U.S. General Services Administration
Office of Program and Project Management
Office of Federal and Leasing Projects

Statement of Work
for
Design-Build Services

PROJECT IDENTIFICATION

Project Title:	IRS Fire Alarm Modernization - Design-Build Services
Building:	IRS Headquarters
Building ID #:	DC0022
Building Location:	1111 Constitution Avenue, NW Washington, D.C. 20224
Project Authorization:	VDC00239
Kahua Number:	19845
SOW Author:	Danielle Jones

TABLE OF CONTENTS

1. PROJECT INFORMATION 4
1.1. PROJECT SUMMARY 4
1.2. PROJECT BACKGROUND 4
1.3. CONTRACT TYPE 5
1.4. DELIVERY TYPE 5
1.5. PROJECT OBJECTIVES 5
1.6. PROJECT SCHEDULE 5
2. SCOPE OF WORK 6
2.1. PROJECT REQUIREMENTS 6
2.2. PROJECT SITE REQUIREMENTS 9
2.3. STANDARDS AND CRITERIA DOCUMENTS 11
2.4. CUTTING & PATCHING REQUIREMENTS 13
2.5. NATIONAL HISTORIC PRESERVATION ACT (NHPA) REQUIREMENTS 14
2.6. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REQUIREMENTS 15
2.7. ACCESSIBILITY REQUIREMENTS 15
2.8. SAFETY AND OCCUPATIONAL HEALTH REQUIREMENTS 15
2.9. FIRE PROTECTION AND LIFE SAFETY REQUIREMENTS 16
Any deviations from these requirements shall be specifically approved by the regional fire protection engineer. Waivers for International Building Code or NFPA 72 requirements will not be granted. 17
2.10. HAZARDOUS MATERIAL REQUIREMENTS 21
2.11. BUILDING CONTROL SYSTEMS, INCLUDING BUILDING AUTOMATION SYSTEMS (BAS) AND BUILDING MONITORING AND CONTROL (BMC) SYSTEMS 22
2.12. CONNECTIONS TO FEDERAL GOVERNMENT BUILDING SYSTEMS NETWORKS (BSN) 23
2.13. COMMISSIONING 23
2.14. PROJECT MANAGEMENT INFORMATION SYSTEM (PMIS): KAHUA 23
2.15. MANUFACTURER REQUIREMENTS 23
3. DESIGN STAGE 23
3.1. PRE-DESIGN PHASE 24
3.2. DESIGN PHASE 24
4. CONSTRUCTION STAGE 29
4.1. GENERAL 29
4.2. PERMITTING 29
4.3. CONSTRUCTION SCHEDULE 30
4.4. CONSTRUCTION PROGRESS REPORTS 31
4.5. SHOP DRAWINGS / PRODUCT DATA SUBMISSIONS 31
4.6. SCHEDULE OF INSPECTIONS AND TESTS 32
4.7. CONSTRUCTION INSPECTIONS 32

4.8. SPECIAL INSPECTIONS 33
4.9. COMMISSIONING 33
4.10. QUALITY CONTROL PLAN 33
4.11. SAFETY PLAN 36
4.12. COORDINATION OF WORK 36
4.13. REQUESTS FOR INFORMATION 36
4.14. MODIFICATIONS / CHANGE ORDERS 36
5. CONTRACT ADMINISTRATION 36
5.1. CONTRACTOR'S STAFF 36
5.2. MEETINGS 37
5.3. COMMUNICATION 38
5.4. PROJECT CLOSEOUT 38
5.5. SCHEDULE OF VALUES 40
5.6. FEE & PAYMENT 40
5.7. GOVERNMENT FURNISHED PROPERTY 40
6. ATTACHMENTS 41

1. PROJECT INFORMATION

This section provides an overview of the project.

1.1. PROJECT SUMMARY

The existing emergency voice fire alarm system at IRS has reached the end of its useful life and needs to be replaced. The fire alarm system in the Internal Revenue Service Headquarters Building is antiquated and does not meet current GSA facility standard or building code requirements. The existing Edward Signal, EST 3 fire alarm system was installed with analog devices. The fire alarm system is a general evacuation sequence. The fire alarm system monitors manual pull stations, spot-type detectors, duct detectors, sprinkler system, emergency generator, heat detectors, etc. There was a head-end system upgrade to include voice capabilities in the building in 2017. The manufacturer no longer supports the equipment, nor are spare parts readily available. The reliability of the system is questionable and if the system fails the building and occupants will be without a centralized way to be notified in the event of an emergency. The main fire alarm control panel is located in a security office near the main entrance. A new emergency voice communication system shall be installed to ensure operational integrity of the building fire alarm system, improve long-term maintenance capabilities, and avoid costly building disruptions if the existing fire alarm system experiences failures. The existing system needs to be upgraded to provide emergency voice communication features and to comply with the National Fire Alarm Code and current GSA requirements. See Section 2.1 for detailed project requirements.

The D/B Contractor shall coordinate work and gain approvals required in this Statement of Work (SOW) with the Contracting Officer (CO) and Contracting Officer's Representative/Project Manager (COR/PM) as required.

1.2. PROJECT BACKGROUND

The Internal Revenue Service Headquarters Building is a federal building which serves as the headquarters of the Internal Revenue Service. It is located at 1111 Constitution Avenue, Northwest, Washington, D.C. (corner of 12th Street). The IRS Headquarters Building is a principal part of the Federal Triangle District, which extends from 4th street west between Constitution and Pennsylvania Avenues to 15th street. Construction of the Federal Triangle began in the late 1920's and was finally completed in the 1990's with the construction of the Ronald Reagan Building. Its historic architectural structures define the axis between the Capitol Building and the White House. This building houses 2,600 employees of the IRS headquarters staff, including the Office of the Chief Counsel of The Treasury Department. The building contains 1,404,880 gross square feet and 63 courtyard parking spaces. The building is a Type IB construction and NFPA 220 construction Type II(222). The building is fully sprinkler protected and considered Group-B occupancy as defined by the IBC

This project includes the design and installation of a new and complete digital/addressable network voice evacuation system, a new bi-directional amplifier two-way radio communications enhancement system, and a new two-way communication system at the (Internal Revenue Service Headquarters Building). The system shall include all wiring, raceways, pull boxes, terminal cabinets, outlet and mounting boxes, control equipment, alarm and supervisory signal initiating devices, alarm notification appliances, and all other accessories and miscellaneous items required for complete operational systems even though each item is not specifically mentioned or described. The scope will include the monitoring of existing Elevator, Computer Room, and other remote Fire Alarm Control Panels existing in the building. Devices connected to these remote panels shall remain.

All construction work is to take place within an occupied Government facility during non-operating hours. The existing fire alarm system must remain operational during construction. The Government anticipates that the final phase of the project shall consist of demolition and recycling or disposal of the existing system.

1.3. CONTRACT TYPE

This contract is a firm fixed-price contract. The services required shall include, but shall not be limited to, the following:

- Contract Management
- Professional Architect/Engineer Services
- Construction Services including Materials, Labor, and Supervision
- Professional Inspection and Testing Services

1.4. DELIVERY TYPE

The project is a Design-Build delivery type.

1.5. PROJECT OBJECTIVES

To be considered successful, the project must achieve the following objectives:

- Deliver the project on time and within budget
- Complete the project with no security violations or safety incidence
- Establish and maintain positive relations with the tenant(s), public authorities, jurisdictions and neighborhood
- Ensure a safe work environment during construction for workers and authorized visitors on the construction site
- Manage the completion of the project with the spirit of partnering and without litigation
- Provide timely reports and communications
- Ensure that all sensitive documents are handled, distributed, archived and destroyed according to established project procedures
- Follow all security requirements in the delivery of this project

1.6. PROJECT SCHEDULE

The overall Period of Performance shall be 815 calendar days from Notice To Proceed (NTP) to Project Closeout, based on the following:

● Design Services	275 calendar days after NTP
● Submit All HSPD-12 Clearance Applications	Not Later Than 95% Design Submission
● Construction to Substantial Completion	436 calendar days after 100% Approval
● Project Closeout (as defined in Section 5.4.)	104 calendar days after Substantial Completion

2. SCOPE OF WORK

This section details the technical requirements and constraints for which the D/B Contractor is responsible.

The Scope of Work indicated is not intended to limit the design of the D/B Contractor's Architect/Engineer (A/E). Variation from the Scope of Work will be considered by GSA, if the proposed change is within the construction budget limitations, meets the objectives for the project, and results in an improved design. The Contracting Officer and the COR/PM must approve all proposed changes to the Scope of Work.

2.1. PROJECT REQUIREMENTS

2.1.1. Base Bid

D/B contractor to provide all management, engineering, design, labor, and materials to install a new network digital addressable emergency voice alarm communication system, network digital-addressable emergency voice alarm communication system, a new bi-directional amplifier two-way radio communications enhancement system, and a new two-way communication system throughout the building. The existing building fire alarm system shall remain operational throughout the duration of construction.

D/B contractor shall be responsible for providing the services of an A/E to provide a complete set of construction documents prior to system installation. Construction documents shall include all architectural, electrical, mechanical, and fire protection design efforts, and shall include any special considerations for historical preservation, lobby finishes, and hazardous materials abatement. The fire alarm design shall be performed by a fire protection engineer in accordance with the requirements of PBS Interim Core Building Standards. Fire alarm design shall include all control equipment and initiating devices required to interface with existing building HVAC, emergency power (life safety), security (door locking/turnstiles), elevator, and fire pump/sprinkler systems. At a minimum construction documentation shall include floor plans showing location of all fire alarm control equipment, initiating devices, notification appliances, vertical and horizontal network circuit locations, system architecture riser diagram, and operational matrix. Upon acceptance of the "Issue for Construction" set of construction documents by the government the contractor shall provide a set of NFPA 72 compliant shop drawing submittals that have been reviewed and approved by the fire protection engineer of record, and any other submissions required by the contract documents or specifications.

D/B contractor shall be responsible for hiring the services of the building's preferred vendor for Operations and Maintenance support, or technicians for fire alarm, sprinkler/fire protection, and elevator system support for the installation, inspection, and acceptance of the new fire alarm system.

D/B contractor shall be responsible for providing the services of a third-party fire protection engineer to witness NFPA 72 required acceptance testing and confidence testing on behalf of the GSA regional fire protection engineer. The third-party fire protection engineer may not be the fire protection designer of record for the fire alarm system.

Minimum Design and Installation Requirements:
Any deviations from these requirements shall be specifically approved by the regional fire protection engineer. Waivers for International Building Code or NFPA 72 requirements will not be granted.

- Provide a networked digital addressable emergency voice communication system in accordance with the most recent requirements of PBS Interim Core Building Standards, International Building Code, and NFPA 72, National Fire Alarm and Signaling Code. The emergency communication system must provide an automatic voice message in response to the receipt of a signal indicative of a fire emergency. Manual control with the capability of making live voice announcements must also be furnished to provide occupants notification on either a selective or all-call basis. Fire alarm control panels and remote transponder panels shall be distributed throughout the building such that a single panel serves no more than three (3) floors.
- Fire alarm system must have a minimum of three distributors in the general area that can service the fire alarm system.
- Where remote fire alarm control panels are installed, they shall be provided at a terminal cabinet location. Each remote fire alarm control panel shall be powered from a wiring riser specifically for that use or from a local emergency power panel located on the same floor as the remote fire alarm control panel. Where remote fire control panels are provided, equipment for notification appliances may be located in the remote fire alarm control panels.
- Provide a secondary remote command fire alarm control panel with manual paging and emergency notification messaging capabilities in the tenant security command center. Priority control of the building fire alarm system shall be with the fire alarm control panel located in the fire command center. Visual indication of the fire alarm control panel with control functions shall be provided. There shall be a soft key request and grant access process with a minimum 15-second timeout between the two command center locations.
- Provide system capability for the initiation of pre-recorded emergency notification messages from the main and secondary command fire alarm control panels. Message verbiage to be determined and approved during the design phase of the project.
- Provide a separate elevator smoke detection control panel in each elevator machine room. Elevator smoke detection control panels shall not be part of the building fire alarm system network. Elevator smoke detection control panels shall be monitored by the base-building fire alarm system for alarm, supervisory, and trouble conditions via control relays and monitor modules.
- All fire alarm signals (i.e., alarm, supervisory, and trouble signals) must be automatically transmitted to a supervising station evaluated by Underwriters Laboratories (UL) to UL Standard 827, Central Station Alarm Services (UUFX Category Code). The communication methods used to transmit signals to the supervising station must meet the requirements in NFPA 72. Two different communication paths are required to be provided. Contractor to consider other communication methods approved by the GSA regional fire protection engineer and GSA IT in lieu of POTS connections.
- Provide a listed surge protection device on the supply side of each fire alarm control panel for overvoltage protection in accordance with the requirements of NEC.
- Provide manual fire alarm boxes (pull stations) throughout in accordance with the spacing and location requirements in NFPA 72. Manual pull stations installed in public areas located on the ground floor of a building must be equipped with a protective cover to prevent unwanted alarms without restricting legitimate operation.

- When smoke detection is installed in rooms having high voltage equipment, the smoke detection must not be installed directly above the high voltage equipment.
- Replace existing fire/smoke door closure hardware with integral smoke detection with new ceiling mounted smoke detection, electromagnetic door hold open devices, and new UL-listed fire exit door closing hardware. D/B contractor shall not be responsible for any adjustments to the existing doors that do not permit self-closing or self-latching (only the door closers themselves).
- Duct smoke detectors and associated operations must be provided as outlined in NFPA 90A. Operation of a duct smoke detector must initiate a supervisory signal at the fire alarm control panel.
- The design for achieving the required minimum dBA levels from audible notification appliances must take into consideration all building construction materials such as carpeting, hard surfaces, walls, doors, etc., and any other materials that can cause sound level attenuation and/or clarity problems in the placement and location of all audible notification appliances. In addition, all new emergency communication systems must include audible notification appliances in all normally occupied rooms and spaces unless an engineering analysis demonstrates adequate sound levels will be achieved without appliances in each room or space.
- Fire alarm speakers must be installed in elevator cars and exit stairways; however, they must only be activated to broadcast live voice messages (e.g., manual announcements). The automatic voice messages must be broadcast through the fire alarm speakers on the appropriate floors, but not in stairs or elevator cars.
- To prevent external tapping of the audio/speaker circuit(s) serving a sensitive compartmented information facility (SCIF), any of the following methods are permitted to be used:
  - Self-amplified speakers
  - Remote dedicated amplification
  - Remote signal modules
- All alarm signals transmitted from any fire alarm system initiation device must activate the respective building audible and visible notification appliances to notify the occupants.
  - Exception: Where approved by the GSA Regional Fire Protection Engineer, smoke detectors used solely to initiate elevator recall and smoke detectors located at doors for the exclusive operation of automatic door release are permitted to initiate a supervisory signal in lieu of an alarm signal.
- The fire alarm and emergency communication system must be designed for selective evacuation. The GSA regional fire protection engineer must establish a dialogue with the project team fire protection engineer to determine specific evacuation strategies for the building and subsequent operational features of the fire alarm system. This includes, but is not limited to, determining how and where the “fire zone” and “safe area zone” messages are used. The visible alarm notification appliance circuits must not be activated on floors designated as safe area zones.
- Two vertical risers (e.g., supply and return inter-connected network circuits Class X) must be installed as far from each other as practicable so that a single fire does not impact both risers. The two vertical risers must be protected as follow:

    - Buildings that are protected by an automatic sprinkler system installed in accordance with NFPA 13, and circuits installed in metal raceway meet a pathway survivability of Level 1 as defined in NFPA 72.
  - The horizontal interconnections between the two vertical risers must be protected as follows:
    - Buildings that are protected by an automatic sprinkler system installed in accordance with NFPA 13, and circuits installed in metal raceway meet a pathway survivability of Level 1 as defined in NFPA 72.
  - All circuits (speaker/audio, SLC, network, and/or power) necessary for the operation of the notification appliances must be protected until they enter the evacuation signaling zone (usually a floor) as follows:
    - Buildings that are protected by an automatic sprinkler system installed in accordance with NFPA 13, and circuits installed in metal raceway meet a pathway survivability of Level 1 as defined in NFPA 72.
  - A minimum of two distinct fire alarm audible notification appliance circuits and a minimum of two distinct visible notification appliance circuits must be provided on each floor.
  - Provide a minimum of two (2) Class B Signaling Line Circuits (SLC) per floor. The system must be designed and installed so that a single open, wire to wire short, or any other Class B impairment on an SLC does not affect more than 2,415 m^2 (26,000 ft^2) of gross floor area. The floor SLCs must be isolated from the SLC risers and network.
  - New two-way communication systems for occupant use that are installed in area of refuge(s), elevator landing(s), and elevator lobby(s) must meet the following requirements:
    - Two vertical risers (e.g., supply and return inter-connected network circuits Class X) must be installed as far from each other as practicable so that a single fire does not impact both risers.
    - All pathways must comply with NFPA 70.
    - Two-way communication systems installed in buildings that are protected by an automatic sprinkler system installed in accordance with NFPA 13, and circuits installed in metal raceway meet a pathway survivability of Level 1 as defined in NFPA 72.
- Auditorium and the vestibule next to it are considered historic spaces and will require special design considerations.
- Construction and design is required to meet all new construction requirements per PBS Interim Core Building Standards.
- Childcare center fire alarm system shall be tied into the new fire alarm system.
- Childcare fire alarm system shall also be upgraded, replaced and redesigned to meet code requirements.
- Childcare center shall be designed to the latest GSA Childcare design guide.
- The project is not a change in use of space.
- The project is not a change in occupancy.
- All designs must be fully approved prior to the start of any construction.

2.2. PROJECT SITE REQUIREMENTS

2.2.1. Work Restrictions

The D/B Contractor shall survey the entire worksite and review existing documentation to be familiar with the existing conditions. This includes all areas of the building, structure, and site affected by the

removal and demolition work, and alterations and new construction work, prior to initiation of design work.

During the construction period, the D/B Contractor shall have full use of the designated premises for construction operations, including full use of the indicated work site, limited only by the Government's right to perform work, or retain other contractors to perform work, on portions of the project. The D/B Contractor shall limit the use of the premises to the work areas indicated, and to allow for Government occupancy and public use.

The building is to remain fully operational throughout the entirety of the project, with no disruption to tenant operations. All work areas must be cleaned at the end of every work day.

The work shall be sequenced to minimize disruption to building occupants, visitors, and maintenance activities. To the greatest extent feasible, demolition work should not take place until supplies are on hand to perform new work.

The D/B Contractor shall coordinate all work activities with the GSA Building Manager and the COR/PM to ensure that proper security and access arrangements are made without impact on the construction schedule.

2.2.2. Working Hours

2.2.2.1. Government Occupied Hours

Government personnel are scheduled to occupy the building during the following hours on weekdays, Monday through Friday, except for established Government Holidays, 6:00 AM to 6:00 PM.

2.2.2.2. Contractor's Working Hours

All work is required to be performed outside of Government Occupied Hours.

Work accomplished outside of Government Occupied Hours shall be performed at no additional cost to the Government. The D/B Contractor shall submit a proposed schedule and gain the COR/PM approval at least 72 hours before proceeding with any work during Government Unoccupied Hours.

2.2.3. Loading Dock

Use of the existing loading dock facilities will be shared with Government activities on a first-come-first-served, wait-your-turn basis. The loading dock is available for the delivery of materials, tools, and supplies between the hours of 8:00 AM to 4:00 PM. Loading dock activities shall be coordinated with the GSA Building Manager a minimum of 72 hours in advance.

2.2.4. Parking

Limited parking is available on-site. 3 parking spots will be made available for the D/B Contractor’s use.

2.2.5. Staging and Storage

The D/B Contractor may be provided a staging area within the building, contingent upon GSA approval, and provided that its use will not interfere with operations of the Government. No GSA employees will assist with unloading/loading of vehicles(s). The D/B Contractor shall provide all personnel and equipment needed for unloading, moving, and assembling the materials.

2.2.6. Dumpster

No space is available on-site for a dumpster. Material is expected to be hauled off at the end of each work shift. Use of existing building dumpsters and trash bins is strictly prohibited.

2.2.7. Restrooms

Restrooms are available for use as designated the Building Manager.

2.2.8. Freight Elevator

A freight elevator is available for use at the project site.

2.2.9. Existing Conditions

All Government property or systems displaced, altered, or damaged during the performance of this contract other than stated in this SOW shall be restored to its original condition at no cost to the Government. These repairs, if needed, shall be executed immediately when the Contractor is notified by the Contracting Officer that such repairs are required due to actions by the contractor or his/her subcontractors.

2.2.10. Electrical Circuits Updates

The D/B Contractor shall update the circuit-panel index for every electrical circuit modified as a part of this SOW. The D/B Contractor shall update the panel schedule for all new circuits added, and identify all new outlets by indicating the electrical room, panel and breaker identification. All junction boxes shall be labeled with panel and breaker numbers.

2.3. STANDARDS AND CRITERIA DOCUMENTS

The D/B Contractor shall ensure that all design, work performed, and materials used, under this scope of work are in accordance with the guidelines, codes and specifications of the following associations and agencies. Any conflicts or ambiguities within, or among, the referenced Standards and Criteria Documents, or any deviations from requirements contained in the Standards and Criteria Documents, shall be reported to the COR/PM in writing, for determination as to applicability. The Contractor shall use the most recent versions of these documents issued at the time the RFP for the project is issued. In the event that there are conflicting requirements, the more stringent of the two shall be used.

2.3.1. GSA Requirements

- PBS Interim Core Building Standards including all applicable Standards, Criteria and Guides listed therein
- PBS P-120, Public Buildings Service Cost and Schedule Management Policy Requirements
- PBS Order 3490.3 CHGE 1, "Security for Sensitive Building Information Related to Federal Buildings, Grounds, or Property", March 22, 2021
- PBS CAD Standards, March 10, 2021

- IAQ Guidelines for Occupied Buildings under Construction by SMACNA
- Occupational Safety and Health regulations for Construction and General industry; 29 CFR Parts 1926 and 1910
- International Code Council Codes (ICC)
- National Fire Protection Association (NFPA) National Fire Codes and Standards
- Egress issues shall meet NFPA 101 Life Safety Code
- ANSI NETA Standards
- OFM COBie Playbook (see attachments)
- PBS EASi/EDMS File Naming Requirements (see attachments)
- Section 889
- PBS Building Commissioning Guide (September 2020)
- National Historic Preservation Act of 1966, as amended, and its implementing regulations (36 CFR 800)
- SECTION 28 48 00 - EMERGENCY RADIO COMMUNICATION ENHANCEMENT SYSTEM (ERCES) (see attachments)
- SECTION **[**28 3176**][**28 3164**]** - **[**FIRE ALARM VOICE EVACUATION SYSTEM**][**FIRE DETECTION AND FIRE ALARM SYSTEM**]** (see attachments)
- HISTORIC STRUCTURES REPORT MARCH 1981 (see attachments)
- Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68)
- ADM 1020.3A: GSA Procedures for Historic Properties (February 2024)
- 40 CFR 61 National Emission Standards for Hazardous Air Pollutants
- 40 CFR 763 Asbestos
- 49 CFR 107 Hazardous Materials Program Procedures
- 49 CFR 172 Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements
- EPA Mold Remediation Guidelines, September 2008
- Section 02085 - Asbestos Abatement Procedures (see attachments)
- GSA BIM Guide 02 - Spatial Program Validation (see attachments)
- GSA BIM Guide 07 - Building Elements (see attachments)
- GSA BIM Guide 08 - Facility Management (see attachments)

2.3.2. Tenant Agency Requirements

None

2.3.3. Stakeholder Requirements

None

2.3.4. Building Management and Controls (BMC) and Federal Government Building Systems Network (BSN) Connection Requirements

- 7002.1 ADM GSA Smart Buildings
- Smart Buildings Implementation Guide Requirements (see attachments)
- Smart Buildings Program Guide (see attachments)
- GSA Data Normalization for Building Automation Systems (see attachments)

- GSA National Capital Region Advanced Metering Systems (AMS) Guide (see attachments)
- Niagara NiCS Statement (see attachments)
- Security and Privacy Controls for Federal Information Systems and Organizations, NIST 800-53
- Guide to Industrial Control Systems (ICS) Security, NIST 800-82
- GSA IT Building Technology Technical Reference Guide (BTTRG) (see attachments)
- Telecommunications Distribution Design Guide, Telecommunications and Infrastructure Standards (see attachments)
- GSA Order 2100.1M GSA Information Technology (IT) Security Policy (see attachments)
- IT Security Procedural Guide: Key Management CIO-IT Security-09-43 (see attachments)
- IT Security Procedural Guide: Building Monitoring and Control (BMC) Systems Security Assessment Process CIO-IT Security-16-76 (see attachments)
- IT Security Procedural Guide: Managing Enterprise Cybersecurity Risk CIO-IT Security-06-30 (see attachments)
- 2180.2 CIO GSA Rules of Behavior for Handling Personally Identifiable Information (PII) (see attachments)
- 2181.1 ADM Homeland Security Presidential Directive-12, Personal Identity Verification and Credentialing, and Background Investigations for Contractors (see attachments)
- 2100.2C CIO P GSA Wireless Local Area Network (LAN) Security guide (see attachments)
- GSA IT Policy Requirements Guide 12-2018 (see attachments)
- GSA IT Security Procedural Guide: Security and Privacy Requirements for IT Acquisition Efforts CIO-IT Security-09-48 (see attachments)
- GSA IT Security Procedural Guide: SSL TLS Implementation Guide - CIO-IT Security 14-69 (see attachments)
- PBS Technology Policy (see attachments)

2.4. CUTTING & PATCHING REQUIREMENTS

Destructive testing is permitted to expose concealed conditions during the Design Phase.

The D/B Contractor shall replace, patch, and repair material and surfaces cut or damaged by methods and with materials in such a manner as not to void any existing warranties.

All substrates must be inspected and defects repaired prior to installing new material or finish. All replacement and new materials shall match the existing in material, dimensions, color and finish. All material selections and/or mock-ups need to be reviewed and accepted by the COR/PM and Tenant Agency prior to ordering.

2.4.1. Structural Systems

Do not cut structural beams or major structural elements without the written review and approval of a Licensed Structural Engineer. Additionally, the COR/PM shall obtain review and acceptance from GSA's OPDQ's structural engineer and A/E's structural engineer. Prior to cutting and/or drilling through any structural member, the Contractor shall conduct ground penetrating radar, or similar type of investigative measure to prevent cutting concealed material. Submit structural calculations sealed by a Licensed Structural Engineer to the COR/PM concurrently for acceptance.

Do not cut and patch structural elements in a manner that would change their load-carrying capacity or load-deflection ratio.

2.4.2. Operational Systems

The D/B Contractor shall not cut and patch operating elements, safety related systems, or related components in a manner that would result in reducing their capacity to perform as intended, or that would result in increased maintenance, or decreased operational life or safety.

2.4.3. Visual / Finishes

The D/B Contractor shall not cut and patch construction exposed on the exterior, or in occupied spaces, in a manner that would, in GSA's opinion, reduce the building's aesthetic qualities, or that would result in visual evidence of cutting and patching. The Contractor shall remove and replace construction that is cut and patched in a visually unsatisfactorily manner.

Patched areas shall be neatly trimmed prior to patching. Feather all patches to provide a complete and finished surface. Paint all exposed work provided under the contract including all patched areas, and exposed areas uncovered during demolition, to provide a complete and finished project. Paint patched areas and surrounding areas to the nearest break in wall surface, or other building line to provide a neat and finished appearance. All paint shall match adjacent painted surfaces. Protect all surrounding areas including fixtures, furniture, floors and accessories from paint splatter and droppings. Clean and restore all areas splashed with paint.

Any work related to removing equipment, brackets, supports, etc. that leaves holes or damaged surfaces on the floor, walls, and ceilings, shall be patched with the same adjacent material and finish.

2.5. NATIONAL HISTORIC PRESERVATION ACT (NHPA) REQUIREMENTS

This building is listed in the National Register of Historic Places. The D/B Contractor shall coordinate design and construction documents with the GSA Regional Historic Preservation Office (RHPO). The RHPO will provide guidance on preservation zones and appropriate treatments. The resulting proposed design/preferred alternative will be the basis for the Section 106 consultation with the DC State Historic Preservation Office (SHPO), if required.

- Recommendations shall be in compliance with the Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Buildings.
- All recommendations shall be reviewed by the GSA RHPO. The RHPO will review all submissions in their entirety for impact on restoration, rehabilitation and renovation zones as defined in the HSR.

For an overall fire protection plan and to emphasize the project team's responsibility to address fire protection and to preserve the historic integrity of historic structures, the project team must explore alternative approaches outlined in state rehabilitation codes, International Existing Building Code, and national performance-based codes to resolve conflicts between prescriptive code requirements and preservation goals. In addition, the requirements and recommendations in NFPA 914 must be considered for rehabilitation projects in historic structures. Early and frequent coordination between the architects, state historic preservation officer, regional historic preservation officer, preservation specialists, external review groups, and the project team's fire protection engineer is needed for timely resolution of conflicts between fire safety and preservation goals. Before the design development submission for a project in a historic building, the project team fire protection engineer must consult

with the GSA regional historic preservation officer and the GSA regional fire protection engineer regarding the impact of the fire protection design features as required.

In historically significant spaces, notification appliances should be placed to minimize destruction of ornamental surfaces. Application of special finish treatments outside of the standard factory process should be coordinated with, and approved in writing by, the manufacturer to ensure that UL labels and appliance performance are not compromised.

In historically significant spaces, smoke detectors should be placed to minimize destruction of ornamental surfaces. Where ceilings are elaborately embellished, explore alternative detection products and approaches such as air sampling detection, projected beams, low-profile spot detectors, recessed installation, or custom-coating detector housings to blend with ornamental finishes. Application of special finish treatments outside of the standard factory process should be coordinated with, and approved in writing by, the manufacturer to ensure that UL labels and detector performance are not compromised. Smoke detector housings should be removed before application of special finishes.

2.6. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REQUIREMENTS

Pursuant to paragraph 5.3 of the PBS NEPA Desk Guide (Oct 1999), this action is covered by an Automatic CATEX and requires no checklist.

2.7. ACCESSIBILITY REQUIREMENTS

Architectural Barriers Act Accessibility Standard (ABAAS) is mandatory for all GSA projects. If local accessibility standards exist, the D/B Contractor shall follow the most stringent requirements between the local standards and ABAAS.

The building ABAAS accessibility shall be maintained at all times.

2.8. SAFETY AND OCCUPATIONAL HEALTH REQUIREMENTS

The D/B Contractor and all subcontractors shall comply with the safety and health standards and guidelines referenced in Section 2.3.1 as well as the following requirements:

GSA NCR Safety and Health are the authority having jurisdiction (AHJ) for all safety and health concerns at all GSA owned facilities.

The D/B Contractor shall provide a site-specific Safety and Health Plan that includes job hazard analysis, bloodborne pathogens, emergency response, personal protective equipment (PPE) requirements, hazard mitigation, hazardous energy control (lock out/tag out), arc flash requirements, hazardous noise, confined space, crane plans, fall protection, chemicals being used onsite, trainings/ certification, and when safety toolbox meetings will occur.

The D/B Contractor shall provide Safety Data Sheets (SDSs) for all substances/ materials to be used in the performance of this contract to the onsite O&M shop. The Contractor will ensure all personnel wear the appropriate personal protective equipment required by the SDSs.

The D/B Contractor shall ensure that all hazards at the end of the workday/ project end are mitigated to ensure that the site is not left in an unsafe condition (e.g., fall, confined space, excavation, chemicals, walkways).

The D/B Contractor shall ensure a first aid kit is available at the site and that all employee injuries and incidents are reported to the COR immediately for reporting to GSA Safety and Health.

The D/B Contractor shall ensure that all hazardous energy sources are locked and tagged out, arc flash procedures are followed to include all PPE, lock out/ tag out (LOTO), labeling, demarcation of zones, and all 1-line drawings are updated. All new electrical must be updated on the inside electrical panel door, all wires are run correctly, and wires are labeled.

All equipment and material that is owned by the contractor/subcontractor must be labeled with the contractor's contact name and cell number for rapid identification during inspections or emergency situations.

The D/B Contractor shall only use extension cords with three (3) prongs (ground) and only use them for temporary power on a daily basis. All extension cords will be inspected before use for damage, frayed electrical, exposed wires, and must dispose of all damaged extension cords. Damaged extension cords cannot be repaired with electrical tape and must be replaced with new to prevent electrical shock hazards and fire. Extension cords cannot be plugged into outlets that have appliances or essential equipment plugged into them. The GFCI extension cord adaptors can be used to prevent tripping of electrical services.

The D/B Contractor shall not store chemicals, equipment, debris, or trash in or around electrical rooms/ panels, in hallways, stairwells, on stairs, or in authorized spaces at any time.

The D/B Contractor shall not permit any contractors/ employees from entering a confined space, accessing the roof top areas without the proper clearance, fall protection, RF Radiation hazard areas, or any other area deemed unsafe by the COR or GSA NCR Safety and Occupational Health.

The D/B Contractor will ensure compliance with all confined spaces with attention to the entry of permit required confined spaces. The contractor is responsible for working with the O&M contractor and building manager for compliance with the site confined space program.

The D/B Contractor shall at any time be able to submit inspection documentation and training documentation for its employees to the COR and GSA NCR Safety and Occupational Health personnel.

All accidents must be reported to the COR immediately and any injuries to personnel must be reported to the COR and NCR Safety and Health immediately with updates hourly until the situation is addressed. A written report shall be submitted within 24 hours of the injury to the COR and NCR Safety and Health. Incidents without injury must submit a written report to the COR within 24 hours.

2.9. FIRE PROTECTION AND LIFE SAFETY REQUIREMENTS

GSA’s Fire Protection Engineers are the authority having jurisdiction (AHJ) for all GSA owned facilities.

GSA regional fire protection program office requests third-party fire protection engineering services for design review, submittal review, and third-party acceptance testing on behalf of the regional fire

protection engineer. Third-party fire protection engineering services will be included within the scope for construction management. Additional third party fire protection engineering services scope requirements will be included in the construction management services scope of work.

Any deviations from these requirements shall be specifically approved by the regional fire protection engineer. Waivers for International Building Code or NFPA 72 requirements will not be granted.

2.9.1. Egress/Life Safety

- D/B Contractor's fire protection engineer shall provide code analysis using the latest requirements of the International Building Code, NFPA codes and standards, and any other applicable requirements. Code analysis shall include, at a minimum, applicable construction codes and standards, use and occupancy identification, construction type, height and area requirements, fire resistant rated construction requirements, vertical opening separation requirements, interior finishes, fire protection systems, life safety systems, and egress requirements. The technical egress requirements of NFPA 101 shall be used in lieu of the International Building Code.
- D/B Contractor's fire protection engineer shall provide occupant load and egress capacity calculations.
- Demonstrate compliance with NFPA 101 requirements for illuminated exit marking signage and emergency lighting.
- Demonstrate compliance with IBC requirements for fire resistant rated partitions, walls, and interior finishes.
- Demonstrate compliance with NFPA locking and exit door hardware requirements.
- Demonstrate compliance with the safeguarding construction and alteration operations requirements of NFPA 241. Construction activities for tenant alterations or building modernizations shall be separated from the remainder of an occupied building with walls having a minimum 1-hr fire resistant rating with 45-min opening protectives, or shall be provided with an active sprinkler system and continuous smoke partitions throughout the duration of construction. Construction phasing and/or separation walls shall be located in such a manner to maintain an NFPA 101 compliant egress arrangement for the remainder of the occupied building (dead-ends, common paths of travel, travel distances, etc.).

2.9.2. Fire Protection Systems

- Modify existing sprinkler systems in accordance with the latest requirements of International Building Code, and NFPA 13, Standard for the Installation of Sprinkler Systems. Sprinkler installation shall be performed by a licensed sprinkler contractor with a minimum of five years experience in the installation of sprinkler systems.
- Design of sprinkler modifications shall be performed by D/B Contractor's fire protection engineer. Locations of required sprinkler system modifications and design criteria shall be included as a separate series of drawings in the design submission(s). Working plans sprinkler system layout shall be performed by a minimum NICET Level III or IV Water Based Systems Layout technician, or a licensed Fire Protection Engineer.
- Provide a notification panel to the Building Management office (G-518).
- Provide detailed installation shop drawings, in accordance with NFPA 13, "Working Plans". Drawings shall be drawn to an indicated scale on sheets of uniform size and be submitted to the

COR/PM for review and approval by the GSA regional fire protection engineer. Submittal information shall include but not be limited to the following:

- Layout indicating details, plan view, elevations and sections of the system piping. Indicate the location of sprinkler heads and piping in relation to the ceiling layout, showing pipe lengths and sizes.
- Detailed riser diagram showing schematic of systems supply, supply connection, devices, valves, pipe and fittings.
- Hydraulic calculations
- Annotated manufacturer's data sheets showing the specific model, type and size of each item.
- The signature and seal of a licensed Professional Fire Protection Engineer, or a NICET Level III or IV Technician.

- Perform hydrostatic testing of sprinkler piping in accordance with the requirements of NFPA 13.
- Final Inspection and Testing: Advise the COR/PM when hydrostatic and alarm tests have been completed and all necessary corrections made, so as to permit final inspection and testing. Submit requests for testing at least 15 calendar days prior to the test date.
    - The final test shall be witnessed by the GSA regional fire protection engineer and/or the third-party fire protection engineer responsible for inspections and acceptance testing. The D/B Contractor and an authorized representative from each supplier of equipment shall be in attendance at the final test.
    - Final testing shall include, but is not limited to, testing of all waterflow and tamper switches.
    - Provide all equipment, services and labor to properly perform all required tests.
- Each elevator bank shall contain a separate fire alarm panel for smoke detection.

2.9.3. Fire Alarm Systems

- Installation shall be accomplished by an electrical contractor with a minimum of five years experience in the installation of fire alarm systems.
- Design of fire alarm system modifications shall be performed by design-build team fire protection engineer. Locations of required fire alarm system modifications and the design criteria shall be included in the design drawing submissions as a separate series of drawings. Fire alarm initiating device and notification appliance shop drawing layout shall be performed by NICET Level III or IV fire alarm systems technician, or licensed fire protection engineer.
- Provide fire alarm initiating devices as needed in accordance with the requirements of International Building Code, and NFPA 72. Initiating devices to include but not be limited to manual pull stations, smoke detectors, duct smoke detectors, heat detectors, waterflow and tamper monitoring, and addressable control relays/modules. When modifying an existing fire alarm system all initiating devices shall be compatible with the existing make and model of the control equipment.
- Provide fire alarm notification devices as needed in accordance with the requirements of International Building Code, and NFPA 72. Notification appliances to include but not be limited to strobes, speakers, horns, or combination devices. Provide visual notification appliances in accordance with the spacing requirements of NFPA 72. Provide audible speaker appliances at a maximum spacing of 625 square feet. When modifying an existing fire alarm system all

notification appliances shall be compatible with the existing make and model of the control equipment

- Install all conductors in rigid metal conduit or electrical metallic tubing, with a minimum diameter of 3/4". Run conduit or tubing concealed unless specifically shown otherwise on the drawings. All wiring for the fire alarm system must be installed in separate conduit.
- All circuits and pathways shall match existing in class and survivability designations. Conductors must match existing in gauge, type and color coding. All conductors which are terminated, spliced, or otherwise interrupted in any enclosure, cabinet, mounting or junction box shall be connected to terminal blocks. Use of wire nuts is prohibited.
- Provide detailed installation shop drawings, in accordance with NFPA 72 documentation and shop drawing requirements. Drawings shall be drawn to an indicated scale on sheets of uniform size, and submitted to the COR/PM for review and approval by the GSA regional fire protection engineer. Submittal information shall include but not be limited to the following:
    - A complete description of the system operation.
    - A complete list of device addresses and corresponding messages.
    - Point to point wiring diagrams showing the points of connection and terminals used for all electrical field connections in the system, including all interconnections between the equipment or systems which are supervised or controlled by the system.
    - Annotated manufacturer's data sheets showing the specific model, type and size of each item.
    - Notification appliance circuit calculations including voltage drop, circuit capacity, amplifier capacity, and power supply capacity.
    - Battery calculations for both the alarm and supervisory power requirements. Ampere-¬hour requirements for each system component shall be submitted with the calculations.
    - Provide a color code schedule for the wiring and floor plans showing the location of all devices and equipment.
    - The signature and seal of a licensed Professional Fire Protection Engineer, or a NICET Level III or IV Technician.
- Perform preliminary tests to ensure that all devices and circuits are functioning properly. After preliminary testing is complete, provide a letter certifying that the installation is complete and fully operable.
- Final Inspection and Testing: Advise the COR/PM when preliminary tests have been completed and all necessary corrections made, so as to permit final inspection and testing. Submit requests for testing at least 15 calendar days prior to the test date.
    - The final test shall be witnessed by the GSA regional fire protection engineer and/or the third-party fire protection engineer responsible for inspections and acceptance testing. The D/B Contractor and an authorized representative from each supplier of equipment and installation shall be in attendance at the final test.
    - Final testing shall include, but is not limited to, testing of all waterflow and tamper switches.
    - Provide all equipment, services and labor to properly perform all required tests.
- All building systems that are monitored and interface with the current fire alarm system shall also be monitored by the new fire alarm system at a minimum.
- The server room contains a separate fire alarm system. The server room fire alarm system shall be

monitored by the new fire alarm system.

2.9.4. Fire and Life Safety System Testing and Acceptance

- The D/B Contractor shall provide a subcontracting Fire Protection Engineering firm (FPE subcontractor), other than the Design Team Fire Protection Engineer, acceptable to the GSA Fire Protection Engineering Section, to witness system acceptance testing and inspections.
    - The contracting firm shall be a firm whose prime enterprise is in the field of fire protection engineering. The contracting firm should have a fully operational and fully staffed office within a 50 mile radius of Washington, DC. The contracting firm must provide a program manager who possesses a BS or MS in Fire Protection Engineering, and meets the experience requirements for fire protection engineers listed below. Complete documentation to support fire alarm systems testing experiences must be resubmitted as a part of the submittal package.
    - Qualified fire protection engineer(s) shall witness acceptance testing. The D/B Contractor must employ a full-time team of at least two qualified fire protection engineers, available for the Testing required by this contract. The engineers shall possess a BS or MS in fire protection or fire safety engineering with at least four consecutive years of experience in fire protection engineering work, within the past six (6) years, or professional engineering licensure in fire protection. Proposed personnel shall demonstrate that they have been involved in fire protection and life safety systems inspection and testing similar in complexity relevant to the scope.
    - The fire protection engineer(s) shall have experience in submittal review, construction inspection, acceptance testing and commissioning systems.
    - The fire protection engineer(s) shall demonstrate a thorough working knowledge and formal training in fire protection codes and standards, especially the latest edition of NFPA 101, NFPA 13, NFPA 72, NFPA 90A and the International Building Code. The proposed personnel shall demonstrate that they have acted in charge of fire protection engineering designs including fire protection and extinguishment systems, fire alarm systems, life safety systems, and smoke control systems.
- Testing and inspections for the fire alarm shall include the following minimum criteria:
    - Testing and commissioning in accordance with NFPA 72
    - All new equipment shall be 100% fully tested
    - Confidence (re-acceptance) testing to include 10% of the building field devices
    - Test each fire alarm initiating and indicating device and circuit for proper operation and response
    - Test the system for all specified functions in accordance with the contract specifications, and the approved sprinkler and fire alarm submittals
    - Determine that the system is operable under trouble conditions
    - Test the adequacy of the notification appliances (visible and audible characteristics)
    - Program changes to the building fire alarm control panel will require re-acceptance testing within 24 hours of the change
    - As applicable, perform a battery test for all new control panels and extender panels
- Testing and inspections for the fire protection system shall include the following minimum criteria:

    - Verify compliance with NFPA 13
    - Visual inspection of the sprinkler system adequacy, coverage, piping, hangars, sprinkler locations, hydraulic nameplates, and sprinkler types.
- Inspections for fire compartment integrity shall include the following minimum criteria:
    - Visually inspect fire rated partition/wall and floor assemblies, partition stenciling, fire door, and fire/smoke damper operation.
- Inspections for life safety and egress shall include the following minimum criteria:
    - Verify compliance with the NFPA 101 egress requirements
    - Visually inspect emergency lighting, exit signage, and egress arrangement (pathways, exits, special locking, etc)

The D/B Contractor shall provide a written Discrepancies and Omissions (D&O) list within 48 hours of completion of each test or inspection. D&O list shall include a description of the work that was completed, a description on the system equipment and operation, and describe conditions which do not comply with the above criteria. Provide corrective action recommendations for all discrepancies and omissions. Note that the task includes follow up inspections and testing necessary to verify corrections of items. If no items are necessary for correction, the D&O list shall indicate all items have been corrected and the space is acceptable for issuance of an occupancy certificate.

2.10. HAZARDOUS MATERIAL REQUIREMENTS

All work, including contact with and handling of hazardous materials, the disturbance or dismantling of structures containing hazardous materials, and/or the transport and disposal of hazardous materials shall comply with the applicable requirements of 29 CFR 1910/1926, and 40 CFR 761/260-271.

2.10.1. Hazardous Materials Survey

The D/B Contractor shall hire a qualified Industrial Hygiene firm to inspect and test all portions of the building that are included in this project as part of the Existing Conditions Survey. Qualified is defined as utilizing personnel who are U.S. Environmental Protection Agency (EPA) accredited AHERA Inspectors/Management Planners or Project Designers. The survey and assessment shall include the following:

- Search through any existing documentation
- A walk-through inspection
- Sampling of any possible asbestos containing materials (ACM) and lead based paint (LBP) not identified in existing documentation. Sampling of ACM shall conform to the requirements found in 40 CFR 763.85.
- Provide sampling, testing and reporting for ACM and LBP that will be disturbed as a result of the project. If material suspected to be ACMs or LBPs are encountered, the material shall be sampled for bulk asbestos and/or lead paint chips.
- Adequately test and characterize the LBP waste by the toxicity characteristics leaching procedure (TCLP) – Lead
- Provide sampling, testing and reporting for caulking, waterproofing materials, and waste generated for PCB content in accordance with 40 CFR 761
- Consider all unmarked lamp capacitors and ballasts to contain PCBs, and manage these items as required by GSA Specification 02089
- Perform a comprehensive assessment, including the count and location of mercury-containing devices such as switches, thermostats, and gauges

- Perform a comprehensive assessment, including the count and location of observed universal waste (e.g. fluorescent lamps, batteries, etc.) and/or hazardous waste
- Perform a comprehensive assessment, including the number of exit signs that may require special disposal

Include hazardous material removal or abatement as required by GSA on drawings and in specifications. After the assessment, the following statements should be used on drawing Cover Sheet:

HAZMAT FOUND: A PRE-ALTERATION ASSESSMENT HAS BEEN CONDUCTED FOR ASBESTOS-CONTAINING MATERIALS (ACM) AND LEAD-BASED PAINT (LBP). AREAS FOUND TO CONTAIN THESE MATERIALS HAVE BEEN INDICATED ON THE CONTRACT DOCUMENTS. HOWEVER, IF SUSPECT ACM OR LBP ARE ENCOUNTERED IN AREAS NOT INDICATED TO CONTAIN THESE MATERIALS, DEMOLITION ACTIVITIES SHALL CEASE AND BULK ASBESTOS AND/OR LEAD PAINT CHIP SAMPLING SHALL BE CONDUCTED. IF THE MATERIALS SAMPLED ARE DETERMINED NECESSARY FOR REMOVAL, THEN THE CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS OF SPECIFICATION SECTIONS 02085 FOR ASBESTOS REMOVAL AND 02090 FOR REMOVAL AND DISPOSAL OF LEAD-BASED PAINT.

2.10.2. Asbestos Containing Material

It is anticipated that Asbestos Containing Material will be encountered during work activities. The project area shall be surveyed for ACMs per section 2.13.1. of this SOW.

All thermal systems insulation (i.e. boiler insulation, duct insulation, pipe insulation), surfacing materials (i.e. plaster and sprayed-on fireproofing) and miscellaneous materials (i.e. asphalt flooring, ceiling tiles, adhesives and mastics, drywall, roofing, gaskets and cement board), installed no later than 1980, must be considered asbestos containing unless proven otherwise in accordance with 29 CFR 1926.1101. Work involving the disturbance, dismantling or demolition of asbestos containing materials or structures containing asbestos; or the removal and disposal of asbestos, shall also comply with the requirements of 40 CFR Part 61, Subparts A and M; 29 CFR 1910.1001 (where applicable); and GSA Specification 02085 Asbestos Abatement Procedures.

Any required asbestos abatement and waste disposal shall be included in the construction cost estimate as a separate line item, as well as the contract drawings and specifications.

The most recent asbestos building-wide survey is provided for reference. Materials assessed to be part of a homogenous area previously determined to be NAD need not be re-sampled.

2.10.3. Hazardous Materials Cost Tracking

The D/B Contractor shall invoice costs for all efforts related to asbestos separately from costs for all efforts related to all other hazardous materials, both of which shall be separate from all other costs for GSA's accounting purposes.

2.11. BUILDING CONTROL SYSTEMS, INCLUDING BUILDING AUTOMATION SYSTEMS (BAS) AND BUILDING MONITORING AND CONTROL (BMC) SYSTEMS

The property does have a BAS.

The D/B Contractor shall integrate all new equipment into the existing BAS or BMC and controllers. This includes interface compatibility, required programming, and commissioning to ensure performance meets required performance objectives per the *PBS Smart Buildings Directive, Smart Building Implementation Guide Requirements, Smart Buildings Program Guide, GSA Data Normalization for Building Automation Systems, GSA National Capital Region AMS Guide, Technology Policy for PBS Owned Building, Monitoring and Control Systems, and Niagara NiCS Statement*. If the BAS or BMC are on a Federal Government network, or will be connected to the network by this project, then the Contractor shall comply with Section 2.17 of this SOW.

2.12. CONNECTIONS TO FEDERAL GOVERNMENT BUILDING SYSTEMS NETWORKS (BSN)

This project is anticipated to connect to the IRS's Network. All persons working on this task order, and interfacing with a Federal Government internet or intranet network shall be HSPD-12 cleared prior to working on the network, regardless of the number of days engaged in the project. All work shall comply with Section 2.3.4. of this SOW.

2.13. COMMISSIONING

2.13.1. Commissioning Agent

The GSA will retain the services of a Commissioning Agent (CxA) through the Construction Manager as Advisor (CMa) to verify that the D/B Contractor has executed the project per the design. Commissioning services will include inspecting, pre-testing, final testing and acceptance *(a.k.a. commissioning)* of the complete building fire alarm system with the fire alarm manufacturer's technician or local factory representatives after all fire alarm programming and fire alarm system installations have been added or completed (by singular device, by zone, or via system-wide).

2.14. PROJECT MANAGEMENT INFORMATION SYSTEM (PMIS): KAHUA

The Contractor shall provide all project documentation through GSA's electronic Project Management Information System (PMIS). GSA's current PMIS is Kahua. The Contractor shall request log-ins to the system for key personnel, after their HSPD-12 Final Fitness is complete and the Personal Identity Verification (PIV) card has been issued, through the PM/COR. The Contractor shall take the Kahua training in order to use the GSA PMIS Kahua.

2.15. MANUFACTURER REQUIREMENTS

The D/B Contractor shall follow all manufacturers' instructions and best accepted trade practices during performance of this work.

3. DESIGN STAGE

This section details the professional services required during the design stage of the project.

The D/B Contractor's Architect/Engineer (A/E) shall develop a design based on the objectives and requirements as stated in this scope of work only.

A registered fire protection engineer must be a full participant of the design team for each phase of the project from concept through designs, construction, and occupancy.

The design shall comply with all applicable codes as identified in PBS Interim Core Building Standards, and the Standards and Criteria Documents listed in this SOW.

3.1. PRE-DESIGN PHASE

Contractor shall field survey and verify the existing conditions prior to the design and layout of the new work. The government will supply existing fire alarm drawings if available. These documents are based upon archive information; the actual conditions may vary.

A registered fire protection engineer must be a full participant of the design team for each phase of the project from concept through designs, construction, and occupancy. A registered fire protection engineer shall be at fire alarm acceptance testing and conduct site visits during construction.

Contractor shall field verify all systems in the building to verify their connection and interface with the fire alarm system. This shall be done during bidding/solicitation. Existing fire alarm drawings should be provided if available. Existing fire alarm drawings are not guaranteed.

3.1.1. Existing Conditions Survey and Report

- The D/B Contractor shall thoroughly research the project requirements.
- Meet with the COR/PM to review the expectations of the project scope of work.
- Meet with the Building Management personnel to gain information about the building and systems operation.
- Conduct an investigation including an on-site survey. The on-site survey must include, but not be limited to, examining the existing conditions and taking necessary measurements. Review all available drawings (GSA supplied drawings are for information only). The D/B Contractor's A/E assumes the responsibility to verify all drawings and existing site conditions.
- Concealed conditions are those which would require selective demolition to investigate. Conditions above acoustic ceiling tile and/or under tile carpet are not considered concealed conditions. These should be investigated during the Existing Conditions Survey.
- The D/B Contractor shall not contact the tenant agency representatives directly without prior approval from the COR/PM. All contact with the tenant agency shall be coordinated through the COR/PM.
- Document the existing conditions in an Existing Conditions Report and submit to the COR/PM.
- Perform pre-alteration assessments for hazardous materials as required this SOW and provide reports.

3.2. DESIGN PHASE

3.2.1. Dimensions

The building was designed and constructed using imperial units.

All dimensions shall be in imperial units with no metric equivalent.

3.2.2. Design Submissions

Design submission expectations are as follows:

3.2.2.1. Construction Documents (CD) Submission (75%)

The midpoint design will include specifications, drawings, calculations, cost estimate, and construction schedule. The specification shall be edited to remove any extraneous sections or paragraphs.

3.2.2.2. Pre-Final CD Submission (95%)

The pre-final submission will include the fully edited and coordinated specifications, drawings and calculations. Action on previous project review comments shall be incorporated in the construction documents. If not incorporated, a written justification for not doing so is required. A 95% submission is expected to be 100% complete with regards to all design information, notes and coordination. The intent is to allow the Government an opportunity to make any final comments.

Prepare and submit a Cost Estimate, Quality Control Plan, Safety Plan, Phasing Plan, a Schedule of Construction Submittals, Key Sustainable Product Compliance Report, and a Schedule of Inspections & Tests with the Pre-Final Design Submission.

3.2.2.3. Issued for Construction (IFC) CD Submission (100%)

The Issued for Construction Submission shall be signed and sealed in accordance with the PBS Interim Core Building Standards requirements. Action on previous project review comments shall be incorporated in the construction documents. If not incorporated, a written justification for not doing so is required.

3.2.3. Design Submission Deliverables

3.2.3.1. Basis of Design / Calculations / Cutsheets / Code Check

The D/B Contractor's A/E shall provide a design narrative, identifying the basis of design and design calculations as required by PBS Interim Core Building Standards.

The D/B Contractor's A/E shall document their design intent; decisions made during design; design assumptions; basis of design including cutsheets; technical analysis; code analysis; and any references.

3.2.3.2. Drawings

The D/B Contractor's A/E shall develop all contract drawings required to convey the project scope. The drawings shall be scaled floor plans for each discipline required (architectural, mechanical, electrical, etc.), with separate sheets for new work and demolition, as well as enlarged floor plans, equipment details, riser diagrams, schedules, etc. Drawings shall clearly distinguish between new and existing work. Drawings shall show critical dimensions, including required clear space for access, use, and maintenance of equipment.

Each drawing's title block shall indicate the project title, project number, building name, building address, building number, D/B Contractor's and A/E's name, address and phone number, contract number, drawing title, drawing type, drawing number, and key plan. A cover sheet shall be provided and shall include a list of the drawings, legend, vicinity map, and location map in addition to all items required for each drawing. Each D/B Contractor's A/E submission must be clearly dated and labeled (e.g. 35%, 65%). Each drawing sheet submitted shall include a graphic scale in the lower right-hand portion of the sheet. The

final set shall be signed and sealed by a registered engineer and/or registered architect for the state in which the building is located.

All drawings shall be delivered in their original authoring format, regardless of file type. In addition to the original authoring file type, CAD plans shall be delivered at each submission. All CAD deliverables shall comply with GSA's PBS CAD Standards, March 10, 2021.

The Contract Documents shall sufficiently define the scope of work and shall stand on their own.

Drawings and specifications shall be fully coordinated to ensure that all necessary work and materials are included for an operational facility of finished appearance.

3.2.3.3. Specifications

Design shall be in accordance with the most recent NFPA code, P-100, GSA fire alarm specifications. Contractor shall provide edits to the attached voice fire alarm specification from our office:

- SOW ATTACHMENT 1 | 283176 [FIRE ALARM AND VOICE EVACUATION SYSTEM][FIRE DETECTION AND FIRE ALARM SYSTEM]
- SOW ATTACHMENT 2 | 284800 EMERGENCY RADIO COMMUNICATION ENHANCEMENT SYSTEM

Project Specifications shall be sufficiently detailed to direct the construction work outlined in this scope of work.

The D/B Contractor's A/E shall use the CSI (Construction Standards Institute) "MasterFormat" (latest versions) system as its project specifications format.

The D/B Contractor's A/E shall sign and seal the final version of the specifications. The D/B Contractor's A/E shall supply .pdf and .docx versions of the specifications with each submission, along with the requested number of hard copies.

The Project Specifications shall completely encompass the scope of work and design of the project. Extensive editing and additions to the above listed guide specifications will be required to tailor them to this scope of work.

The specifications shall take into account a construction plan producing a minimum disruption of day-to-day activities, climate control, utilities, and services.

Specification of proprietary products is generally not permitted. Specification sections shall be written to permit bidding by any supplier whose products meet the performance, technical and physical requirements of the project. When only a single product is available from a sole source who will perform the required function, the D/B Contractor's A/E shall submit as early as possible a written justification to the COR/PM for acceptance by the Contracting Officer. The justification shall include a complete description of the product, including the name, model and manufacturer's address, and the reasons for the proposed proprietary specification.

3.2.3.4. Construction Submittal List

As part of the 95% Submission, the D/B Contractor's A/E shall submit a list of all submittals required for construction. The list shall include specification section and paragraph numbers and type of submittal.

As part of the 95% Submission, the D/B Contractor's A/E shall also create a complete submittal register that includes all of the submittals required in the specifications. All submittal shall use the following naming convention:

- Specification number – Specification section name – Submittal type.

3.2.3.5. Estimates

No estimates required for Design-Build project type.

3.2.3.6. Schedule

The D/B Contractor shall include all milestones for the design phase into the overall project schedule. The project schedule shall adhere to the requirements identified in the Construction phase section of this SOW.

3.2.3.7. Phasing Plan

The D/B Contractor's A/E shall submit the following phasing information:

- Phasing Narrative in written form which outlines phasing requirements and sequence with all areas of the project identified as a part of some phase. Each phase description shall include constraints particular to that phase, what other phases must precede it, and any moves which must precede the start of the phase or phases. If equipment and other removable items require storage and relocation by the government because of the requirements, it shall be listed in the phasing narrative. Special phasing constraints which may be common to the project should be listed at the end of the narrative and not within each individual phase description.
- Individual phases shall be outlined and labeled on all drawings including site, architectural, structural, plumbing and electrical drawings. Phases shall be outlined on the submitted full sized drawings.
- All systems shall be designed so that, upon completion of a particular phase, the entire area covered by that phase can be occupied by the agency personnel with all systems functioning properly.

Phasing requirements shall describe the general sequence of the project work, estimated project duration (including allowances for delivery items), and what government constraints exist that will influence the D/B Contractor's approach to the construction project. In addition, special attention shall be given to asbestos abatement requirements to ensure that the project phasing plan and associated costs are reasonable. Adequate time shall be allocated for the evaluation for any special requirement areas in addition to the time to perform the work that must precede the general construction.

3.2.4. Design Reviews

The Government will provide reviews of D/B Contractor design submissions to verify adherence to contract requirements. Design reviews by the government are not to be interpreted as resulting in an approval of the D/B Contractor's apparent progress toward meeting contract requirements but are

intended to discover any information which can be brought to the D/B Contractor's attention which might prevent costly errors and/or misdirection. The D/B Contractor shall remain completely responsible for designing and constructing the project in full accord with the requirements of this contract.

The design-build contractor shall provide the services of a licensed fire protection engineer approved by the GSA regional fire protection engineer to witness acceptance and confidence testing of the new building fire alarm system, new bi-directional amplifier two-way radio communications enhancement system, and new two-way communication system on behalf of the regional fire protection engineer. Additional third party fire protection engineering services scope requirements will be included in the Design-Build scope of work.

3.2.5. Submission Format

Each Submission requires:

- 1 Zip file which includes the following:
  - One consolidated, searchable PDF containing all drawing files
  - Basis-Of-Design, Calculation, Cut Sheets and Code Check as PDF
  - One Zip file containing individual drawing DWG files
  - One consolidated, searchable PDF containing all specifications with bookmarks for major divisions
  - One Zip file with individual specification sections as DOCX
  - Construction Submittal List as PDF
  - Project schedule as MS Project
  - Project schedule as PDF
- 4 Full-Size sets of drawings
- 4 Half-Size sets of drawings
- 4 hard-copy binders of the project specifications

3.2.6. Submission Schedule and Reviews

The D/B Contractor's A/E shall deliver all design documents required for review and approval by the government to the COR/PM in accordance with the following schedule:

Kickoff Meeting	due 7 calendar days after Contract NTP
Existing Conditions Survey (ECS)	due 14 calendar days after Contract NTP
Existing Conditions Survey Report	due 14 calendar days after ECS Survey
GSA Review	due 7 calendar days after ECS submission
75% Submission	due 32 calendar days after ECS Approval
GSA Review	due 30 calendar days after 75% Submission
95% Submission	due 29 calendar days after 75% Approval
GSA Review	due 35 calendar days after 95% Submission
IFC Submission	due 21 calendar days after 95% Approval
GSA Review	due 22 calendar days after IFC Submission

3.2.7. Stakeholder Review

GSA has allocated time for all stakeholder reviews in the above table. Recovery from delays beyond the original review time-frame due to rejection or revision to the submission package, is the

responsibility of the D/B Contractor. In the event that the stakeholder does not provide a response within the time frame included above, the D/B Contractor shall submit a request to extend the period of performance by an equitable amount of calendar days.

3.2.8. Rejection of Submittals

Government rejection of submittals does not relieve the D/B Contractor from responsibility of meeting the period of performance.

4. CONSTRUCTION STAGE

This section details the services and submittals required to support the construction stage of the project.

4.1. GENERAL

The D/B Contractor shall provide all necessary labor, materials, supervision, management, quality control plan, and testing to produce work conforming to the contract documents and Issued for Construction (IFC) 100% Final Construction Documents created during the Design Phase.

4.1.1. Project Supervision

The D/B Contractor shall have a full-time Superintendent on-site at all times when work is performed. GSA may contract a third-party Construction Manager as Advisor (CMa) for daily on-site project management, monitoring, coordination and inspections. The Contractor's Superintendent shall coordinate with the GSA CMa and COR/PM on all project activities.

4.2. PERMITTING

The D/B Contractor shall obtain and provide to the COR/PM all applicable permits such as, but not limited to, sheeting, shoring, and public space permits as required by federal, state or local jurisdictions; this includes application fees and any fines or penalties that result from noncompliance.

4.2.1. Permit for Welding, Cutting, or Brazing

The D/B Contractor shall comply with NFPA 51B. The D/B Contractor shall not conduct operations involving the use of open-flame, electrical arc equipment, or flammable substances until a permit for welding, cutting, and burning has been issued by the Government.

The D/B Contractor shall complete GSA 1755 - Permit for Welding, Cutting, or Brazing. Contact the Building Management Office to obtain burn permits. Burn permits are required for each separate occurrence. Burn Permits must be displayed at the work site during burning operation. The permit duration shall be one work shift for a specific location unless otherwise agreed to by the Government and D/B Contractor.

4.2.2. Utility Locating Services

Where sitework shall occur, utility locating services must be provided 7 calendar days in advance of any sitework work beginning.

4.2.3. Utility Outage

Utility outages (electrical, domestic water, chilled water, steam, gas) shall be approved by the GSA Building Manager at least 72 hours prior to the outage.

All unscheduled power and communication outages caused by the D/B Contractor as a result of demolition or construction activities shall be restored immediately. The D/B Contractor shall take all necessary precautions to minimize the possibility of such a disruption from occurring by conducting a thorough pre-construction survey. Failure to provide corrective actions for causing an outage as described above will result in the Government executing the repair and charging the D/B Contractor for the full cost of the repair performed by others as well as the administrative costs of the repair.

4.2.4. Fire Protection and Life Safety System Impairment

All impairments to the building fire protection and fire alarm systems shall be submitted to the GSA Building Manager and COR/PM at least 72 hours prior to commencing any work which could affect an active fire protection or life safety system. Impairment requests shall be submitted via the Building Management fire alarm and fire protection system impairment request form.

4.2.5. Fire Watch

When a required fire alarm system or automatic sprinkler system is out of service for more than 4 hours in a 24-hour period, the GSA Building Manager and AHJ shall be notified at least 7 calendar days in advance. Work shall not commence until the AHJ has given written approval of the proposed fire watch or building evacuation plan. Comply with NFPA 101 and OSHA 1910.252 for all fire watch requirements.

4.3. CONSTRUCTION SCHEDULE

Within 7 calendar days of Notice to Proceed (NTP), the Contractor shall submit a Preliminary Schedule detailing the complete scope of work and proposed logical relationships. Provide within 14 calendar days of NTP a detailed, time-scaled computer generated Project Schedule with activities representing each portion of the Work for the entire Contract Performance Period. Submit both as MS Project and PDF. The Project Schedule shall be updated on a monthly basis throughout the entire Project performance period until Project completion is achieved. A revised project schedule shall be submitted with each invoice.

Throughout construction the Contractor shall provide a two week look ahead with a description of on-site activities happening within the period, and a list of sub-contractors on-site. The two week look ahead shall include the time of day the work will be performed, areas of the project site the work will occur, any utility outages required, and any deliveries scheduled. The two-week look ahead shall be provided one week prior to the first day on the schedule, and shall be updated weekly.

All owner furnished equipment and materials shall be identified with dates needed to be received by the Contractor.

All durations shall be shown in calendar days.

The Project Schedule shall use the Critical Path Method (CPM) for the planning, scheduling and reporting of the work to be performed under the contract.

No unspecified constraints, float suppression techniques, or use of activity durations, logic ties and/or sequences deemed unreasonable by GSA shall be used in the Project Schedule.

As defined by the Contract, the entire project performance period shall establish the Project Substantial Completion Date which shall be used in the planning and presentation of the Contractor's Project Schedule. GSA reserves the right not to approve any schedule deemed to have an unrealistic forecasted Substantial Completion Date. Government approval of an early completion Project

Schedule shall not modify the Contractual Substantial Completion Date or Project Completion Date. The time difference between the Contractor's planned Substantial Completion Date and the Contract directed Substantial Completion Date shall be considered Project Float, jointly owned and for the mutual use of both the Contractor and GSA.

4.4. CONSTRUCTION PROGRESS REPORTS

Prepare an electronic daily construction report recording the following information including, but not limited to, events at the site. All daily reports are to be uploaded to Kahua daily, and the COR/PM shall be notified.

Each daily report shall include:

- List of subcontractors at the site
- List of separate contractors at the site
- Count of personnel at the site
- High and low temperatures, general weather conditions
- Accidents
- Meetings and significant decisions
- Unusual events
- Stoppages, delays, shortages, and losses
- Meter readings and similar recordings
- Emergency procedures
- Orders and requests of governing authorities
- Change Orders received or implemented
- Services connected or disconnected
- Equipment or system tests and startups
- Partial completions or occupancies
- Summary of all work performed

4.5. SHOP DRAWINGS / PRODUCT DATA SUBMISSIONS

The D/B Contractor shall submit shop drawings and product data as stipulated in the project specifications, or as required by GSA, for acceptance prior to procurement of materials, installation, and construction. All submissions shall be made to the COR/PM. Prior to submitting shop drawings to the COR/PM, the D/B Contractor's A/E shall review the shop drawings for completeness and shall establish that the shop drawings meet the approved design and contract requirements.

Shop drawings must illustrate manufacturer's recommended clearances around installed equipment for access and maintenance. Shop drawings shall be checked for compliance with manufacturer's recommended clearances.

Shop drawings shall be continuously annotated showing solutions to problems not encountered during survey period or anticipated. The government shall be apprised of all modifications and each solution shall be submitted to the COR/PM for acceptance and approval within three days of change.

Shop drawings shall have the professional seals and signatures of the preparing Registered Professional Engineers. Shop drawings shall have the signatures of the reviewing Registered Professional Engineers and/or Architects.

4.5.1. Submittal Log

Contract to provide a Submittal Log for ALL submittals required by the contract documents. Provide this submittal log within 14 calendar days of the NTP. Provide updates of the Submittal Log every month.

4.5.2. Government Review

Shop Drawing/Product Data submissions to the Government shall be made after review and approval by the D/B Contractor's A/E. Government rejection of submittals does not relieve the D/B Contractor from responsibility of meeting the period of performance. The D/B Contractor shall utilize early submission to minimize lead time between the Design and Construction Phases.

4.5.3. Changes

Should shop drawing and/or product data changes take place after Government review and approval, the D/B Contractor shall submit the altered material within three days of the change.

4.5.4. Products for Submission

The D/B Contractor shall provide shop drawings and product data for all systems, equipment and materials referenced within the IFC Design Document submission.

4.6. SCHEDULE OF INSPECTIONS AND TESTS

Prepare and submit a schedule of inspections, tests and similar services required by the Contract Documents within 14 calendar days after the approval of the 95% Submission.

The D/B Contractor shall coordinate the schedule of inspections and tests with the Construction Schedule and other related documents. Prepare the schedule in tabular form, including but not limited to, the following information:

- Specification section number
- Description
- Identification of applicable standards
- Identification of methods to be used
- Number of inspections, tests or similar services
- Time schedule or time span
- Responsible entity
- Requirements for taking samples
- Unique characteristics

4.7. CONSTRUCTION INSPECTIONS

Construction inspections shall be scheduled, coordinated and performed to ensure that all specified materials, and products are installed per code compliance and contract. At a minimum, inspections must be performed at the following intervals:

- Framing and rough-in inspection (before insulating or covering framing)
- Insulation inspection (after insulation is installed)
- Final inspection (after all construction is complete)

Inspections include, but are not limited to, adherence to construction documents, contract requirements, and the following:

- Equipment, materials and workmanship
- Labor and safety conditions
- Defects and omissions
- Problems encountered
- Qualitative and quantitative differences between construction contract documents and actual work in place

Key personnel from the D/B Contractor and the D/B Contractor's A/E shall be in attendance in-person at all inspections directly related to their discipline.

4.8. SPECIAL INSPECTIONS

The D/B Contractor shall provide the coordination and services for the special inspections as indicated in the Schedule of Inspections and Testing, including, but not limited to:

- Coordination of the trades, quality control and the sequence of construction to ensure continuity of the system for the inspection(s)
- Not covering or encasing inspection areas prior to inspections
- Additional testing or retesting
- Associated services for the inspections
- Repair

The D/B Contractor shall obtain and include the cost for special inspections as a separate line in the Contract Sum.

4.9. COMMISSIONING

The D/B Contractor shall be fully engaged in the commissioning process. This includes completion of the Pre-Commissioning Checklists and coordination of resources needed to complete commissioning required in the Commissioning Plan.

The D/B Contractor shall make the recommended corrections to commissioned systems for any system which fails to meet the required test parameters.

4.10. QUALITY CONTROL PLAN

The D/B Contractor shall develop and maintain a Quality Control Plan which is first submitted during the 65% design phase of the project, based upon the USACE Three-Phases of Control, to accomplish the Design-Build contract requirements. The Quality Control Plan shall identify personnel, procedures, instructions, records and forms to be used in carrying out the requirements of the Project. It will provide the means to maintain effective Quality Controls for construction, sampling and testing activities.

The Quality Control Plan shall also describe the quality assurance, quality control, and other technical activities that will be implemented to ensure that sampling and analyses are performed in order to meet applicable data quality objectives for the project.

4.10.1. Content

The Quality Control Plan shall identify and address the special factors impacting the construction, and specify the considerations and provisions to be made by the D/B Contractor during construction of the project. Consideration and provisions proposed to accommodate special factors impacting the construction shall be outlined, and described in sufficient detail to clearly indicate all facets and how

they relate to the coordinated construction of the project. The D/B Contractor is not relieved from any requirements specified in this document should they not be included in the plan.

Special factors impacting include, but are not limited to:

- Work hour restrictions
- Construction phasing
- Utility outages
- Security and access requirements
- Safety Plan per OSHA requirements
- Staging and storage area space limitations
- Asbestos removal and disposal

4.10.2. Workmanship Standards

The D/B Contractor shall initiate and maintain procedures to ensure personnel performing the work are skilled and knowledgeable in the methods and craftsmanship needed to produce the required levels of workmanship. The D/B Contractor shall remove and replace work that does not comply with workmanship specified and standards recognized in the construction industry for the applications indicated. The D/B Contractor shall remove work damaged during construction, and replaced with work per the requirements of the drawings and specifications.

4.10.3. Manufacturer's Instructions

Where installations include manufactured products, comply with manufacturer's applicable installation instructions and recommendations to the extent that those instructions and recommendations are more explicit or stringent than requirements contained in the Contract Documents.

4.10.4. Specialists

Where the individual sections of the specifications require specialists to perform the work, comply with the requirements specified. The assignment of a specialist shall not relieve the D/B Contractor from complying with applicable regulations, union jurisdictional settlements or similar conventions, and the final responsibility for fulfillment of the entire requirements remains with the D/B Contractor.

4.10.5. Minimum Quality and Quantity

The quality level, or quantity shown or specified, shall be the minimum required for the work. Except as otherwise indicated, the actual work shall comply exactly with that minimum or may be superior to that minimum within limits acceptable to GSA. Specified numeric values are either minimums or maximums as indicated, or as appropriate for the context of the requirements.

4.10.6. Availability of Tradespersons and Manufacturer's Field Services Representatives

The D/B Contractor shall, at each progress or coordination meeting, review the availability of tradespersons, qualified manufacturers representatives required in the specifications, and projected needs to accomplish work as scheduled. Require each subcontractor to report on events which might affect progress of work. Where possible, consider alternatives and take actions to avoid disputes and delays.

4.10.7. Inspection / Testing

The D/B Contractor shall provide all inspection and testing, except where required by code, specification, or detailed elsewhere in the requirements of this document.

The Quality Control Plan shall identify the equipment and/or system to be inspected and/or tested, exact test(s) to be performed, measured parameters, and the stage of construction development when tests are to be performed. The D/B Contractor shall organize inspection and/or testing of equipment in accordance with a recognized method which delineates all facets of construction. The method shall identify all equipment items, subsystems, and/or components which influence operation, function, quality or referenced on timeline charts to identify when tests should be performed. The D/B Contractor is not relieved from the required performance test should these not be included in the plan.

4.10.8. Test Parameters

For each component to be inspected/adjusted/tested, identify each test parameter and represent each operating condition and all control modes of operation. Tests shall document any observed deficiencies or improper operation. Tests shall identify capacity readings, normal operation of equipment and verification of required automatic controls.

4.10.9. Test Report

For each inspection/adjustment/test parameter, identify the test(s) to be conducted, methodology, adjustments contemplated, test result comparison to that of performance parameters, the date and time of the test, and who will do the work. Consider the following as an example:

- Test
- Test Method
- Adjustments
- Performance Parameters
- Actual Performance
- Test Occurrence
- Test Performed by

4.10.10. Coordination with others

The D/B Contractor shall cooperate with agencies and others performing required tests, inspections and other quality control services, and shall provide reasonable auxiliary services as requested. The D/B Contractor shall notify the testing and inspection entities sufficiently in advance of operations to permit their timely assignment of personnel. Auxiliary services include but are not limited to the following:

- Provide access to the work
- Furnish incidental labor and facilities necessary to facilitate inspections and tests
- Take adequate quantities of representative samples of materials that require testing or assist the agency in taking samples
- Deliver samples to testing laboratories
- Coordinate the sequence of activities to accommodate required services with a minimum of delay

- Schedule times for inspections, tests, taking samples and similar activities

4.11. SAFETY PLAN

The D/B Contractor shall develop, provide, and maintain a Safety Plan based upon OSHA Safety Plan Requirements. The Safety Plan shall be prepared and submitted with the 95% Submission. Construction shall not begin until the Safety Plan is approved.

4.12. COORDINATION OF WORK

The D/B Contractor shall coordinate the work of this contract with that of other contractors in the building at the same time.

4.13. REQUESTS FOR INFORMATION

Each RFI shall include a specific description of the issue requiring clarification, and citing the specific related contract documents requiring clarification. RFI's should only be submitted after performing due diligence to confirm that the contract requirements in question are in fact unclear or otherwise inadequate.

The D/B Contractor's A/E shall review all RFIs and provide recommendations before submission to the COR/PM.

Upon receipt of the response to each RFI submitted, coordinate the response with all involved subcontractors to ensure understanding and appropriate action.

4.14. MODIFICATIONS / CHANGE ORDERS

A Contract Modification (Change Order) will only be approved if the CO agrees that additional work to be performed by the Contractor, as a result of resolution of an RFI, and is beyond the original scope of work. No work shall be performed until an executed contract modification has been awarded. Proposals from sub-contractors shall be included in any proposal requested by the Contracting Officer.

5. CONTRACT ADMINISTRATION

5.1. CONTRACTOR'S STAFF

5.1.1. Personnel Qualifications

The D/B Contractor shall exclusively utilize the Key Personnel named and/or otherwise identified in the D/B Contractor's bid submission materials to perform services required under this contract. In the event that any personnel named in the D/B Contractor's Technical Qualifications Statement are unable to perform their duties due to death, illness, resignation from the D/B Contractor's employment, the Contracting Officer's request for removal, or similar reasons, the D/B Contractor shall, within five working days, submit to the CO in writing, the name and qualifications of proposed replacement with equal or superior qualifications. No substitution shall be made without prior approval of the CO. Any approved substitutions shall be made at no increase in the lump sum contract price.

5.1.2. Contracting Officer Acceptance

The CO shall accept or reject personnel proposed by the D/B Contractor. The D/B Contractor shall make a timely and prompt re-submittal to provide other personnel required to replace any that are rejected by the CO, both at initial submittal or any subsequent rejection or substitution of personnel.

5.1.3. Personnel Security Requirements

The D/B Contractor shall comply with the Security Clearances requirements of the contract documents (see The Agreement) and GSAR 552.204-9 Personal Identity Verification Requirements. The Contractor shall review the CIO policy noted in the GSAR 552.204-9 on this GSA webpage on How Contractors Obtain a GSA Access Card.

Application for HSPD-12 clearance includes an electronic application process, in-person fingerprinting at a federal facility, and in-person pickup of the badge. For any individual whose Initial Fitness Determination requires that the applicant wait for Final Fitness Determination, the D/B Contractor shall promptly provide a qualified replacement.

All personnel in this contract shall comply with all building security provisions and facility access requirements beyond HSPD-12. In addition to the GSA-issued badge, some Agencies require their Agency badges to be obtained, and worn at all times while in the building, this may require additional information to be submitted. Contact COR/PM for requirements.

No extensions for schedule will be given for failure to get personnel credentialed in a timely manner.

Building badges must be worn above the waist and below the neck in a visible fashion at all times by the D/B Contractor while in the subject facility.

5.1.4. Escorting

All D/B Contractor personnel shall be escorted at all times in compliance with the HSPD-12 escorting requirements.

5.1.5. Permits and Responsibilities

Per FAR 52.236-7 Permits and Responsibilities, the D/B Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The D/B Contractor shall also be responsible for all damages to persons or property that occur as a result of the D/B Contractor's fault or negligence. The D/B Contractor shall also be responsible for all materials delivered, and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

5.2. MEETINGS

The D/B Contractor shall prepare and distribute an agenda for each D/B Contractor hosted project meeting in advance of the meeting date. Agenda for all meetings shall include review of all open items (e.g. RFIs, Design Comments, Issue Tracking), a look-ahead to the next scheduled meeting, and a round robin opportunity for all participants to introduce items to the meeting.

The D/B Contractor's in-person representation at all meetings shall include those individuals having knowledge of the agenda topics and authority to make decisions and commit resources.

The D/B Contractor shall provide minutes of all D/B Contractor hosted project meetings and presentations to all attendees identifying new and unresolved action items and associated responsible parties. Minutes shall be provided within 1 calendar day after each meeting.

5.2.1. Design Review Meetings

During the design phase, the D/B Contractor shall conduct, and a GSA representative and/or consultant will attend, on-site review meetings in-person, following each of the design submissions.

5.2.2. Construction Kickoff Meeting

After design and before construction NTP, the D/B Contractor shall conduct a Construction Kickoff Meeting in-person with the COR/PM, CMa, and Building Manager to provide an overview of the project and discuss how all GSA review comments have been addressed. Also discuss phasing, staging, working hours, vertical transportation of materials, and any other special building requirements.

5.2.3. Construction Progress Meetings

After Construction begins, the D/B Contractor shall conduct, and a GSA representative and/or consultant, will attend biweekly progress meetings in-person. Field inspections by the COR/PM will generally coincide with these progress meetings.

5.3. COMMUNICATION

The D/B Contractor shall reply to correspondence from the GSA, tenant agencies, and GSA contractors within 3 calendar days. The COR/PM shall be included on all correspondence.

5.4. PROJECT CLOSEOUT

The D/B Contractor shall complete all punchlist items prior to the completion of project closeout.

5.4.1. Final Inspection and Test

Unless otherwise identified, manufacturer recommendations shall be followed for all inspection and test procedures.

5.4.2. As-Built Drawings

The D/B Contractor shall provide "As-Built Drawings" and documents based upon actual site installation, as should be reflected within latest Record Drawings/documents. Should Record Drawings not present As-Built conditions, the D/B Contractor shall perform field measurements and shop drawing take offs as required to support accurate As-Built drawings. Should the Government determine that variation exists between finished construction and the As-Built drawings, the D/B Contractor shall correct drawings to the satisfaction of the government. Electronic As-Built drawings shall be submitted through Kahua.

5.4.3. Specification Manual

The D/B Contractor shall provide electronic copies of the specification manual submitted through Kahua with complete sets of all final design specifications and related documents. Specifications shall be precisely edited to match installed features/systems/equipment and materials.

5.4.4. Product Data and Shop Drawing Manuals

The D/B Contractor shall combine all product data submission material and shop drawings into hard copy manuals for reference during construction. Shop drawings shall be bound with product data or separately bound in drawing racks. The manuals shall be divided into sections corresponding to design specification section headings. The D/B Contractor shall provide electronic copies submitted through Kahua containing all approved shop drawing submissions.

5.4.5. Design Calculation Manual

The D/B Contractor shall provide electronic copies submitted through Kahua of final sets of all design calculations associated with this project representing both initial design calculations and those analyses associated with contract changes.

5.4.6. Operation and Maintenance Manual

The D/B Contractor shall prepare a detailed Operation and Maintenance Manual identifying all procedures, tools, equipment and parts necessary to assure satisfactory operations and to provide maintenance per manufacturer's recommendations, including the following:

- Instruction manuals covering the care, preservation and maintenance of materials and finishes
- Operation, maintenance, troubleshooting and parts manuals for equipment and building operating systems
- Instruction to Government operating personnel in the operation and maintenance of building systems and equipment
- Equipment inventories
- Emergency manuals
- Electronic versions uploadable to GSA's NCMMS

The D/B Contractor shall deliver electronic copies submitted through Kahua to the PM/COR.

5.4.7. Maintenance Training

Maintenance Training shall address cycles of replacement, use of any special tools, and other product- or system-specific maintenance requirements. Include references to record documents, spare parts, material lists, warranties, maintenance agreements and similar continuing commitments.

5.4.8. Warranties

The D/B Contractor is required to provide the government with 3 original signed copies of all warranties. Warranty start date shall begin no earlier than the date of installation acceptance.

5.4.9. Attic Stock

The D/B Contractor is required to provide the government with critical key-components or attic stock items at the end of the project. GSA will determine which specific items and in what quantities..

5.4.10. Return All HSPD-12 and/or Tenant Agency Badges

The D/B Contractor shall return all badges to the COR/PM that were issued for the project.

5.4.11. Release of Claims

The D/B Contractor shall furnish the Government with a release of all claims against the Government under the applicable portions of this contract.

5.5. SCHEDULE OF VALUES

The D/B Contractor shall submit a completed Schedule of Values no later than 14 calendar days prior to the scheduled date of initial Requests for Payment. Schedule of Values must include the following:

- Work activity – (by division or specific work activity)
- Dollar value of each specific work activity – both with an amount in dollars and cents, and as a percentage of the Contract Sum to the nearest one-hundredth percent. Adjust the amounts to total to the Contract Sum and the percentages to total 100 percent
- Line items for mobilization and demobilization
- Line item for close out (% to be negotiated with COR/PM)
- Total cost and proportionate share of general overhead and profit for each item. (i.e. no stand alone item for Overhead, and Profit)
- Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at the government's option
- Separate prices for design stage and construction stage costs

Each item in the Schedule of Values and Requests for Payment shall be complete.

5.5.1. Modifications

Update affected work branches and subordinate line items and resubmit the Schedule of Values before the next Request for Payment when Modifications result in a change in the Contract Sum.

5.5.2. Options

Provide a separate Schedule of Values for each exercised Option.

5.6. FEE & PAYMENT

The design fee shall be paid per submission schedule. Upon review and acceptance of each submission, the D/B Contractor may submit an invoice for the specific contract amount. The construction shall be paid per the progress of construction according to Schedule of Values, submitted on a monthly interval.

Prior to final payment under this Contract, the D/B Contractor shall complete all items in Section 5.4 Project Closeout and furnish the Government with a release of all claims against the Government.

5.7. GOVERNMENT FURNISHED PROPERTY

There is no government furnished property for this contract.

END SCOPE OF WORK

6. ATTACHMENTS

- SOW Attachment 1 | 283176 FIRE ALARM AND VOICE EVACUATION SYSTEM
- SOW Attachment 2 | 284800 EMERGENCY RADIO COMMUNICATION ENHANCEMENT SYSTEM
- SOW Attachment 3 | IRS FAS REplacement C&D Waste Mgmt
- SOW Attachment 4 | C and D Waste Monthly Report
- SOW Attachment 5 | GSA Affiliated Customer Accounts (GACA) Controlled Unclassified Information (CUI) and documents and photographs too large to share here are available on GSA Affiliated Customer Account (GACA) in Gmail.
- SOW Attachment 6 | NDA Document Security
- SOW Attachment 7 | HISTORIC STRUCTURES REPORT MARCH 1981
- SOW Attachment 8 | DC0022 IRS Building Annual Asbestos Inspection _ Survey Report-FINAL
- SOW Attachment 9 | Section 01546 - Safety and Health
- SOW Attachment 10 |Section 02085 - Asbestos Abatement Procedures
- SOW Attachment 11 | IRS HQ Fire Alarm Study
- SOW Attachment 12 | Child Care Center Design Guide