

Part 2 General Requirements

PART 2

GENERAL REQUIREMENTS

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00 00 00 GENERAL REQUIREMENTS

1.1 Definitions

As used throughout the contract, the following terms have the meaning set forth below:
Contracting Officer (KO): The individual designated to administer the contract. Throughout this contract this individual will be responsible and possess the authority to act on behalf of the Government with respect to the specific contract.

Contracting Officer Representative (COR): The individual designated by the Contracting Officer as the authorized representative of the Contracting Officer. The COR is responsible for monitoring performance and technical management of the effort required and should be contacted regarding questions or problems of a technical nature.

Contract: Contract or task order.

Contractor: The term Contractor refers to both the prime Contractor and all subcontractors, whether in contract with the Prime Contractor or other subcontractors at any tier, including the Designer of Record.

Designer of Record (DOR): Licensed architect/engineer working as subcontractor to or partner with prime Contractor who provides design for this contract.

Quality Control (QC): Contractor's system to control the quality of design, material, equipment and construction.

Quality Assurance (QA) Program: Government's program to evaluate the effectiveness of the Contractor's quality control. The Government's QA Program is not a substitute for the Contractor's QC Program.

Federal Holidays: New Year's Day, Martin Luther King Jr. Day, President's Day, Memorial Day, Juneteenth National Independence Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, and Christmas Day.

1.2 Accessibility

Provide barrier-free design in accordance with UFC 1-200-01 DoD Building Code.

1.3 Changes

No oral statement by any person other than the Contracting Officer, as provided in the Federal Acquisition Regulation (FAR) clause 52.243-5 entitled, "CHANGES AND CHANGED CONDITIONS," will in any manner or degree modify or otherwise affect the terms of this contract.

1.4 No Waiver by the Government

The failure of the Government in any one or more instances to insist upon strict performance to any of the terms of this contract or to exercise any option herein conferred is not to be construed as a waiver or relinquishment to any extent of the right to assert or rely upon such terms or options on any future occasion.

1.5 Equitable Adjustments

- a. Whenever the Contractor submits a claim for equitable adjustment under a clause which provides for equitable adjustment of the contract, such claim must include all types of adjustments in the total amounts to which the clause entitles the Contractor, including, but not limited to, adjustment arising out of delays or disruptions.
- b. Except as the parties may otherwise expressly agree, the Contractor must be deemed to have waived: (1) any adjustments to which he otherwise might be entitled under the clause where such claim fails to request such adjustments; and (2) any increase in the amount of equitable adjustments additional to those requested in its claim.

- c. If required by the Contracting Officer, the Contractor agrees to execute a release, in form and substance satisfactory to the Contracting Officer, as part of the supplemental agreement setting forth the aforesaid equitable adjustment. The Contractor further agrees that such release will discharge the Government, including its officers, agents, and employees, from any further claims, including, but not limited to, further claims arising out of delays or disruptions caused by the aforesaid change.

1.6 Warranty

Warrant all materials and work for not less than one year after final acceptance of the work, except as otherwise indicated in this RFP. If required to provide remedial repair of previously installed work due to latent defect or unacceptable work performance, warrant the repaired work for one year after the completion and acceptance of the repair. For warranted items, furnish the manufacturer's original written warranty accompanied by a copy of the supplier's receipt showing place of purchase, telephone number of supplier, address, delivery order number if applicable, and ticket number.

01 11 00 SUMMARY OF WORK

1.0 Protection of Government Property

Take special care to protect Government property. Return areas damaged as a result of construction under this contract to their original condition. In addition to FAR 52.236-9, Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements, perform the following:

- a. Remove or alter existing work or facilities in such a manner as to prevent injury or damage to any portion of the existing work or facilities that remain.
- b. Repair or replace portions of existing work altered during construction operations to match existing or adjoining work, as approved by the Contracting Officer. At the completion of operations, existing work must be in a condition equal to or better than that which existed before new work started.
- c. Preserve the natural resources in accordance with the approved environmental protection plan prepared in accordance with UFGS 01 57 19 Temporary Environmental Controls.

1.1 Government Furnished Material and Equipment

If applicable, the Government will furnish the materials and equipment for installation by the Contractor pursuant to contract clause FAR 52.245-2, Government Property (Fixed Price Contracts). Notify the Contracting Officer in writing at least 15 calendar days before the materials and equipment are required. Pick up materials and equipment no later than 30 calendar days after such date. When materials and equipment are not picked up by the 30th day, the Contractor will be charged for storage at the prevailing rate. The Contracting Officer will specify the location of materials and equipment and the delivery location.

01 14 00 WORK RESTRICTIONS

1.1 Existing Underground Utilities

Verify on-site utilities and have them marked out by a third-party utility locator service prior to the

start of construction. Determine the elevations of existing utilities and underground obstructions indicated as existing to remain in locations to be traversed by new utilities and other work provided herein before new work is laid closer than the nearest manhole or other structure at which an adjustment in grade could be made. Where dig permits are required, obtain permits, and notify the Contracting Officer 30 calendar days prior to any excavation.

Maintain all utility markings for the duration of the contract.

Special Requirements:

- a. permits are required, obtain permits, and notify the Contracting Officer 30 calendar days prior to any excavation.
- b. Temporary electrical services shall be provided to affected facilities during construction-required power outages to maintain quality of life and continuous operation of the affected facilities during construction.

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1.2 Work Hours, Access and Passes

All Contractor employees, including subcontractors, subcontractors' employees, suppliers, and suppliers' employees are required to comply with the Installation Security Requirements regarding personnel, vehicle, and equipment security passes and access to the jobsite. Nothing in the contract is to be construed in any way to limit the authority of the Commanding Officer to prescribe new, or to enforce existing security regulations governing the admission or exclusion of persons and the conduct of persons while aboard the station, including but not limited to, the rights of search of all persons or vehicles aboard the station.

Coordinate with the Contracting Officer for specific security and access requirements.

- a. Access to Buildings / Occupied Buildings: The Contractor may work in or around existing occupied buildings. The Contractor is responsible, via the Contracting Officer, to obtain access to building and facilities and arrange for them to be opened and closed. Do not enter the building(s) without prior approval of the Contracting Officer. Keep the existing buildings and their contents secure at all times. Provide temporary closures as required to maintain security. Contract personnel will not be permitted in security-regulated buildings or areas unless cleared by the Security Officer.
- b. Passes and Badges: Contractor employees and representatives performing work under this contract are required to be either United States citizens or documented legal residents (status verified by prime contractor). All Contractor employees must obtain the required employee and vehicle passes. Each employee is required to wear the Government issued badge over the front of the outer clothing. Failure to obtain security and base access passes must not be a cause for contract performance time extension. The Contractor is required to immediately turn in all terminated employee's badges to the issuing office. Obtain access to Navy installations through participation in the Defense

Biometrics Identification System (DBIDS). Requirements for Contractor employee registration, and transition for employees currently under Navy Commercial Access Control System (NCACS), are available at <https://www.cnmc.navy.mil/Operations-and-Management/Base-Support/DBIDS/>. No fees are associated with obtaining a DBIDS credential. Participation in the DBIDS is not mandatory, and Contractor personnel may apply for One-Day Passes at the Base Visitor Control Office to access an installation. Registration for DBIDS includes: Present a letter or official award document (i.e. DD Form 1155 or SF 1442) from the Contracting Officer, that provides the purpose for access, to the base Visitor Control Center representative.

- Present valid identification, such as a passport or Real ID Act-compliant state driver's license
- Provide completed SECNAV FORM 5512/1 to the base Visitor Control Center representative to obtain a background check. This form is available for download at <https://www.cnmc.navy.mil/Operations-and-Management/Base-Support/DBIDS/>
- Upon successful completion of the background check, the Government will complete the DBIDS enrollment process, which includes Contractor employee photo, finger prints, base restriction and several other assessments
- Upon successful completion of the enrollment process, the Contractor employee will be issued a DBIDS credential, and will be allowed to proceed to worksite

DBIDS Eligibility Requirements: Throughout the length of the contract, the Contractor employee must continue to meet background screen standards. Periodic background screenings are conducted to verify continued DBIDS participation and installation access privileges. DBIDS access privileges will be immediately suspended or revoked if at any time a contractor employee becomes ineligible. An adjudication process may be initiated when a background screen failure results in disqualification from participation in the DBIDS, and Contractor employee does not agree with the reason for disqualification. The Government is the final authority. DBIDS Notification Requirements: Immediately report instances of lost or stolen badges to the Contracting Officer. Immediately collect DBIDS credentials and notify the Contracting Officer in writing under the following circumstances: (1) An employee has departed the company without having properly returned or surrendered their DBIDS credentials. (2) There is a reasonable basis to conclude that an employee, or former employee, might pose a risk, compromise, or threat to the safety or security of the Installation or anyone therein.

- g. Contractor Vehicles: All vehicles must display a valid state license plate and safety inspection sticker, if applicable, and must be maintained in good repair. The company name must be displayed in a clearly visible manner and size on each Contractor vehicle used in the course of work. [Registration, proof of insurance and driver's licenses are required to obtain a station vehicle pass.]
- h. Work Hours: Unless otherwise indicated, work will be located on a government compound, military installation, or station. Contractor work hours are between 0700 and 1530 Monday through Friday. Obtain advance approval from the Contracting Officer for Contractor personnel to remain on site beyond normal working hours. Notify the Contracting Officer at least 48 hours in advance to obtain approval for access to the jobsite or work outside of normal working hours or on Saturday, Sunday, and Federal Holidays.
- i. Contractor Personnel: Provide the Contracting Officer the name(s) of the supervisory

person(s) authorized to act for the Contractor. Provide, and update as required, a list of the key personnel for the Contractor and subcontractors including addresses and telephone numbers for use in the event of an emergency.

- j. Contractor employees must conduct themselves in a proper, efficient, courteous and businesslike manner. Remove from the site any individual whose continued employment is deemed by the Contracting Officer to be contrary to the public interest or inconsistent with the best interests of National Security.

1.3 Security Requirements

All security requirements apply to all subcontractors and suppliers associated with this contract. [Special or extraordinary security requirements are identified herein.] Comply with the following [in addition to special or extraordinary security requirements]:

- a. Do not publicly disclose any information concerning any aspect of the materials or services relating to this contract, without prior written approval of the Contracting Officer.
- b. Do not disclose or cause to be disseminated any information concerning the operations of the activity's security or interrupt the continuity of its operations.
- c. Do not disclose any information to any person not entitled to receive it. Failure to safeguard any classified information that may come to the Contractor or any person under his control, may subject the Contractor, his agents or employees to criminal liability under 18 U.S.C., Sections 793 and 798.
- d. Direct to the Contracting Officer and or Installation Security Officer for resolution all inquiries, comments or complaints arising from any matter observed, experienced, or learned as a result of or in connection with the performance of this contract, the resolution of which may require the dissemination of official information.
- e. Coordinate photography requirements with the Contracting Officer. Some areas restrict or prohibit photographing Government property.
- f. Military escorts are required in the following spaces: [Not Used]

Deviations from or violations of any of the provisions of this paragraph, will, in addition to all other criminal and civil remedies provided by law, subject the Contractor to immediate termination for default and withdrawal of the Government's acceptance and approval of employment of the individuals involved.

01 20 00 PRICE AND PAYMENT PROCEDURES

1.1 Schedule of Prices

Submit a schedule of prices for approval on forms furnished by the Government. The initial schedule of prices may be preliminary for construction activities until the design is developed. Include a detailed breakdown of the contract price with quantities and unit prices for each work activity or definable feature of work. Include general conditions, profit, and overhead costs within the unit prices. Break down into design and construction is required. The Contractor may invoice for bonds once the Government has approved the bonds, however, no other requests for

payment will be processed without an approved schedule of prices and baseline schedule.

1.2 Contractor Invoices

Contractor requests for payment must conform and will be processed in accordance with the requirements of FAR 52.232-5 and FAR 52.232-27.

- a. Content of Invoice: Requests for payment in accordance with the terms of the contract must consist of the following: (If NFAS Clause 5252.232-9301 is present in the contract, documents must be provided as attachments in Wide Area Workflow (WAWF). The maximum size limit per attachment is less than 2 megabytes, but there are no limits on the number of attachments. If a document cannot be attached to WAWF due to system or size restrictions it must be provided as instructed by the contracting officer). If NFAS Clause 5252.232.9301 is not present in the contract, follow the invoicing instructions provided in the contract.
 1. Contractor's Invoice on NAVFAC Form 7300/30, must show, in summary form, the basis for arriving at the amount of the invoice.
 2. Contractor's Estimate for Voucher/ Contract Performance Statement on NAVFAC Form 7300/31 furnished by the Government, showing in detail: the estimated cost, percentage of completion, and value of completed performance for each of the construction categories stated in this contract. Use NAVFAC LANT Form 4-330/110 (New 7/84) on NAVFAC Atlantic contracts when a Monthly Estimate for Voucher is required.
 3. Affidavit to accompany invoice (LANTDIV NORVA Form 4-4235/4 (Rev. 5/81)).
 4. Updated copy of submittal register.
 5. Updated copy of progress schedule. Furnish as specified in "FAR 52.236-15, Schedules for Construction Contracts."
 6. Contractor Safety Self Evaluation Checklist (original)
 7. Final release (for final payment only). Final invoice must be accompanied by the certification required by DFARS 252.247.7023 TRANSPORTATION OF SUPPLIES BY SEA, and the Contractor's Final Release.
- b. Payment:
 1. Payment will be made on Contractor's submission of itemized requests and will be subject to reduction for overpayments or increased for underpayments from previous payments. The Government may withhold payment or reduce payments for the following:
 - a. Defects in material or workmanship.
 - b. Claims the Government may have against the Contractor under or in connection with this contract.
 - c. Contractor's failure to submit an updated schedule.
 - d. Payroll violations.
 - e. Unless otherwise adjusted, repayment to the Government upon demand for overpayments made to the Contractor.
 2. Payments may be made for materials, stored off construction sites, under the following conditions:

- a. Materials to be considered for progress payment prior to installation must be located and stored within 20 miles by streets and roads of the construction site.
- b. Materials adequately insured and protected from theft and exposure. Payment requests for offsite materials must include the consent of surety.
- c. Materials not susceptible to deterioration or physical damage in storage or in transit to the job site are acceptable for progress payments. Items such as steel, machinery, pipe and fittings and electrical cable are acceptable, but items such as gypsum board; glass, insulation and wall covering are not.
- d. Materials in transit to the job or storage site are not acceptable for payment.
- e. Conditions specified in FAR 52.232-5(b) Payments Under Fixed Price Construction Contracts.

1.3 Budget Management

The Contractor must be responsible for budget management throughout the entire project. It is the intent of the Government to partner with the Contractor to maximize project value while strictly controlling contract modifications and maintaining overall fiscal control. When required, develop a Budget Management System for each phase of the design.

[This project requires a Budget Management System be developed and maintained. The Budget Management System must represent major portions of the work such as HVAC, site work, and exterior skin. The purpose of budget management is to balance scope and value during critical project design decisions. Update the budget management status at regular intervals during design, at a minimum with design submittals, for review by and discussion with the COR.]

01 30 00 ADMINISTRATIVE REQUIREMENTS

1.1 Supervision

The Contractor must have a superintendent fluent in English [and host nation language] on the job site during working hours.

The Superintendent must have a minimum of 5 years of experience as a Superintendent on previous projects of similar size and complexity. The Superintendent may [not] serve as the Site Safety and Health Officer. Provide a Superintendent Resume for the proposed on-site Project Superintendent describing experience with references and qualifications to the Contracting Officer for approval. The Contracting Officer reserves the right to interview the proposed on-site Project Superintendent at any time in order to verify the submitted qualifications.

1.2 Required Insurance

Within 15 calendar days after award, furnish the Contracting Officer a Certificate of Insurance as evidence of the following insurance coverage amounts not less than the amount specified below in accordance with FAR Clause 52.228-5 Insurance Work on A Government Installation:

- a. Comprehensive General Liability: \$500,000 per occurrence.
- b. Automobile Liability: \$200,000 per person, \$500,000 per occurrence for bodily injury; \$20,000 per occurrence for property damage.
- c. Worker's Compensation: As required by Federal and State Worker's compensation and occupational disease and other laws.
- d. Employer's Liability Coverage: \$100,000, except in states where worker's compensation may not be written by private carriers.
- e. Others as required by state law.
- f. Above insurance coverages is to extend to Contractor personnel operating Government owned equipment and vehicles.
- g. The Certificate of Insurance must provide for 30 calendar days written notice to the Contracting Officer by the insurance company prior to cancellation or material change in policy coverage.

For projects which require removal of asbestos containing materials the Asbestos Contractor or Subcontractor, as the case may be is required to provide occurrence-based liability insurance with asbestos coverages in an amount not less than \$1,000,000 and must name the Government and Private Qualified Person (PQP) as additional insureds.

1.3 Post Award Kick-Off Meeting (PAK)

Prior to commencement of design, and within 21 calendar days of award, meet with representatives of the Contracting Officer, installation and client to present the concept design for discussion and acceptance. The project team will develop a mutual understanding relative to the approved proposal, safety program, environmental permits and requirements, quality control procedures, and design and construction schedule. During the meeting, Contractor must propose and gain acceptance for any critical path work activities requiring advance submittal and approval. If the contract includes work on any fire protection system, including fire alarm and mass notification systems, the Contractor and the appropriate DOR must meet with the NAVFAC Fire Protection Engineer (FPE) to establish clear expectations of fire protection requirements of the project.

The Contractor's key personnel must attend including the Project Manager, Superintendent, Site Safety and Health officer, Construction Quality (CQ) Manager, Design Quality Control (DQC) Manager, Designer of Record (DOR), and major subcontractors.

[1.4 Design Presentation / Development (DP/D)]

The Contractor must lead discussions to develop an understanding of the facility design that the accepted technical proposal represents with the Government users and maintainers of the facility. Develop site plans, floor plans, exterior finish materials, and building elevations to conduct working sessions with the Government meeting attendees. The purpose of the DP/D Meeting is to confirm the appropriateness of the facility design and develop acceptable alternatives if changes are needed. The Contractor must anticipate that Government Facility Users represented at the DP/D Meeting will provide additional functional information. Incorporate functional design changes into the facility design as required to meet the needs of the Users. At the end of the DP/D Meeting the Contractor must provide either assurance that the updated design can be built within the budget or identify potential cost modification items and establish a follow-on DP/D Meeting to finalize a

design that will include trade-offs to bring the project within the budget. The following Contractor key personnel must attend the Design Presentation: Project Manager, Project Scheduler, Cost Estimator, Lead Designer of Record, Design Staff responsible for each architectural/engineering discipline when facility design is discussed, Major Subcontractors, and DQC.]

1.5 Partnering

The Contracting Officer will coordinate the initial Team-Led (Informal) Partnering Session with key personnel of the project team, including Contractor and Government personnel. The Partnering Session will be co-led by the Government Construction Manager and Contractor's Project Manager. The Initial Team-led Partnering session may be held concurrently with the Pre-Construction Post-Award Kickoff meeting. Partnering sessions will be held at a location mutually agreed to by the Contracting Officer and the Contractor, typically at a conference room on-base or at the Contractor's temporary trailer. The Initial Team-Led Partnering Session will be conducted and facilitated using electronic media (a video and accompanying forms) provided by Contracting Officer. The Partners will determine the frequency of the follow-on sessions. Participants will bear their own costs for meals, lodging and transportation associated with Partnering.

1.6 Pre-Construction Conference

Prior to construction or demolition, meet with representatives of the Contracting Officer to discuss and develop mutual understanding relative to administration of the safety programs, environmental issues, safety of building occupants and surrounding area, hazardous materials, waste disposal, construction QC procedures, construction schedule, labor provisions and other construction phase contract procedures.

1.7 NAVFAC Red Zone Meeting (NRZ)

Participate in NAVFAC Red Zone (NRZ) meetings with the Contracting Officer to identify strategies to ensure the project is carried to expeditious closure and turnover to the client. The Contracting Officer will provide a template to the Contractor to use to develop a NRZ Checklist. Revise the template to include critical work activities and their planned completion dates based on the project scope of work and schedule. Discuss any progress changes with items listed on the NRZ Checklist during regularly scheduled NRZ Meetings beginning approximately at 75% stage of construction prior to project completion.

01 31 23.13 20 ELECTRONIC CONSTRUCTION AND FACILITY SUPPORT CONTRACT MANAGEMENT SYSTEM

See UFGS Section 01 31 23.13 20 Electronic Construction and Facility Support Contract Management System in Part 5 of this RFP for requirements for the use of eCMS.

01 32 16.00 20 SMALL PROJECT CONSTRUCTION PROGRESS SCHEDULES

Develop and implement a design and construction schedule in accordance with UFGS 01 32 16.00 20 in Part 5 of this RFP.

01 33 00.05 20 CONSTRUCTION SUBMITTAL PROCEDURES

1.1 Construction submittals are to be Contractor-approved, except those listed below:

- a. DOR Approval required for:
 - 1. Earthwork and Geotechnical submittals
 - 3. All components of the roof and exterior wall.
 - 4. All components of the interior doors, hardware, cabinets, fireproofing/firestopping, railings, paint, finish materials/colors.
 - 5. HVAC Testing, Adjusting, and Balancing.
 - 6. Telecommunications
 - 7. SID submittals and Furnishings, Fixtures, and Equipment (FFE) packages for review and approval by NAVFAC Interior Designer

- b. Government Approval required for:
 - 1. Government approved submittals as required by UFGS specification sections edited by the DOR.
 - 2. Substations
 - 3. Transformers
 - 4. Medium & High Voltage Switchgear
 - 5. Medium & High Voltage Cable
 - 6. 400Hz Converters
 - 7. Emergency Generators
 - 8. Uninterruptible Power Supplies
 - 9. Electronic Security Systems
 - 10. Fire Protection related submittals

1.2 Submit the following construction submittals, approved by the DOR, to the Government for surveillance:

- a. Submit fire protection related submittals pertaining to spray-applied fire proofing and fire stopping, exterior fire alarm reporting systems, interior fire alarm & detection systems, and fire suppression systems including fire pumps and standpipe systems.
- b. Submit geotechnical related submittals pertaining to soil investigations (reports and soils analysis), foundations (shallow and deep), pavements structure design, test pile and production pile testing and installation.
- c. Submit roofing submittals pertaining to materials and systems used to make up the roof system.
- d. Submit HVAC Testing, Adjusting, and Balancing required submittals.
- e. Submit telecommunications shop drawings for coordination with the NMCI Contractor.
Note: For the purpose of this document, the term "NMCI" is used to reference the

network provided for use by the Navy and Marine Corps; the terms Continuation of Service Contract (COSC) and Next Generation Enterprise Network (NGEN) will be used to reference the contract between the government and the Contractor providing the NMCI network service.

- f. Submit Performance Verification and Acceptance Testing required by IBC or this RFP.
- g. Submit all Interim Special Inspection Reports on a bi-weekly basis until work requiring special inspections is complete. Submit all Structural Observation Reports and the Final Report of IBC Special Inspections.
- h. For any pre-engineered buildings, submit shop drawings showing engineering data and complete building drawings, signed and sealed by a registered professional engineer.
- i. Comply with sustainability submittals per UFGS section 01 33 29 Sustainability Requirements and Reporting included in Part 5 of this RFP.
- j. [Submit FF&E submittals to NAVFAC Interior Designer for review and approval.]
- k. Submit Structural Shop Drawings and structural product data.

1.3 Construction Submittal Process

Provide to the Government submittals as listed. See Section 01 33 10.05 20 Design Procedures for specific design and construction submittal format and approval and surveillance requirements. Design drawings may be prepared more like shop drawings to minimize construction submittals after final designs are approved. Therefore, the Contractor is encouraged to prepare and submit with the design drawings, appropriate connection, fabrication, layout, and product specific drawings.

- a. QC Plan, prior to Design/Construction (may be phased).
- b. Construction submittals, prior to construction, approved in accordance with QC Plan, the DOR or QC Specialist is the approving authority for submittals unless otherwise indicated.
- c. Sustainability Action Plan (and Sustainability Notebook when required) in accordance with 01 33 29 Sustainability Requirements and Reporting.
- d. DOR-approved construction submittals identified for Government surveillance (typically Fire Protection system and Life Safety submittals). Stamp the submittals "FOR SURVEILLANCE ONLY." Submit Surveillance submittals to the Government prior to starting work for that item. Submittals required for surveillance will be returned only if corrective actions are required.
- e. Safety Data Sheets (SDS) as applicable.
- f. Baseline Schedule: due prior to PAK.
- g. Environmental Protection Plan, prior to start of the work.
- h. Contractor Safety Self-Evaluation Checklist.

- i. Accident Reports - submit if incidence occurs.
- j. Accident Prevention Plan and Activity Hazard Analysis: Submit prior to construction.
- k. Schedule of Prices, initial due 21 calendar days after award and a detailed due prior to construction.
- l. Record Drawings, due at Beneficial Occupancy
- m. Operation and Maintenance Information: Due prior to testing as applicable, no later than 30 calendar days before Beneficial Occupancy.
- n. Licenses and Permits: Per this section and Part 4.
- o. Completed High Performance and Sustainable Building (HPSB) compliance checklists in accordance with UFC 1-200-02 High Performance and Sustainable Building Requirements and UFGS Section 01 33 29 Sustainability Requirements and Reporting. Attach completed HPSB Checklist to Interim DD 1354.

[p. DD Form 1354:

Prepare a Draft and Interim DD Form 1354, TRANSFER AND ACCEPTANCE OF MILITARY REAL PROPERTY, in accordance with UFC 1-300-08. Coordinate the identification of appropriate asset construction categories with the Contracting Officer and the Real Property Accounting Officer.

1) Draft DD Form 1354. DOR must determine applicable real property assets broken out by construction categories and submit a "Draft DD Form 1354" for Government approval as a part of the Design Analysis included with the Prefinal Design submittal. "Draft DD Form 1354" must include all quantities and units of measure but does not require cost breakdown. The Real Property Accountable Officer (RPAO) will provide the first draft of the DD1354 to the contractor with RPUIDs and CCNS on it.

2) Interim DD Form 1354. Contractor must coordinate with the DOR and update the Draft DD Form 1354 submission to include any additional assets, improvements, or alterations that occurred during construction. Use the Draft DD Form 1354 [and the UFGS Section 01 20 00 Price and Payment Procedures] to identify costs. The costs and quantities must align with the RPUID and unit of measures listed on the RPAO's draft 1354. Submit the final draft Interim DD Form 1354 to the Government for approval 30 days prior to the Beneficial Occupancy Date (BOD). If modifications to the Interim DD Form 1354 are required by the Government, the corrected version must be submitted prior to the BOD.

3) When documenting demolition work, the DD Form 1354 must list the quantitative data associated with this work as a negative value to show the cost should be deleted from the Navy asset data store. Coordinate with the Installation Real Property POC to assist in determining the negative value for demolition work. There are two ways to account for the demolition portion of the project and to document the reduction of real property: (1) attach an Authorization for Demolition form 18 (Service-specific) to the DD Form 1354 to document category codes and quantities of demolished real property. These should be listed separately from constructed/transferred item numbers; or, (2) indicate, as additional DD Form 1354 item numbers, all demolished real property facility numbers and category codes using negative numbers (shown in parenthesis) for units of measure, and in block 18 indicate N/A for costs. Disposal cost within the footprint of the project is added

into total construction cost of new facility prompting the demolition.]

q. Construction Submittals:

1) In addition to the design submittals noted in Section 01 33 10.05 20, construction submittals will be required. The list of required submittals will be generated from the Contractor-prepared specifications and indicated in the submittal register.

2) Shop drawing submissions will be governed by UFGS 01 33 00.05 20 Construction Submittal Procedures, available on the Whole Building Design website (www.wbdg.org). Contractor must assume a 15-day review period from the time the submittal received through email and eCMS and submittals shall be addressed to COR.

1.4 Organization Responsibilities

Stamp each sheet of each submittal with QC certifying statement or approving statement, except that data submitted in bound volume or on one sheet printed on two sides may be stamped on the front of the first sheet only. Sign certifying statement or approval statement. The person signing certifying statements must be QC organization member, and the signatures must be in original ink; stamped signatures are not acceptable. Retain a copy of approved submittals at project site, including Contractor's copy of approved samples.

a. When approving authority is Contracting Officer, QC organization will certify submittals, assure proper signatures, and forward to Contracting Officer with the following certifying statement:

"I hereby certify that the (equipment) (material) (article) shown and marked in this submittal is that proposed to be incorporated with contract Number (insert contract number here), is in compliance with the contract documents, can be installed in the allocated spaces, and is submitted for Government approval.

Certified by QC Manager _____, Date _____ "

b. When the Approving Authority is the Designer of Record, the DOR must approve, professionally stamp, sign, and date submittals. DOR stamp on construction submittals or submission of design documents that include construction submittals indicates DOR approval for construction. QC organization must certify submittals, assure proper signatures, and forward to Contracting Officer with the following certifying statement:

"I hereby certify that the (equipment) (material) (article) shown and marked in this submittal is that proposed to be incorporated with contract Number (insert contract number here), is in compliance with the contract requirements, can be installed in the allocated spaces, and is submitted for DOR approval.

Approved by DOR _____, Date _____
Certified by QC Manager _____, Date _____ "

1.5 Operations and Maintenance Information (OMSI)

Deliverable		FEAD/ ROICC	IPT	PWO	USER
1	Quality Control Plan	x			
2	Material Safety Data Sheets	x			
3	Design/Construction Schedule	x			
4	Waste Management Plan	x			
5	Safety and Health Plan	x			
6	Schedule of Prices				
7	Budget Management Summary	N/A	N/A	N/A	N/A
8	Record Drawings	x			
9	Operation and Maintenance Information	x			
10	Licenses and permits	x			
11	Badge Requests	X			
12	Statement of Acknowledgement SF 1413	NA			
13	Demolition and Work Plan	X			
14	Design Development Docs	X			
15	Final Design Docs	X			
16	Submittal Register	X			
17	[Waste Management Opportunity Assessment Form]	N/A	N/A	N/A	N/A
18	Performance/Payment Bonds	X			
19	Environmental Protection Plan	X			
20	Certificates of Insurance	X			
21	DD Form 1354	NA			
22	Sustainability Action Plan	N/A	N/A	N/A	N/A
23	Sustainability Notebook	X			
24	NAVFAC High Performance and Sustainable Building (HPSB) Checklist	N/A	N/A	N/A	N/A

1.6 Licenses and Permits

Obtain all appointments, licenses, and permits required to perform work under this contract at no additional expense to the Government. See "Permits Record of Decision" (PROD) form for list of permits. Comply with all applicable federal, state, and local laws, and base regulations and procedures. Provide evidence of such permits and licenses to the Contracting Officer before work commences and at other times as requested by the Contracting Officer (see FAR 52.236-7, *Permits and Responsibilities*). Coordinate permit applications with Navy or local environmental office.

The contractor must submit a complete PROD form with the first design submittal package. A

blank PROD form can be obtained from the NAVFAC Design-Build website at the following link https://www.wbdg.org/FFC/NAVFAC/NDBM/ST/PROD_Form.doc . Contractor must determine correct permit fees and pay said fees. Copies of all permits, permit applications, and the completed PROD form must be forwarded to the Government's Civil Reviewer and Environmental Reviewer.

Contractor is exclusively responsible for his full compliance with patent laws and must affirm that the company is licensed to use equipment and processes the company employs in this project.

1.7 Record Drawings

The as-built modifications must be accomplished by electronic drafting methods on the Contractor-originated DWG design drawings to create a complete set of record drawings. For each record drawing, provide CAD drawing identical to signed Contractor-originated PDF drawing that incorporate modifications to the as-built conditions. After all as-built conditions are recorded on the DWG files, produce a PDF file of each individual record drawing in conformance with FC 1-300-09N. Electronic signatures are not required on record drawings.

01 33 10.05 20 DESIGN SUBMITTAL PROCEDURES

1.1 Summary

This section includes requirements for contractor-originated design documents and design submittals.

1.2 Reference Standards

This RFP references published standards, the titles of which can be found in the Unified Master Reference List (UMRL) on the Whole Building Design Guide at the Unified Facilities Guide Specification (UFGS) [Website](#). The publications referenced form a part of this specification to the extent referenced.

The advisory provisions of all codes, requirements, and standards are mandatory; substitute words such as "must" or "required" for words such as "shall", "should", "may", or "recommended," wherever they appear. The results of these wording substitutions incorporate these code and standard statements as requirements. Reference to the "authority having jurisdiction" is interpreted to mean Contracting Officer or Contracting Officer Representative. Comply with the required and advisory portions of the current edition of the standard at the time of contract solicitation.

Provide work in compliance with the following design standards and codes, as a minimum. Government standards listed in this RFP take precedence over industry standards. The following list of codes and standards is not comprehensive and is augmented by other codes and standards referenced and cross-referenced in the RFP. Refer to Parts 3 and 4 for specific requirements within other UFC's.

- a. U.S. Department of Defense (DoD) Unified Facilities Criteria (UFC)

UFC 1-200-01	DoD Building Code (General Building Requirements)
UFC 1-200-02	High Performance and Sustainable Building Requirements

UFC 1-300-08	Criteria for Transfer and Acceptance of DoD Real Property
FC 1-300-09N	Navy and Marine Corps Design Procedures
UFC 3-560-01	Electrical Safety, O&M
UFC 3-600-01	Fire Protection Engineering
UFC 3-810-01N	Navy and Marine Corps Environmental Engineering for Facility Construction

b. UFC 1-200-01

UFC 1-200-01 DoD Building Code is a hub document that provides general building requirements and references other critical UFCs. A reference to UFC 1-200-01 in the RFP document requires compliance with the Tri-Service Core UFCs. Refer to the UFC 1-200-01 for a complete list of all applicable Tri-Service Core UFCs at website location <https://www.wbdg.org/ffc/dod/unified-facilities-criteria-ufc>. Contractor-originated design documents must provide a project design that complies with the Request For Proposal (RFP), FC 1-300-09N, UFC 1-200-01, UFC 3-810-01N, the Core UFCs, and other UFC's listed above.

1.3 Design Requirements

- a. Provide design documents that include basis of design, design drawings and design specifications, reports and submittal register in accordance with FC 1-300-09N Navy and Marine Corps Design Procedures.
- b. Design is the work necessary to ensure functionality, quality, and safety for critical facets of the project. Special coordination requirements such as for phone, LAN and cable, are included herein.
- c. Part 3 contains the project description, functional and performance requirements, scope items, and expected quality levels that exceed Part 4. Part 4 identifies design criteria, verification requirements, and performance and quality requirements of products.
- d. Provide professional registration and design signing and stamping requirements per requirements of FC 1-300-09N Design Procedures. Interior Designers must be NCIDQ certified per UFC 3-120-10 Interior Design. The design effort must be overseen by a Design Quality Control (DQC) Manager who will ensure that the design meets the requirements of this RFP. The DQC Manager will prepare a DQC Plan describing how the design process will ensure conformance to the RFP.
- e. Provide a Contractor-originated design specification that in conjunction with the drawings, demonstrates compliance with requirements of the RFP. The specified products, materials, systems, and equipment that are approved by the DOR; submitted to the Government by the Contractor; and reviewed by the Contracting Officer must be used to construct the project. Prescriptive specification sections contained in RFP Part 5 must become a part of the Contractor-originated specification without modification. The Contractor must prepare design specifications that include a UFGS specification for each product, material, or system on the project. Organize the specifications using Construction Specification Institute (CSI) Multiformat . Provide project specifications to

include the following:

1. Provide the specification cover sheet with the professional seal and signature of the lead licensed architect or engineer of the project design team. Indicate the Contractor's company name and address on the specification coversheet.
 2. Table of contents for entire specification.
 3. Individual UFGS specification sections for each product, material, and system required by the RFP. Edit UFGS sections in accordance with RFP Part 3 and 4.
 4. If proprietary information is provided or required, include a coversheet for the product, material, or system information that is being proprietarily specified. This information must comply with the related UFGS specification.
 5. If proprietary information is provided or required, include highlighted and annotated Catalog Cuts, Manufacturer's Product Data, Tests, Certificates, manufactures information and letters for each product, material, or system that is being proprietary specified.
 6. Coordinated submittal register for all products, materials, and systems with each design submittal. Provide a cumulative register that identifies the design and construction submittals required by each design package along with previous design submittals. The DOR must assist in developing the submittal register by determining which submittal items are required to be approved by the DOR. Complete all fields in the final submittal register in order to obtain Government approval of the final design.
- f. Identification of Manufacturer's Product Data Used as Specifications: Provide complete and legible catalog cut sheets, product data, installation instructions, operation and maintenance instructions, warranty, and certifications for products and equipment for which final material and equipment choices have been made. Indicate, by prominent notation, each product that is being submitted including optional manufacturer's features and indicate where the product data shows compliance with the RFP. Attach this product data to the end of the applicable UFGS specification section that specifies the material.
- g. Specification Software: Submit the final specification source files in either MS Word or Specs Intact with a Submittal Register generated in Excel or Specs Intact.
- h. Meet sustainability requirements per UFC 1-200-02 High Performance and Sustainable Building requirements and UFGS Section 01 33 29 Sustainability Requirements and Reporting. UFGS Section 01 33 29 Sustainability Requirements and Reporting must be included in Part 5 of all project RFPs.
- i. Submit design drawings or sketches, calculations, and manufacturer's data to demonstrate compliance with contract requirements. The Contractor is encouraged to prepare design drawings more like shop drawings to minimize construction submittals.
- j. Provide electronic copies of design submittal package to the following reviewers 21 calendar days to the in-progress review period.

	Deliverable	FEAD/ROICC	IPT	PWO	USER
	Quality Control Plan	X			
	Accident Prevention Plan	X			
	Environmental Protection Plan	X			

65% Design Development				
Design & Drawing	X		X	X
Basis of Design	X		X	X
Calculations	X		X	X
Specifications	X		X	X
Manufacturer's Shop Drawing (i.e., Switch gear, Switch, and Transformer)	X		X	X
100% Final Design				
100% Design and Drawing	X		X	X
100% Basis of Design	X		X	X
100% Calculations	X		X	X
100% Specifications	X		X	X
IFC package	X		X	X

k. The final design submittal must be professionally signed and sealed by the DOR and forwarded to the Contracting Officer prior to the start of construction. Separated final design packages will only be considered for Government review and approval during the Post Award Kick-off Meeting.

- I. Submit Draft DD Form 1354. See section 01 33 00.05 20 for detailed requirements.

1.4 Order of Precedence

The contract consists of the solicitation, the approved proposal, and the final design. In the event of conflict or inconsistency between any of the below described portions of the conformed contract, precedence must be given in the following order:

- a. Any portions of the proposal or final design that exceed the requirements of the solicitation.
 1. Any portion of the proposal that exceeds the final design.
 2. Any portion of the final design that exceeds the proposal.
 3. Where portions within either the proposal or the final design conflict, the portion that most exceeds the requirements of the solicitation has precedence.
- b. The requirements of the solicitation, in descending order of precedence:
 1. Standard Form 1442, Price Schedule, and Davis Bacon Wage Rates.
 2. Part 1 - Contract Clauses.
 3. Part 2 - General Requirements.
 4. Part 3 - Project Program Requirements.
 5. Part 4 - Performance Specifications exclusive of prescriptive specifications.
 6. Part 5 - Prescriptive Specifications exclusive of performance specifications.
 7. Part 6 - Attachments (Concept Drawings).
- c. Within Part 3- Project Program Requirements Section 5.0 ROOM REQUIREMENTS provides detailed requirements on a room-by-room basis that further defines

requirements that are in addition to the ENGINEERING SYSTEMS REQUIREMENTS SECTION.

- d. Government review or approval of any portion of the proposal or final design does not relieve the Contractor from responsibility for errors or omissions with respect thereto.

01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS

Develop and implement a safety program in accordance with UFGS 01 35 26 in Part 5 of this RFP and EM-385-1-1 Safety and Health Requirements Manual.

1.1 Ergonomics Considerations During Design – Not used.

Design facilities, processes, job tasks, tools and materials to reduce or eliminate work-related musculoskeletal (WMSD) injuries and risk factors in the workplace. Design maintenance access to reduce WMSD risk factors to the lowest level possible. In addition to requirements included in this contract, design must incorporate the requirements of MIL-STD-1472F.

01 45 00.05 20 DESIGN AND CONSTRUCTION QUALITY CONTROL

Establish and maintain a quality control program as described herein.

1.1 Quality Control Plan

Submit a QC Plan for Government review and acceptance prior to the start of construction. Submit the QC Manager's resume for approval prior to all other administrative submittals except for bonds and insurance. The QC plan must include the following:

- a. NAMES, QUALIFICATIONS and RESPONSIBILITIES: For each person in the QC organization (design and construction).
- b. OUTSIDE ORGANIZATIONS: Outside organizations, including architectural and consulting engineering firms and a description of the services these firms will provide.
- c. INITIAL SUBMITTAL REGISTER (DESIGN & CONSTRUCTION): Include submittal reviewer, estimated date of delivery, and identify which design submittals require Government approval prior to construction, and which construction submittals require DOR or Government approval prior to construction.
- d. TESTING LABORATORIES: Accredited laboratories as applicable.
- e. TESTING PLAN AND LOG: Tests required, referenced by specification paragraph number requiring the test, frequency, and person responsible for each test.
- f. LIST OF DEFINABLE FEATURES: A Definable Feature of Work (DFOW) is a task, which is separate and distinct from other tasks, and has the same control requirements and work crews.
- g. COMMUNICATION PLAN: Provide a plan for key decisions and possible problems the Contractor and Government may encounter during the design phase of the project. Communication Plan must indicate the frequency of design meetings and what

information is covered in those meetings, key design decision points tied to the Network Analysis Schedule and how the DOR plans to include the Government in those decisions, peer review procedures, interdisciplinary coordination, design review procedures, and comment resolution.

- h. SPECIAL INSPECTIONS: Provide a list of Special Inspections, testing, approvals, certifications, observations, and quality assurance plans as prescribed in Chapter 17 of IBC.

1.2 Quality Control Manager Qualifications

Appoint a Quality Control Manager responsible for the QC program. The QC Manager may [not] serve as the Quality Control Manager on this project. The QC Manager must have a minimum 5 years of combined experience as a Project Superintendent, QC Manager, inspector, Project Manager, Project Engineer or Construction Manager on previous projects of similar size and complexity. The QC Manager must possess a current certificate showing successful completion of the NAVFAC Contractor Quality Management (CQM) Training.

1.3 Quality Control Manager Responsibilities

- a. Participate in the Post Award Kick-off, Partnering/Pre-Construction Meeting, Design Development and Coordination Meetings and Production Meetings.
- b. Ensure that no construction begins before the DOR has signed and stamped the design for that segment of work, and design and construction submittals are approved as required by the QC Plan.
- c. Immediately stop any work that does not comply with contract plans and specifications and direct the removal and replacement of any defective work.
- d. Prepare QC Reports.
- e. Hold weekly QC meetings with DOR, Superintendent and Government technical team; participation must be suitable for the phase of work.
- f. Ensure that safety inspections are performed. Attend weekly Toolbox meetings.
- g. Maintain submittal log.
- h. Maintain updated as-built drawings on site.
- i. Maintain testing plan and log. Ensure that all testing is performed per contract.
- j. Maintain deficiency log on site, noting dates deficiency identified, and date corrected.
- k. Certify and sign statement on each invoice that all work to be paid under the invoice has been completed in accordance with contract requirements.
- l. Perform Punch-out and Pre-final inspections and participate in Final Inspections. Establish list of deficiencies; correct prior to the Final inspection.
- m. Ensure that all required keys, operation and maintenance manuals, warranty certificates, and the As-built drawings are submitted to the Contracting Officer.

- n. If Commissioning is part of work, engage Commissioning Authority (CxA), coordinate their oversight of Contractor's work, and verify CxA's performance in accordance with UFGS section 01 45 00.05 20.

1.4 Three Phases of Quality Control

Utilize the Three Phases of Quality Control process consisting of:

- a. Preparatory Phase: Review all applicable documents for compliance with all applicable laws, codes, regulations, and the requirements of the contract, including contract drawings and specifications. Determine requirements for testing and certification. Review submittal approvals for materials, equipment, shop drawings, and applicable methods of construction and installation. Include all Preparatory Phase items, along with the Preparatory Phase Checklist and, in the QC Report.
- b. Initial Phase: Observe and inspect the initial portion of the work performed under a DFO to establish the quality of the workmanship, resolve conflicts in construction, ensure that testing is done and certified as required, and to check all work procedures to ascertain the work is in conformance with required safety requirements. Record and report nonconforming work and work not of acceptable quality and requiring correction or rework. Include all Initial Phase items, along with initial phase checklist and, in the QC Report.
- c. Follow-Up Phase: Occurs at the completion of each DFO. Ensure the work follows contract requirements, quality of workmanship for all work is maintained, and all work performed meets safety requirements. Include all Follow-Up Phase items, including date, in the QC Report.

1.5 Contractor Production Report

Prepare Daily Production Reports on forms furnished for this purpose. Submit reports to the Contracting Officer by 10:00 am the following day. Reports must include:

- a. Worker hours by classification, move-on and move-off of construction equipment furnished by the prime, subcontractor or the Government, and materials and equipment delivered to the site.
- b. Safety meetings, checks and inspections.
- c. Disposition of Construction Waste Material: Per Waste Management Plan and per Environmental Protection Plan.

01 50 00 TEMPORARY CONSTRUCTION FACILITIES AND CONTROLS

1.1 Contractor Work Site

Limit use of the premises for work and for storage of material and equipment associated with the contract. Unless otherwise specified or separately agreed to, Government owned material handling equipment, transportation equipment or general tools will not be available for Contractor's use. Clean work area daily and after completion of the work, removing all loose debris and disposing of all non-permanent materials in accordance with the contractor's Waste Management Plan.

- a. Temporary Facilities: The Contractor may provide his own office facilities; coordinate and obtain advance approval from the Contracting Officer. Provide and maintain suitable sanitary facilities within the construction limits of the contract. Dispose of sanitary waste in accordance with the applicable laws, and local regulation.
- b. Contractor-Furnished Equipment: Equipment is subject to the inspection and approval of the Contracting Officer, prior to and during the life of the contract. All equipment and vehicles must display readily visible Contractor identification markings. Relocate stored Contractor equipment which may interfere with operations of the Government or with others on-site.
- c. Contractor-furnished Material: Protect and secure products stored at this site.
 - 1. All replacement units, parts, components, and materials to be used in the maintenance, repair and alteration of facilities and equipment must be new and compatible with the existing equipment on which it is to be used, and must comply with applicable Government, commercial, or industrial standards such as Underwriter's Laboratories, Inc., and National Electrical Manufacturers Association.
 - 2. In addition, submit a current certificate recognized by the State or local authority that states the Contractor has completed at least 10 hours of training in backflow preventer installations.
- d. The Contractor Lay-Down Area(s) will be limited to project site(s).
- e. The entire site must be fenced. Fence must be a minimum of 6 feet high chain link with screen material.

1.2 Temporary Utilities

- a. The Government will provide water and power in reasonable quantities at the prevailing rates.
- b. All labor, material, and equipment necessary to affect temporary utility tie-ins, including transformers, if necessary, will be at the expense of the Contractor and under the surveillance of the Contracting Officer.
- c. The Contractor will be responsible for any damages to Government, private or public facilities and property that may result from the installation and removal of these temporary utility tie-ins. Corrections and repairs will be made at the Contractor's expense.
- d. The actual location and installation of the temporary tie-in, together with any interruptions of utilities systems, must be identified and approved by the Contracting Officer prior to execution. Notify the COR and Station Utilities 15 calendar days prior to any tie-ins.
- e. Permanent utility systems, when indicated, will be available for tie-in.
- f. Telephone and Data Service: Decide with local telephone company, NMCI and other pertinent base communication departments.
- g. Maintain utility services to existing facilities always surrounding the site(s) during construction.

- h. Contractor must install and certify back flow preventers on all connections to the potable water supply system.

01 57 19 TEMPORARY ENVIRONMENTAL CONTROLS

1.1 Unforeseen Hazardous Conditions

Do not disturb hazardous materials and report condition immediately to the Contracting Officer potentially hazardous conditions that are uncovered, or the Contractor becomes aware of that have not been identified in the RFP. This includes hazardous components and materials and contamination (see UFC 3-810-01N Navy and Marine Corps Environmental Engineering for Facility Construction for more information). This includes conditions that are not only hazardous to humans but wildlife, marine life and the environment. Stop work in the area of the questionable material or condition until identification and direction is provided.

1.2 Environmental Protection Requirements

The Contractor must complete and submit evidence of completion of the Environmental Compliance Assessment Training and Tracking (ECATTS) program. For more detailed information on ECATTS see UFGS 01 57 19.

The DOR must edit and submit UFGS 01 57 19 Temporary Environmental Controls. Comply with state and local regulations within the edited UFGS section.

01 74 19 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

Develop a Waste Management Plan that identifies all recyclable material and disposal methods for all material. Contractor must reduce, recycle or salvage as much waste material as possible with a goal of diverting at least 60% of construction waste from landfill. Address waste reduction, recycling and salvage as part of the waste management plan. Report volume or weight of disposed and recycled materials. Report destination of debris diverted from disposal. The Contractor is responsible for removing and disposing of all waste materials generated. Consider all material recyclable or reusable, unless clearly demonstrated the material requiring disposal is waste material.

Submit Construction Waste Management Plan for Government approval within 45 calendar days after contract award. The plan must be approved prior to the start of construction or demolition. Manage demolition debris/waste or deconstruction materials in accordance with the approved construction waste management plan. An approved construction waste management plan will not relieve the Contractor of responsibility for compliance with applicable environmental regulations or meeting project cumulative waste diversion requirement. Ensure all subcontractors receive a copy of the approved Construction Waste Management Plan. The plan demonstrates how to meet the project waste diversion requirement.

The Waste Management Plan must include:

- a. Names of individuals responsible for waste management and waste management tracking, along with roles and responsibilities on the project.
- b. Actions that will be taken to reduce solid waste generation, including coordination with

subcontractors to ensure awareness and participation.

- c. Description of the regular meetings to be held to address waste management.
- d. Description of the specific approaches to be used in recycling/reuse of the various materials generated, including the areas on site and equipment to be used for processing, sorting, and temporary storage of materials.
- e. Name of landfill and/or incinerator to be used.
- f. Identification of local and regional re-use programs, including non-profit organizations such as schools, local housing agencies, and organization that accept used materials such as material exchange networks and resale stores. Include the name, location, phone number for each re-use facility identified, and provide a copy of the permit or license for each facility.
- g. List of specific materials, by type and quantity, that will be salvaged for resale, salvaged and reused on the current project, salvaged and stored for reuse on a future project, or recycled. Identify the recycling facilities by name, address, and phone number.
- h. Identification of materials that cannot be recycled or reused with an explanation or justification, to be approved by the Contracting Officer.
- i. Description of the means by which any materials identified in item (g) above will be protected from contamination.
- j. Description of the means of transportation of the recyclable materials (whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler and removed from the site).
- k. Copy of training plan for subcontractors and other services to prevent contamination by co-mingling materials identified for diversion and waste materials.

******END OF DB RFP Part 2 – General Requirements******

Part 3 - Statement of Work / Project Program

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CHAPTERS

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1.0 PROJECT DESCRIPTION

The project is a Design-Build (DB) to include the replacement of the existing 23.2 kV switchgear at Exchange Switching Station behind B1019. The existing switchgear had experienced failure to include deterioration of cables, switchgear components were none-operational, relays and switch settings failed, loose connections, and damaged spring mechanism, misaligned parts can disrupt switchgear operation and lead to failure and safety concerns and possible larger damaged downstream of the units to include building electrical and controls system.

The current condition of the Exchange Switching Station at the Marine Corps Base in Quantico has reached the end of its useful life (Life span) and it has to be replaced. Multiple components of the switchgear have failed in the past few years.

The contractor shall perform assessment, investigation downstream load calculations of the equipment to size feeders, grounding and duck bank. The assessment report and bases of design (BOD), load calculations and coordination study shall be submitted during the design phase. Remove existing ten (10) EI Nexus 1450 energy meters and reinstall on new switchgear and reprogram. Provide security/safety chain link fence around the exchange switching station with double gates and 3-line barbed wire over the fence. Provide concrete pad mounted 15 KV switchgear with microprocessor-based interrupters. Provide new concrete pads, galvanize chain link fence, with gate & barbed wire galvanized, and grounding.

Provide 2 switchgear (SSA & SSB), 6-way buses with a tie bus in between. The 2 switchgears shall have a total of eleven (11) outgoing and incoming circuits; five (5) outgoing with one spare and one receiving circuit for SSA and four (4) outgoing with one spare and one receiving circuit for SSB. As part of this project, the contractor shall construct or may use the existing concrete pad provided the substation will be operational during the construction. Outages will happen during the switching, rotation, termination and testing only. Contractor shall remove existing ten (10) EI Nexus 1450 energy meters and reinstall on new switchgear and reprogram Contractor will offer means in method to perform the construction to either provide temporary switchgear during the construction to construct the new concrete pad and installation of duck bank before the demolition and installation of new switchgear or reuse the existing concrete pad and duck bank. The means and method will be presented on the drawing and recommendation base on assessment by DOR. Contractor shall minimize the operation impact during construction and switchover The new switchgear shall be in accordance with Section 26 13 00, SF6/High- Fire Point Fluids insulated pad-mounted switchgear.

The new SF6 switch shall be configured and labeled in accordance with the existing units, see Part 6, Existing Schematic Diagram.

The contractor must engage a third party to test the new SF6 switches, cables, terminations and phasing

plan in accordance with NETA regulations prior to turning the switchgear live. Equipment calibration certificate and NETA must be presented by the contractor prior to any testing. All test report shall be submitted to Government Representative.

Before construction can begin, the contractor must submit a phasing plan and obtain government outages approval within forty-five calendar days before the outage schedule, the contractor must submit an outage request for government approval. The contractor shall supply temporary switchgear if deemed necessary to maintain continuous operation during construction/or submit other means that to satisfy the requirement for continues operation. The phasing plan and coordination plan shall be submitted prior to any construction work.

During construction, security measures are necessary to prevent unauthorized persons from entering the Exchange Switching Station (behind B1019) locations.

Demolition and Construction work must take place within regular business hours on weekdays. The schedule utility switchover operations or outage shall be performed during weekend and outage request shall be submitted within 45 calendar days prior to actual outage schedule.

Existing medium voltage electrical distribution drawings and diagrams are available upon request.

2.0 PROJECT OBJECTIVES

The main project objectives are as follows:

The contractor will replace the existing switchgear at Exchange Substation's. The existing 13.2 kV Switchgear have total of eleven (11) incoming and outgoing circuits. One (1) incoming and 5- outgoing circuits including one (1) spare for SSA and SSB have 4 outgoing and 1 – incoming with 1 spare circuits. The switchgear shall be equipped with computer-based fault interrupters or microprocessors that do not require batteries. Remove existing ten (10) EI Nexus 1450 energy meters and reinstall on new switchgear and reprogram to new Switchgear. It is not possible to employ relays or fault interrupters that need batteries for DC control. Replace the galvanized chain-link fence with a gate and galvanized barbed wire, as well as grounding, new wires, conduit, and concrete pads and new galvanize chain link fence with gate. Change the distribution circuits' new switch's configuration.

2.1 APPLICABLE CODES AND STANDARDS

In addition to the codes and standards listed in Part 4, the design and construction must be in accordance with the latest revision/edition of the Regional and State codes and standards. The term "Latest Revision/Edition" is defined as the version as of the project award date.

Attachment "B" – Project Site

1. FC 1-300-09N	<i>Navy and Marine Corps Design Procedures</i>
2. UFC 1-200-01	<i>DoD Building Code</i>
3. UFC 1-300-08	<i>Criteria for Transfer and Acceptance of DoD Real Property</i>
4. UFC 3-201-01	<i>Civil Engineering</i>
5. UFC 3-220-01	<i>Geotechnical Engineering</i>
6. UFC 3-501-01	<i>Electrical Engineering w/Ch. 1</i>
7. UFC 3-550-01	<i>Exterior Electrical Distribution w/Ch.1</i>
8. UFC 3-560-01	<i>Electrical Safety, O&M w/Ch. 2</i>
9. UFC 3-575-01	<i>Lightning and Static Electricity Protection Systems</i>
10. UFGS 01 33 29	<i>Sustainability Reporting for Design Build</i>
11. UFGS 01 35 26	<i>Governmental Safety Requirements</i>
12. UFGS 26 08 00	<i>Apparatus Inspection & Testing</i>
13. UFGS 26 12 19	<i>Pad Mounted MV Transformers</i>
14. UFGS 26 23 00	<i>Switchboards and Switchgear</i>
15. IEEE C2	<i>Rules for Inst. & Manut. of Electrical Supply Stations and Equipment</i>
16. NFPA 70	<i>National Electrical Code (2014)</i>
17. NFPA 70E	<i>Standard for Electrical Safety in the Workplace</i>
18. UFC 1-200-02	<i>High Performance and Sustainable Building Requirements</i>
19. EM-385-1-1	<i>Army Corps of Engineers Safety and Health Requirements</i>
20.UFGS 26-13 -00	<i>SF6/High-Fire point Fluids Insulated Pad-Mounted Switchgear</i>
21.UFC 3-520-01	2005 requirements for advanced metering systems

ADD: 21.UFC 3-520-01

01 32 17.00 20 Cost-Loaded Network Analysis Schedules (NAS)

01 74 19 Construction and Demolition Waste Management

01 78 00 Closeout Submittals

03 30 00 Cast-in-Place Concrete

26 00 00.00 20 Basic Electrical Materials Methods

26 05 19.10 20 Insulated Wire and Cables

33 71 02 Underground Electrical Distribution

2.2 SUSTAINABLE DESIGN

Refer to *UFC 1-200-02, High Performance and Sustainable Building Requirements (2016) w/Change 4*

2.3 STORMWATER MANAGMENT - LOW IMPACT DEVELOPMENT (LID)

Comply with UFC 3-210-10, *Low Impact Development* and FC 1-300-09N *Navy and Marine Corps Design Procedures*. Additional specific LID and stormwater management requirements are found in RFP Parts 3 and 4, Section G30. In addition to LID, comply with State and Local stormwater regulations.

2.4 CYBERSECURITY

All control systems including systems separate from an energy management control system must be designed, acquired, and executed in accordance with DoD Instruction 8500.01, DoD Instruction 8510.01, and as required by individual Facilities Engineering Command (FEC) or installation implementation policy.

2.5 ENGINEERING DESIGN

To create a design solution, the contractor must hire a licensed Electrical and Civil (Site) Engineer.

To guarantee that the facilities served by the Exchange Switching Station continue to function while the current system components are maintained, the design scope must include a survey, verification of the current situation, site design, electrical design, demolition, switching plan, and phasing plan.

Provide a 60% Design Submission, Pre-Final and Final Design submittals. (Refer to FC 01-300-09N.)

Submit electronic copy by email and eCMS for all drawings and submittals.

Hold review meetings for each submission. Make corrections as noted from each meeting. Meeting shall occur at the PWB offices.

Once construction is complete, submit record drawings (As-Built) (source file and PDF copy.).

Submit a completed Form DD1354.

Project Schedule:

- Kickoff Meeting – Within fifteen (15) days after contract award.
- Concept Design Meeting between the Contractor Designer of Record (DOR) and Government personnel – Fifteen (15) days after Kickoff meeting. Anticipate minimum of 2 hour meeting at MCBQ. The DOR will present a Concept Design Solution based on their field investigation(s). The DOR must address the design approach, conformance to UFC requirements, and address any potential impacts for the project's design. The government will provide comments for consideration.

- 60% Design Submission – Sixty (60) days after Notice to Proceed (NTP) or executed contract, whichever occurs first.
- Design Review Meeting – Within Five (5) days of the 60% Design Submission.
- Pre-Final Design Submission – Thirty (30) days after completion of the Design Review meeting.
- Final (100%) Design Submission – Within ten (10) days of the Pre-Final Design review meeting.
- Design Review Meeting – Within five (5) days of Pre-Final Design submittal.
- Start of Construction – Within twenty (20) days of Final Design approval by the Government.
- Construction – Within three-hundred sixty-five (365) day after acceptance by the government of the final design.
- IFC Drawing Package- within ten (10) days of 100% approved design
- Total Period of Performance is 525 calendar days.

3.0 SITE ANALYSIS

3.1 EXISTING SITE CONDITIONS

The Switchgear at exchange substations behind B 1019 has to be demolished and replaced because it has reached the end of its useful life. Many pieces of equipment have failed in the past few years. Relays and switch settings are broken. The safety and security of downstream electrical and building components are at danger due to possible malfunctioning and failure of the switchgears.

Geotechnical Data: NOT USED

3.2 SITE DEVELOPMENT

New medium voltage equipment and enclosures, new medium voltage conductors, splices and terminations, new duct banks, new concrete pads.

4.0 BUILDING REQUIREMENTS

Electrical distribution facility infrastructure, slab, enclosure, and equipment improvements at two sites.

5.0 ROOM REQUIREMENTS

Not Used

6.0 ENGINEERING SYSTEMS REQUIREMENTS (ESR)

A10 Foundations
A20 Basement Construction

B10 Superstructure
B20 Exterior Closure
B30 Roofing
C10 Interior Construction
 C20 Stairs
 C30 Interior Finishes
 D10 Conveying Systems
 D20 Plumbing
 D30 HVACD40 Fire Protection Systems
 D50 Electrical Power and Lighting
 E10 Equipment
 E20 Furnishings
 F10 Special Construction
 F20 Selective Building Demo
 G10 Site Preparations
 G20 Site Improvements
 G30 Site Civil/Mechanical Utilities
 G40 Site Electrical Utilities

A10 FOUNDATIONS

The minimum requirements for the subsurface investigation and report are as required by Facilities Criteria (FC) 1-300-09N with associated references. Perform the soils investigation at the site for use in the design and construction of the new facilities. Perform, at Contractor's expense, subsurface exploration, investigation, testing, and analysis for the design and construction of features such as the electrical substation slab, transformer slab, and utility pole foundation.

Prepare a report including laboratory analysis of samples and recommendations for foundation and pavement design by a Professional Engineer as specified and in accordance with UFC 3-201-01, *Civil Engineering*.

As a minimum, the successful bidder's Geotechnical Engineer must perform additional subsurface exploration and supplementary laboratory testing as necessary to support the design concept.

A20 BASEMENT CONSTRUCTION

Not Used

B10 SUPERSTRUCTURE

Not Used

B20 EXTERIOR CLOSURE

Not Used

B30 ROOFING

Not Used

C10 INTERIOR CONSTRUCTION

Not Used

C30 INTERIOR FINISHES

Not Used

D10 CONVEYING SYSTEMS

Not Used

D20 PLUMBING

Not Used

D30 HVAC

Not Used

D40 FIRE PROTECTION SYSTEMS

Not Used

D50 ELECTRICAL

The electrical design must comply with the design criteria specified in UFC 3-501-01, *Electrical Engineering*, and its referenced documents.

GENERAL ELECTRICAL SYSTEM REQUIREMENTS

Provide an electrical system complete in place, tested and approved as specified throughout this RFP, as needed for a complete, usable, and proper installation. Install all equipment in accordance with the criteria of Section D50 and the manufacturer's recommendations.

Where the word "should" is used in the manufacturer's recommendations, substitute the word "shall." This section of the RFP includes all electrical work on or within the building out to the five (5) foot line. Electrical site work outside the five (5) foot line is covered in section G40.

SUSTAINABILITY: Provide electrical systems and components that support project sustainability and energy goals.

ANTITERRORISM: Provide bracing of electrical equipment which is suspended and weighs more than 31 pounds.

SEISMIC BRACING: Bracing of electrical equipment to resist seismic events is not required based on site seismic design criteria and building importance factor.

ELECTRICAL TESTING: Test new electrical equipment in accordance with NETA acceptance testing specifications. Test existing electrical equipment remaining in service in accordance with NETA maintenance testing specifications.

COMMISSIONING: Commission all systems in accordance with RFP Part 2, Chapter 2, Section 01 33 29.05 20, *Sustainability Reporting for Design Build*; Section 01 91 00.15, *Total Building Commissioning*; and UFC 1-200-02, *High Performance and Sustainable Building Requirements*.

D5010 ELECTRICAL SERVICE & DISTRIBUTION

Provide an exterior distribution system consisting of insulated conductors in conduit.

Provide an insulated equipment grounding conductor in all raceways for systems operating at greater than 50 volts.

D501001 MAIN TRANSFORMERS

Not Used

D501002 SERVICE ENTRANCE EQUIPMENT

Not Used

D501003 INTERIOR DISTRIBUTION TRANSFORMERS

Not Used

D501004 PANELBOARDS

Not Used

D5020 LIGHTING & BRANCH WIRING

One (12') pole mount LED light fixtures at the 6-way switch pad and connect to the existing site lighting circuits

D5030 COMMUNICATIONS & SECURITY

Not Used

D5090 OTHER ELECTRICAL SERVICES

Not Used

D509001 GENERAL CONSTRUCTION ITEMS (ELECTRICAL)

Provide General Construction Items (Electrical) including, but not necessarily limited to: All conductors, connections, terminations, fittings, enclosures, boxes, supports, and associated equipment needed, and other sections of this RFP as required for a complete and usable system.

Where applicable, provide fire stopping for conduits, cable trays and busways that penetrate fire-rated walls, fire-rated partitions, or fire-rated floors in accordance with Section C10, *Interior Construction*.

D509002 EMERGENCY LIGHTING AND POWER

Not Used

D509003 GROUNDING SYSTEMS

Provide a complete Equipment Grounding System (EGS) for the new electrical system(s) including but not limited to switchgear, and switch.

E10 EQUIPMENT

N/A

E20 FURNISHINGS

N/A

F10 SPECIAL CONSTRUCTION

N/A

F20 SELECTIVE BUILDING DEMOLITION

Demolition will be required at the Exchange Switching Station (behind B1019). Phase all construction to ensure continued electrical service to affected facilities.

F2010 Exchange Substation (Switchgear Conversion) Demolition

1. Carefully remove existing 15kV switch
2. Remove existing equipment pad and install new.

3. Remove existing galv chain link fence with gate and install new.
4. Remove existing MV cable
5. Remove existing grounding
6. Remove existing concrete slabs
7. Remove existing energy meters and re-install on new Switchgear.

G10 SITE PREPARATION

SYSTEM DESCRIPTION

Provide site preparation that supports project sustainability goals of UFGS 01 33 29.05 20, *Sustainability Reporting for Design Build*. The site preparation activities consist of site clearing, demolition, salvage, relocation, earthwork, and hazardous waste remediation to ready the site for other work associated with the project.

GENERAL SYSTEM REQUIREMENTS

Develop the project site and perform off-site work necessary to meet the requirements of the project, antiterrorism criteria, local codes, reference standards, technical specifications, and performance criteria.

Prior to starting work, physically verify the location of all existing utilities and obtain additional survey data required to provide a quality final design. Perform a topographic survey in accordance with FC 1-300-09N, *Navy and Marine Corps Design Procedures*. Include the topographic survey in all design submittals.

The existence, size, and location of the utilities are not guaranteed by the surveys provided. Verify the location of all utilities prior to construction.

Electronic files of the topographic surveys will be provided to the Contractor only after award of the Contract. Previous site plans of the existing site are being provided to the Contractor in lieu of a topographic survey. Perform a topographic survey of the project area that will be impacted by the work in accordance with FC 1-300-09N, *Navy and Marine Corps Design Procedures*. Include the topographic survey in all design submittals.

The existence, size, and location of the utilities are not guaranteed by the provided site plans. Verify the location of all utilities prior to construction.

The Design-Build Contractor must contact Miss Utility to schedule utility marking and must obtain a current Miss Utility Project Number. The Design-Build Contractor must provide the Miss Utility Project

Number to the Contracting Officer's representative. The Design-Build Contractor shall be responsible for keeping all utility markings current during construction.

Additional survey must include test pit verification of all connection points when located at points other than manhole structures and field-located fittings (e.g., valves, blow-offs, etc.) and at points where new utilities will cross existing utilities.

Additionally, as part of the utility investigation, the contractor shall:

1. Research and confirm existing utility locations, including abandoned line(s).
2. Provide utility type, pipe size, material, horizontal and vertical location, etc.
3. Confirm utility connection points.
4. Unless otherwise noted, provide new facilities at the locations indicated on the drawings in Part 6.
5. Minimize the impact of construction activity on operations and neighboring facilities.
6. Identify and obtain permits to comply with federal, state, and local regulatory requirements associated with the work.
7. Submit a complete Permits Record of Decision (PROD) form with the first design submittal package. A blank PROD form can be obtained for download under Part 6 Attachments of the NAVFAC Design-Build website.
8. Determine correct permit fees and pay said fees.
9. Forward copies of permits, permit applications, and the completed PROD form to the Government Civil Reviewer and Environmental Reviewer.
10. Perform work in accordance with the obtained permits.

The Contractor must include in the site development plan: Traffic Control Plan, new haul route(s), work site access point(s), employee parking location(s) and material laydown and storage area(s) for the Government Civil Engineer review and approval, unless otherwise directed by NAVFAC.

Refer to *Site Analysis* and *Building Requirements* sections for additional site preparation functional program information.

GOVERNMENT-PROVIDED GEOTECHNICAL INFORMATION

A geotechnical investigation report, including subsurface soil information, is not included in this RFP.

Perform the soils investigation at the site for use in the design and construction of the new facilities.

Perform subsurface exploration, investigation, testing, and analysis for the design and construction of features such as the building foundations, pavement section(s), stormwater management facilit(ies), and utility structure foundations.

Prepare a report including laboratory analysis of samples and recommendations for foundation and pavement design by a Professional Engineer as specified, and in accordance with the latest version of the following facilities criteria: FC 1-300-09N *Navy and Marine Corps Design Procedures*, UFC 3-201-01, *Civil Engineering*, and UFC 3-220-01 *Geotechnical Engineering*.

As a minimum, the successful bidder's Geotechnical Engineer must perform additional subsurface exploration and supplementary laboratory testing as necessary to support the design concept. Provide

personnel under the supervision of a registered Professional Engineer to inspect excavations and soil/groundwater conditions throughout construction.

The Engineer is required to perform preconstruction and periodic site visits throughout construction to

assess site conditions. The Engineer, with the concurrence of the Contractor and the Contracting Officer, is required to update the excavation, sheeting, shoring and dewatering plans as construction progresses to reflect actual site conditions and is required to submit the updated plan and a written report (with professional stamp) at least monthly informing the Contractor and Contracting Officer of the status of the plan, and an accounting of Contractor adherence to the plan; specifically addressing any present or potential problems.

The Engineer must be available to meet with the Contracting Officer at any time throughout the Contract

duration. Provide the services of the Engineer at no additional cost to the Government.

It is important to note that the presence of loose or compressible soils may result in excessive settlement that could impact the performance of surface bearing structures and supporting facilities such as foundations, slabs, pavements, sidewalks, and utilities. The magnitude and duration of consolidation settlement will be dependent on the composition, depth, and thickness of the compressible soils as well as the successful bidder's design concept.

The Contractor's Geotechnical Engineer is responsible for evaluating potential global settlement due to designed grade increases and final structural loads. The Contractor's Geotechnical Engineer must develop any settlement mitigation procedures (such as preloading, surcharging, fill monitoring programs, and ground improvement systems) needed to maintain global settlements within tolerable limits.

Surcharge material, if required, must remain in place for a minimum of 90 days.

G1001 Exchange Switching Station (behind B1019)

Provide design, equipment, excavation, materials, and labor necessary to demolish and form a new medium voltage switchgear concrete duct bank system and equipment slab(s) at the Exchange Switching Station (behind B1019)

Construct all equipment slabs and duct banks in accordance with UFGS 26 12 19.10.

Provide new cast-in-place concrete equipment slabs, where necessary, according with manufacturer recommendations and UFC standards.

G1002 H-POLE SUBSTATION SITE PREPARATION

G1010 SITE CLEARING

Minimize removal and disposal of all trees required for project construction.

Burning will not be allowed.

All grubbing and clearing residue, demolished material, rubbish, and debris generated by this project must be hauled off-site and off station by the Contractor.

G1020 SITE DEMOLITION & RELOCATIONS

Preserve the following **above ground** site elements:

Preserve the following **underground** elements:

Remove all appurtenances associated to any utility to be removed so there is no presence of the utility at ground surface. Any utility systems to be abandoned must be done in a manner that removes their presence from the ground surface, and clearly indicates that they have been abandoned.

- a. Remove existing 15kV switchgear with all components
- b. Remove existing Switchgear dist section
- c. Remove existing concrete slabs
- d. Remove existing galv chain link fence, with gate & Barbed wire galv

G1030 SITE EARTHWORK

Provide grading so the site will drain. Blasting for rock excavation will not be permitted.

Provide materials required more than those resulting from excavations from off Government property.

All unsuitable material and surplus excavation must become the property of the Contractor and must be disposed of off Government property. De-water all excavated areas.

G1040 HAZARDOUS WASTE REMEDIATION

No hazardous waste remediation is anticipated for this project.

G20 SITE IMPROVEMENTS

Provide accessibility in conformance with applicable requirements of [UFC 1-200-01](#) , *General Building Requirements*.

SYSTEM DESCRIPTION

Provide site improvements that support project sustainability goals of Part 2 Section 01 33 29.05 20, *Sustainability Reporting for Design-Build*. The site improvements consist of pavements and pavement related features, landscaping and other exterior site development work related to this project.

Provide a pavement design by a licensed Professional Engineer familiar with conditions local to the project site. Site design will include coordination with the Civil Engineer.

GENERAL SYSTEMS REQUIREMENTS

Provide site improvements as required to make a useable facility that meets functional and operational requirements, incorporates all applicable anti-terrorism, force protection and physical security requirements and blends into the existing environment.

Provide accessibility in conformance with requirements of UFC 1-200-01, *DoD Building Code (General Building Requirements)*. Identify and obtain permits to comply with federal, state, and local regulatory requirements associated with this work. Complete the Permits Record of Decision (PROD) form with the first design submittal package. Determine correct permit fees and pay said fees.

Forward copies of permits, permit applications, and the completed PROD form to the Government's Civil Reviewer. Perform work in accordance with the obtained permits. Provide site improvements that support project sustainability goals.

Design and develop new site improvements within the Limits of Disturbance (LOD). Minimize the impact of construction activity on operations and neighboring facilities. Locate new site improvements at locations indicated on the drawings in another part of this RFP.

If specific locations are not provided, site the improvements to develop appropriate and positive relationships with other facilities and to conform to existing development patterns. Refer to Site Analysis and Building Requirements Sections for additional site improvement functional program information.

G2010 ROADWAYS

G2020 PARKING LOTS

If parking spaces need to be removed, provide parking summary table on the Site Plan showing the number of existing spaces and the number of existing spaces removed. Repair parking in lots

of bituminous (asphalt) pavement.

Design repair pavement sections in accordance with UFC 3-201-01, *Civil Engineering* and UFC 3-250-01, *Pavement Design for Roads and Parking Areas*.

G2030 PEDESTRIAN PAVING

Not Used

G2040 SITE DEVELOPMENT

G2040 SITE DEVELOPMENT

Provide reinforced concrete utility pads designed to support the weight of the new Exchange Substation with 15KV SF6 switch medium voltage switch and other associated electrical equipment.

G2050 LANDSCAPING

Prevent erosion from occurring by providing erosion control measures as required by city, state and federal requirements.

G205005 PLANTINGS

Preserve existing trees to the greatest extent possible. Select plant material from Master Plant Lists found within the Installation Appearance Plan (IAP). Other plants not found on these lists may be used if approved by the reviewing Government Landscape Architect. Final approval of all new plant materials rests with the reviewing Government Landscape Architect.

G30 SITE CIVIL/MECHANICAL UTILITIES

SYSTEM DESCRIPTION

The site civil/mechanical utility systems include water supply systems, sanitary sewer systems, storm drainage systems, heating distribution systems, cooling distribution systems, fuel distribution systems and associated appurtenances which are more than 5 feet (1.5 meters) outside of the existing building location and new work area.

GENERAL SYSTEM REQUIREMENTS

Develop the site to provide water, fire protection, sanitary sewer, storm drainage, heating, cooling and fuel distribution services that meet the requirements of each regulatory agency that governs and issues permits for the construction and operation of these systems. Site design is required to comply with UFC 3-210-10, *Low Impact Development*, as well as state or local stormwater management regulations and project sustainability goals.

Provide each system complete and ready for operation. Physically verify the location of existing above and below ground utilities prior to starting work.

Identify and obtain permits to comply with all federal, state, and local regulatory requirements associated with this work. Complete the Permits Record of Decision (PROD) form with the first design submittal package. Determine correct permit fees and pay said fees. Forward copies of

permits, permit applications, and the completed PROD form to the Government's Civil/Mechanical Reviewer. Perform work in accordance with the obtained permits.

Minimize the impact of construction activity on facility operations and neighboring facilities.

Utility connection points are indicated on the drawings in Part 6. Obtain final approvals from the Government's Civil/Mechanical Reviewer and the Contracting Officer for utility connection points associated with this work. Coordinate with the local utility providers and pay fees or charges required to connect to their utility.

Disciplines involved in site work design must coordinate utility locations with the Civil Engineer and the Landscape Architect. Refer to *Site Analysis and Building Requirements* Sections for additional site civil/mechanical utilities information.

Provide fittings, connections and accessories required for a complete and usable system. Install equipment in accordance with PTS Section G30 and the manufacturer's recommendations.

Where the word "should" is used in the manufacturer's recommendations, substitute with the word "must."

Submit training plan 30 calendar days prior to training sessions; include scheduling, content, outline, and training material handouts.

Provide site civil/mechanical utility systems and components that support project sustainability goals of Part 2 Section 01 33 29.05 20, *Sustainability Reporting for Design Build*.

G3010 WATER SUPPLY

The existing water system serving the project site is maintained by MCB Quantico.

G3020 SANITARY SEWER

N/A

G3030 STORM SEWER

The existing storm sewer system serving the project site is maintained by MCB Quantico. Confirm that the existing outfall has adequate capacity to receive the additional stormwater flow generated by the project.

G303001 STORM SEWER PIPING

The following materials for the repair of storm sewer piping are not allowed: PVC, reinforced concrete pipe, corrugated steel, corrugated aluminum, polyethylene (PE), polypropylene (PP).

G303006 EROSION & SEDIMENT CONTROL MEASURES

The contractor will provide minimum erosion and sediment control measures in accordance with local and federal regulations.

G303007 STORM WATER MANAGEMENT

G40 SITE ELECTRICAL UTILITIES

The electrical design must comply with the design criteria specified in UFC 3-501-01, *Electrical Engineering*.

All primary distribution systems must be designed as four wire, multi-grounded systems that are Wye-connected at the source transformer. A system grounded (neutral) conductor must be provided throughout the system. Equipment intended to interrupt current at fault levels must have interrupting ratings sufficient for the nominal circuit voltage and the current that is available at the line terminals of the equipment.

This section covers installations out to the building 5-foot (1.5 meter) line. Select electrical characteristics of the power system to provide a safe, efficient and economical distribution of power based upon the size and types of electrical loads to be served. Use distribution and utilization voltages of the highest level that is practical for the load to be served. Provide a minimum of 20 percent spare conduits at all levels of the power distribution system including any standby power systems.

Ensure a minimum of 3m (10 ft) clear workspace in front of pad-mounted equipment for hot stick work. Provide bollards in areas where equipment is subject to vehicular damage.

UNDERGROUND ELECTRICAL CONDUCTORS

Underground primary electrical distribution must comply with UFC 3-501-01, *Electrical Engineering* and UFC 3-550-01, *Exterior Electrical Power Distribution*.

GENERAL SYSTEM REQUIREMENTS

Provide complete Electrical Systems, in place, tested and approved, as specified throughout this RFP as needed for a complete, usable and proper installation. Install all equipment in accordance with PTS Section G40 and the manufacturer's recommendations.

Where the word "should" is used in the manufacturer's recommendations, substitute the word "must."

Provide site electrical utilities systems and components that support project sustainability goals of DB RFP Part 2, Section 01 33 29.05 20, *Sustainability Reporting for Design Build*.

G4010 ELECTRICAL DISTRIBUTION

This new 2ea 6-Way will be part of the new electrical Exchange Switching Station (Switch Gear Conversion) system in the following configuration.

G401001 SUBSTATIONS

The SF6 switches shall be of dead-front construction with stainless steel tanks and operator full size viewing windows for each switching way. The switches will be three-position (On/Off/Ground) switch ways. The switch design shall incorporate operating handles on the opposite side of the tank from the cable entrance bushings, terminations, and cables.

For every switch route, supply 600 ampere dead-break connectors with 200 ampere interface bushings. All SF6 switches must have ground fault circuit indicators and protection relays installed.

The new switch gear shall include provisions for advanced metering and switchgear controls to be seamlessly compatible with the existing Base Energy Management Control System (EMCS)

Network, and capable of being controlled from MCB Quantico's Energy Control Center. The base EMCS consists of control devices connected via LAN to a central database.

The new switchgear shall be capable for integration with SCADA system on the base.

Provide new equipment grounding system.

G401002 TRANSFORMERS

G401003 MEDIUM VOLTAGE SWITCHES

The new SF6 switches will have three positions (On, Off, and Ground) and be dead front with stainless steel tanks and full-size viewing glass for operators.

The new SF6 switches must have a Ground Fault indication, terminations and cables, and operational handles on the other side of the tank from the cable entrance bushings. For every switch path, supply 600-amp dead break connectors with 200-amp interface bushings.

For unused bushings, provide one or more industrial-rated load break insulated protective caps.

G401004 MEDIUM VOLTAGE CABLES

G4030 SITE COMMUNICATION & SECURITY

The design shall include provisions for support, equipment, and labor required to seamlessly integrate and update Cyber Security Accreditation to meet current cybersecurity Authority to Operate (ATO) requirements.

The electrical system shall be safe, reliable, flexible, and maintainable.

Prior to the first design submission, the Contractor must conduct a meeting with MCB Quantico G6 to determine quantities and types of communication cable support systems to be provided with the new equipment, communication and metering systems shown under sections D50 and G40.

Work by the contractor shall include:

Provide temporary and permanent distribution support systems for existing telephone, Communications, Antenna and CATV Cables and related equipment affected by construction.

Direct-buried cables emerging from the ground shall be installed in rigid conduit or sleeved when installed on wooden utility poles. **Minimum conduit size shall be $\frac{3}{4}$ inch.**

Provide a complete grounding system for the facility electrical and telecommunications systems.

The grounding shall comply with NFPA 70, NFPA 780, IEEE and all applicable UFCs as a *minimum* design standard.

Existing grounding electrode system(s) may be reused, where practical.

A separate equipment grounding conductor shall be provided for feeder and branch circuits.

Metal conduit/duct shall not be used for the sole purpose of grounding.

NOTE: If any code or standard conflict arises during the performance of this project, the UFC standard shall prevail.

*** END OF DB RFP PART 3 SOW ***

Part 4 Minimum Materials, Engineering and Construction Requirements

1.0 GENERAL REQUIREMENTS

The requirements indicated here are minimum performance requirements. More specific project functional and performance requirements, scope items and expected quality levels over and above the standards in Part 4 are identified in Part 3 of the Request for Proposal or Basic Ordering Agreement. The Contractor is encouraged to exceed the minimum requirements. The Contractor's performance evaluation will be based in part on enhancements to materials, engineering, design and construction provided for the contract that exceed minimum requirements.

Part 4 is a general section. Not all items in Part 4 will be required for this project. See Part 3 for project-specific requirements. See "Contract and Order of Precedence" paragraph in Part 2 for relationships between all parts of the RFP.

In general, unless otherwise indicated, provide all labor, equipment and materials necessary to complete the work required for the contract. All work must be in conformance with all applicable referenced criteria, construction standards, laws and regulations, including applicable building fire and life safety codes.

Recycled Materials Considerations:

An Affirmative Procurement Program has been established within the Federal government to promote the purchase of products containing recovered materials. This program promotes the purchase of products containing materials recovered from the solid waste stream. The intent is to conserve resources and reduce solid waste by developing markets for recycled products and encouraging manufacturers to produce quality recycled content products. Use products that meet or exceed the EPA guideline standards for recovered content as required by the Federal Acquisition Regulations (FAR). Availability lists of manufacturers and EPA research on product usage are on the Construction Criteria Base (CCB) at www.wbdg.org/ccb/ccb.php under Documents Library, NAVFAC Criteria. A partial list of products containing recycled materials for possible use is as follows:

- Rock Wool Insulation
- Fiberglass Insulation
- Cellulose Insulation
- Cement and Concrete - Coal Fly Ash
- Crushed Concrete Aggregate for new asphalt, concrete or subgrade
- Cellulose spray applied fireproofing

1.1 MATERIALS AND METHODS OF CONSTRUCTION

Only new materials and equipment are to be installed in the work. All materials, equipment and appliances must be of the current manufacturers' products. Do not use obsolete or discontinued materials, equipment, and appliances, except that construction materials containing recycled

content as described in Paragraph 1 of this Part that completely comply with all materials specifications found elsewhere in this Part may be used.

1.2 APPLICABLE CODES AND STANDARDS

The design and construction must be in accordance with established construction practices, and the latest revision/edition of the following referenced codes and standards. The term "Latest Revision/Edition" is defined as the version as of the project award date. References are available at www.wbdg.org/ndbm/. The advisory provisions of all codes and standards is mandatory, as though the word "must" had been substituted for "should" wherever it appears. Reference to the "authority having jurisdiction" is to be construed to mean "Contracting Officer". Comply with the required and advisory portions of the current edition of the standard at the time of contract award. All work must comply with UFC 1-200-01, *General Building Requirements*, and IBC 2009 or later edition as modified by applicable NFPA Standard as well as codes and standards listed in RFP Part 2.

1.3 LOCATION-SPECIFIC CODES AND STANDARDS

See Part 3.

1.4 DISCREPANCIES

When discrepancies in the referenced standards and the contract requirements occur, the more stringent requirements govern. The word "should" in all NFPA publications is to be interpreted as a requirement. The Authority Having Jurisdiction in the interpretation of the codes and standards, and approving the exceptions allowed in the referenced standards, is the Contracting Officer, and the parties designated by the Contracting Officer.

2.0 PERFORMANCE TECHNICAL SPECIFICATIONS

Note: The paragraph numbers used correspond with the numbers used in UNIFORMAT II/Work Breakdown Structures (WBS) as listed in the Whole Building Design Guide, Navy Design Build Master, accessible at this website: www.wbdg.org/ndbm/.

D50 ELECTRICAL

D5010 ELECTRICAL SERVICE & DISTRIBUTION

Provide interior electrical wiring, fixtures, switches, outlets, and apparatus in accordance with applicable codes and standards. The electrical system must conform to NFPA 70. Power and lighting circuits must be separate.

1. **Wiring:** All wiring must be in electrical metal conduits and must be concealed except in the industrial spaces and at locations indicated in Part 3. No conductors are permitted to be smaller than No. 12 AWG, copper wires. Wiring below slab or underground must be in Schedule 40 PVC with ground wire. Exposed conduits on the exterior of the building are prohibited. Provide a ground conductor for each circuit; conduits must not be used as

the sole means of grounding. Cable assembly Types AC, MC, or MI and flat conductors may only be used in locations allowed by UFC 3-520-01. Circuit breakers must be bolt-on type. Series rated circuit breakers and fusible panelboards must not be used.

2. **Service Entrance Equipment:** When a switchboard or switchgear is required, the Designer of Record must utilize UFGS Section 26 23 00, Low Voltage Switchgear or UFGS 26 24 13 Switchboards, for the project specification, and must submit the edited specification section as a part of the design submittal for the project.

D5090 OTHER ELECTRICAL SERVICES

1. **Surge Protective Device (SPD):** Provide SPD in accordance with UFC 3-501-01, *Electrical Engineering*.
2. **Variable Frequency Drives:** When variable frequency drives are required, the Designer of Record must utilize UFGS Section 26 29 23 for the project specification and must submit the edited specification section as a part of the design submittal for the project.
3. **Emergency Generators:** When an emergency generator is required, the Designer of Record must utilize UFGS Section 26 32 15.00 for the project specification and must submit the edited specification section as a part of the design submittal for the project.
4. **Automatic Transfer and Bypass/Isolation Switches:** When an Automatic Transfer Switch is required, the Designer of Record must utilize UFGS Section 26 36 23 for the project specification and must submit the edited specification section as a part of the design submittal for the project.
5. **Uninterruptible Power Supply (UPS) System:** When a UPS system is required, the Designer of Record must utilize UFGS Section 26 33 53 and must submit the edited specification section as a part of the design submittal for the project.
6. **400 Hertz Systems:** The Designer of Record must utilize UFGS Section 26 35 43 for the project specification and must submit the edited specification section as a part of the design submittal for the project.
7. **Lightning Protection:** When lightning protection is required, the Designer of Record must utilize UFGS Section 26 41 00 for the project specification and must submit the edited specification section as a part of the design submittal for the project.

SECTION G. BUILDING SITEWORK

G10 SITE PREPARATIONS

1. **General Requirements:** Building site work includes site preparation, site improvements, site civil/mechanical utilities, site electrical utilities, exterior furnishings, landscaping, and irrigation. Provide site work in accordance with UFC 3-201-01, *Civil Engineering*.
2. **Project Limitations:** Prior to the start of design, determine the exact limit-of-work line for the project periphery, considering items such as, but not limited to, utility work, landscape re-vegetation of disturbed areas, and lay down areas. The Civil Engineer of Record in coordination with other design team disciplines must determine limit-of-work lines. Minimize the impact of construction activity on operations and neighboring facilities.
3. **Geotechnical Data:** Not used.
3. **Temporary Erosion & Sediment Control:** Develop and implement temporary erosion and sediment control measures and other Best Management Practices (BMPs) prior to or in conjunction with commencement of earthwork in accordance with the state Erosion and Sediment Control Laws and Regulations. Remove all non-permanent erosion control measures after vegetation is fully established. Maintain temporary erosion control measures in accordance with state Erosion and Sediment Control Laws and Regulations throughout the project until areas are fully stabilized.

G1010 SITE CLEARING

1. **Existing Utilities:** When the Contractor is to work at a site that has existing utilities, the contractor is responsible for coordination with Contracting Officer and utility companies for staking out, capping, connection and relocation of any existing utility systems or traffic interruption. Notify utility locator service for area where Project is located before site clearing.
2. **Interruption:** All interruption to the existing utilities and traffic must be coordinated with and approved by the Contracting Officer not less than 45 calendar days in advance of such interruption.

G1020 SITE DEMOLITION & RELOCATIONS

Abandon utility systems in-place conforming to applicable codes and regulations, removing their presence from the ground surface and clearly indicating that they have been abandoned. Remove utilities underneath or within 3.0 m (10 feet) of any new facilities. Fill abandoned gravity systems with flowable fill. Fill abandoned utility system piping under pavements subject to potential vehicle loading with flowable fill.

Remove existing utility structures to 900 mm (3 feet) below existing or new adjacent grade, whichever is greater. Break up bases to permit drainage. Fill with clean sand.

Comply with the requirements of the utility provider concerning utility relocation.

G1030 SITE EARTHWORK

The DOR must utilize UFGS Section 31 23 00.00 20 for the project specification and must submit

the edited section as a part of the design submittal. Perform quality assurance for earthwork in accordance with UFGS Section 31 23 00.00 20. If sheeting/shoring or dewatering is required, the Contractor must provide a registered Professional Engineer to provide excavation, sheeting, shoring, and dewatering plans and inspection of excavations and soil/groundwater conditions throughout construction. The Engineer must be responsible for performing pre-construction and periodic site visits throughout construction to assess site conditions. The Engineer, with the concurrence of the contractor and the Contracting Officer, must update the excavation, sheeting, shoring, and dewatering plans as construction progresses to reflect actual site conditions and must submit the updated plan and a written report (with professional seal) at least monthly informing the Contractor and the Contracting Officer of the status of the plan and an accounting of Contractor adherence to the plan; specifically addressing any present or potential problems. The Engineer must be available to meet with the Contracting Officer at any time throughout the contract duration.

G20 SITE IMPROVEMENTS

Provide site improvements as required to make a useable facility that meets functional and operational requirements, incorporates all applicable anti-terrorism, force protection and physical security requirements and blends into the existing environment.

Provide site improvements in conformance with applicable requirements of the Uniform Federal Accessibility Standards.

1. **Pavements:** For work in and adjacent to existing pavements, the Contractor is required to match the existing adjacent finish elevation, materials, paving section and texture, and pavement markings, unless otherwise indicated in Part 3 or directed by the Contracting Officer.

Provide pavement design and pavement section materials in accordance with UFC 3-201-01, *Civil Engineering*. Provide pavement markings in accordance with the SHS. Design materials for life expectancy of at least 3 years under an average daily traffic count per lane of approximately 9000 vehicles. Water based paints must have durability rating of at least 4 when determined in the wheel path area. Provide a half-rate initial marking application on bituminous pavements. Provide the remaining application at the end of the normal curing period.

2. **Traffic Control:** If the site work involves interference with normal vehicular and or pedestrian traffic, the Contractor must coordinate with the authority having jurisdiction, propose and obtain approval for traffic control measures that may be required in performance of the work required by the contract.

G4010 ELECTRICAL DISTRIBUTION

1. **Electrical Utilities Design and Construction:** Site electrical utilities include all exterior electrical work, including the connection to the primary distribution system. This also includes telephone and cable television supplies.

Provide electrical overhead and underground, distribution systems in accordance with IEEE C2 (National Electrical Safety Code), NFPA 70, local utilities company

requirements, and local Activity guidelines.

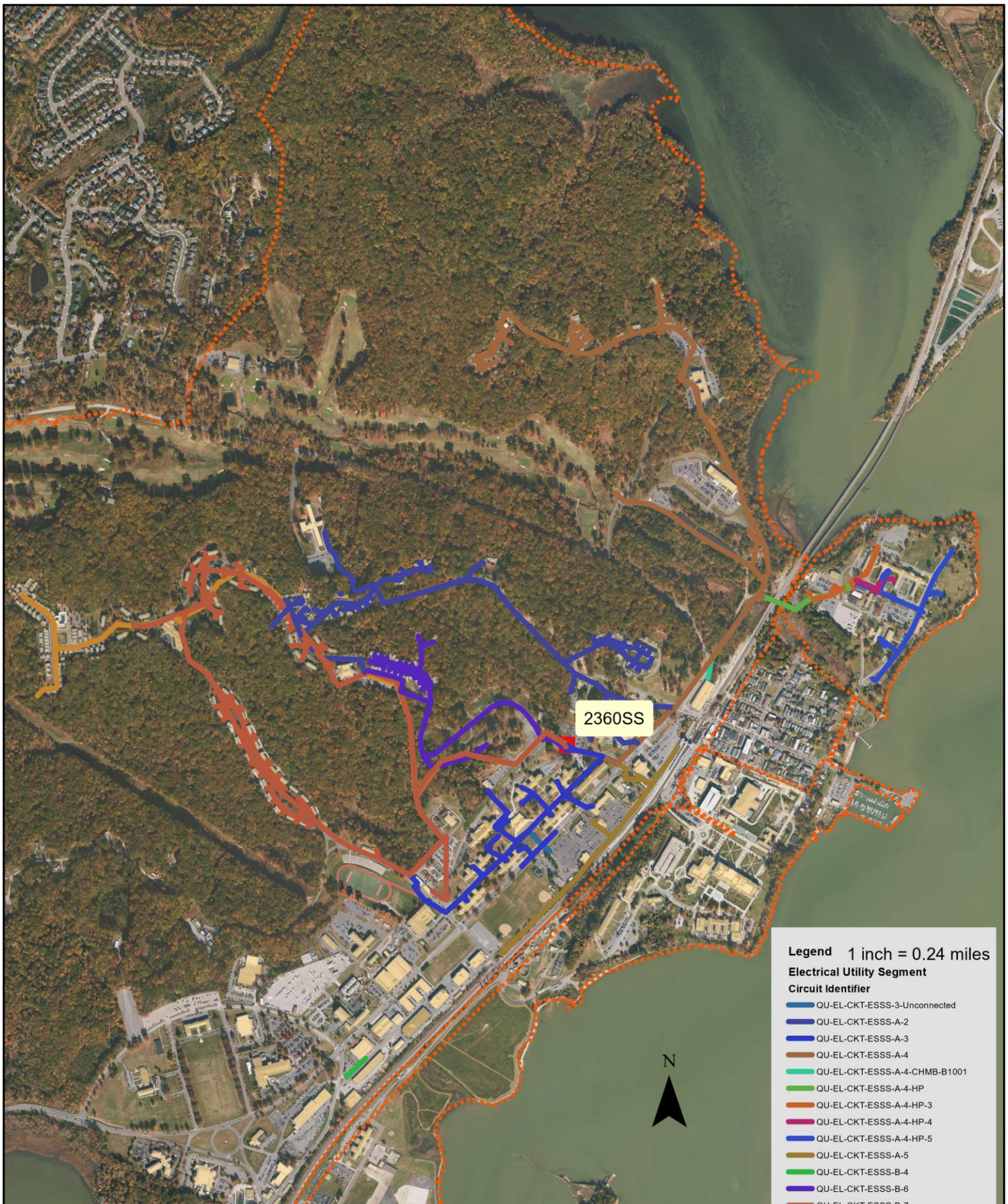
2. **Coordination With Local Utilities Company and Local Activity:** Service meters for electrical services must be provided and installed in conformance with the local utilities company requirements and local activity guidelines.
3. **Substations:** When secondary unit substations are required, the Designer of Record must utilize UFGS Section 26 11 16, *Secondary Unit Substations*, and UFGS Section 26 23 00, *Low-Voltage Switchgear*, or UFGS 26 24 13, *Switchboards*, for the project specification, and must submit the edited specification section as a part of the design submittal for the project.
4. **Transformers:** When transformers are required, the Designer of Record must utilize UFGS Section 26 12 19.10, *Three-Phase, Liquid-Filled Pad-Mounted Transformers*, UFGS Section 26 12 21, *Single-Phase Pad-Mounted Transformers*, or UFGS Section 33 71 01, *Overhead Transmission and Distribution*, for the project specification, and must submit the edited specification section as a part of the design submittal for the project.
5. **Switches, Controls and Devices:** When switches or control devices are required, the Designer of Record must utilize UFGS Section 26 13 00, *SF6/High-Fire point Fluids Insulated Pad-Mounted Switchgear*, or UFGS Section 33 71 01, *Overhead Transmission and Distribution*, for the project specification, and must submit the edited specification section as a part of the design submittal for the project.

*****End of DB RFP Part 4*****

DB RFP Part 5 - Prescriptive Specifications [NOT USED]

Part 6 Attachments

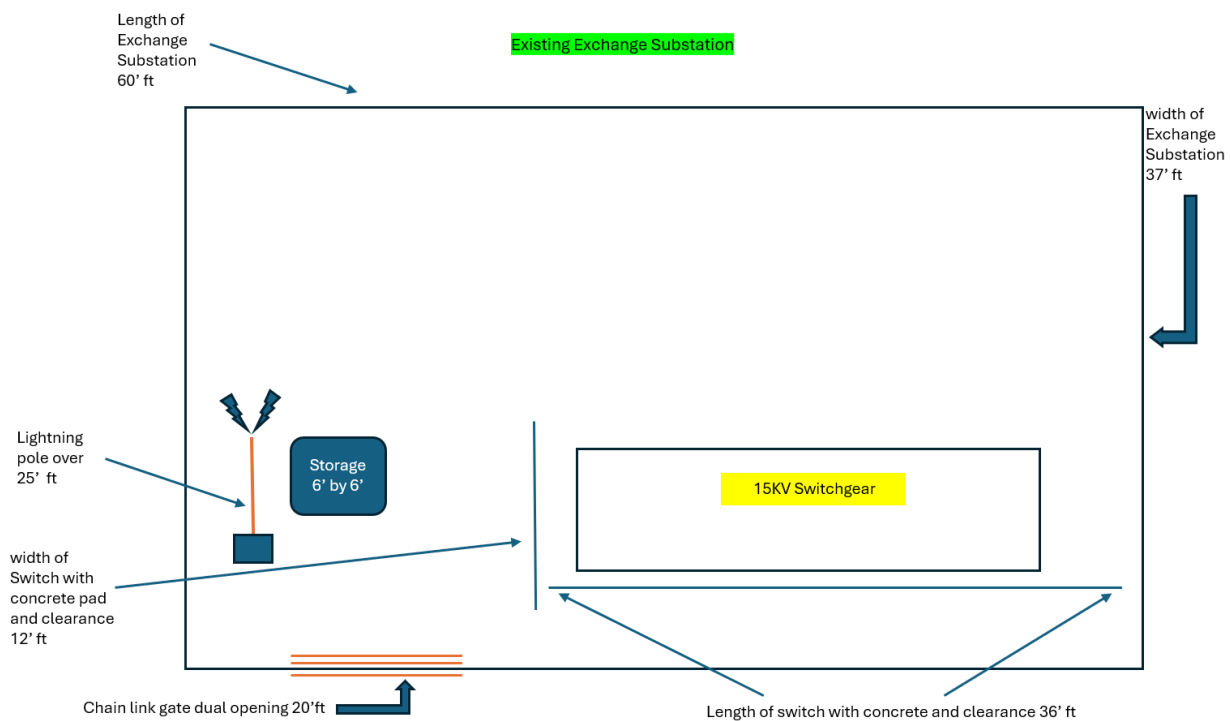
Part 6 contains information that will help the contractor develop a suitable design and construct without hindrance.



The location of Exchange Switching Station (behind B1019)







*****END OF DB RFP PART 6*****

*****END OF DB RFP*****

Attachment Project Site



Attachment “C” – Nexus 1250 Energy Meters, Existing



