardous material abatements |
| Calculations | |

| | |
|----------------------|---|
| Design Calculations: | Revise the Schematic calculations and supplement as required for 100% design. Submit in same format as for Schematic submittal. |
|----------------------|---|

| Fire Suppression Design | |
|--------------------------------|---|
| Drawings | |
| Record Submittal: | The submission should include all drawings required for the final design submittal plus all necessary detail sheets to complete the fire suppression portion of the project. Drawings shall be fully coordinated with the other disciplines and the specifications. |
| General Conditions: | <p>Show the following:</p> <ul style="list-style-type: none"> a. Design criteria including IBC Occupancy Classification, b. Utility Water Main Hydraulic Test Results, c. General notes for the project, d. Material notes such as piping, sprinkler heads, etc., e. Abbreviations and symbols used for fire suppression system. |
| Plan: | <p>Show the following:</p> <ul style="list-style-type: none"> a. Hydraulic Calculations, b. Riser Diagram for all piping, c. Location of all risers on floor plan, d. Location of all valves on floor plan, e. Graphic scales. |
| Details: | <ul style="list-style-type: none"> a. All special connections completely detailed to a point where no further engineering is necessary. |
| Schedules: | <ul style="list-style-type: none"> a. Sprinkler schedule. |