DOOR REFURBISHMENT PROJECT

Everett M. Dirksen U.S. Courthouse 219 South Dearborn Avenue

Chicago, Illinois 60604

Ralph H. Metcalfe Federal Building

77 West Jackson Boulevard Chicago, Illinois 60604

ISSUED: ISSUED FOR CONSTRUCTION: 11-19-18

Prepared For:



GENERAL SERVICES ADMINISTRATION GREAT LAKES REGION REGION 5 230 SOUTH DEARBORN CHICAGO, ILLINOIS 60640 Prepared By:

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THE FOLLOWING LISTED DOCUMENTS COMPRISE THE PROJECT MANUAL FOR THE PROJECT LISTED ABOVE. WHERE NUMERICAL SEQUENCE OF SECTIONS IS INTERRUPTED, SUCH INTERRUPTIONS ARE INTENTIONAL.

THE COMPLETE PROJECT MANUAL FOR THIS PROJECT CONSISTS OF THIS ENTIRE VOLUME, WHICH MUST NOT BE SEPARATED FOR ANY REASON. THE ARCHITECT AND OWNER DISCLAIM ANY RESPONSIBILITY FOR ANY ASSUMPTIONS MADE BY A CONTRACTOR OR SUBCONTRACTOR WHO DOES NOT RECEIVE A COMPLETE PROJECT MANUAL, INCLUDING ALL SECTIONS LISTED IN THE TABLE OF CONTENTS.

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SECTION 01 10 00 SUMMARY

PART 1 GENERAL

1.01 PROJECT INFORMATION

- A. Project Name and Location: Dirksen & Metclalfe Door Repairs & Replacement Project.
 - 1. Everett M. Dirksen Courthouse, 219 S. Dearborn Street, Chicago, IL 60604.
 - 2. Ralph H. Metcalfe Federal Building, 77 West Jackson Boulevard, Chicago, IL 60604.
- B. Project Summary Description: Repars to existing exterior doors at both locations.
- C. Architect: The term Architect refers to the project designer. The Architect's status relative to the construction will be stated in writing by the Contracting Officer prior to the pre-construction conference. The project was designed by: KOO LLC.
- D. The GSA Project Manager for the project is: Joseph Stroming.
- E. The GSA Contracting Officer for the project is: Oana Sandru.

1.02 SCHEDULE OF GOVERNMENT-FURNISHED PROPERTY

A. The project includes the following Government furnished property to be installed by the Contractor. The contractor shall advise GSA at least 30 days in advance of when the property should be delivered.

1.03 MISCELLANEOUS PROVISIONS

- A. Comply with the "Building Design Standards" guide for the Everett Dirsken United Stated Courthouse (USCH_BDS) for all work at Dirksen.
- B. Work in existing facilities shall correspond in all respects with the existing conditions to which it connects, or to similar existing conditions, in materials, workmanship and finish.
- C. Alterations to Existing Conditions: Existing conditions shall be cut, drilled, removed, temporarily removed, or removed and replaced, as necessary for performance of Work under the Contract. Work out of alignment where exposed by removal of existing work shall be called to the attention of GSA. Necessary corrective work shall be as directed.
 - 1. Replacements of existing conditions that are removed shall match similar existing conditions.
 - 2. Unless otherwise indicated, existing structural members shall not be cut or altered without authorization by the Contracting Officer.
 - 3. Conditions remaining in place, which are damaged or defaced during the Work, shall be restored to the condition existing at time of award of Contract.
 - 4. Discolored or unfinished surfaces exposed by removal of existing conditions, that are indicated to be final exposed surfaces, shall be refinished or replaced as necessary to produce uniform and harmonious contiguous surfaces.
- D. Existing structures will remain in place.
- E. Existing utility services with related meters and equipment will remain in place.
- F. Removed items indicated to remain the property of the Government shall be stored on site where directed by the Contracting Officer.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 01 14 00 WORK RESTRICTIONS

PART 1 GENERAL

1.01 CONTRACTOR USE OF PREMISES

- A. The Contractor will review and document the existing conditions surrounding the project premises. Provide documentation to the Government prior to the commencement of any construction activity.
- B. The Contractor shall limit use of the premises to the work in areas indicated, and to allow for Government occupancy and public use.
 - 1. Confine operations at the site to areas indicated. Do not disturb portions of the site beyond the areas in which Work is indicated.
 - 2. Keep driveways and entrances serving the premises clear and available at all times to the Government, Government employees and to visitors. Do not use these areas for parking or storage of materials.
 - 3. Schedule deliveries to minimize space and time requirements for storage of material and equipment on site.
 - 4. Maintain existing building in a safe and weather-tight condition throughout the construction period. Repair damage caused by construction operations to the satisfaction of the government. Take precautions to protect the building, its occupants and the public during the construction period. A representative of the Contractor shall be available to arrive on site within one (1) hour of notice should an emergency occur.
 - 5. Keep public areas, such as hallways, stairs, lobbies and toilet rooms, free from accumulation of waste material, rubbish, construction debris and construction materials.
 - 6. Space on the premises will be made available for the Contractor's storage and related activities, provided that its use will not interfere with operations of the Government. Arrange and gain approval for use of this space through the Contracting Officer.
 - 7. Existing materials and equipment that are removed as part of the construction operations, and that are not reused or designated to be salvaged as Government property, shall become the property of the Contractor and shall be removed from the site. Storage or sale of excess salvageable materials and equipment is not permitted on site.
 - Smoking is not permitted in or around the building, see Facilities Management Regulation (FMR) Case 2008-102-3. Also see Code of Federal Regulations (CFR) 41 CFR Part 102-74.
 - 9. Cell Phones: Contractor is to provide company cell phone during this contract. All cell phones to be "on vibrate" at all times. If a telephone begins audibly ringing, the building guards will take the cell phone and hold until the end of the working day prior to the con-tractor leaving the property. Cell phones are only permitted in construction area and contractor's office space.
 - 10. No apparatus with an open flame is allowed to be used within the facility without the prior receipt of a burn permit. Contact the Field Office to obtain burn permits. Burn permits are required for each separate occurrence.
 - 11. Permits: Refer to FAR 52.236-7
 - 12. 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.
 - 13. Coordinate with the GSA Building Manager and the COR for site access.
 - 14. Coordinate with the GSA Building Manager and the COR on correct response procedures for any building system alarms occurring during or resulting from the construction process.

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WORK RESTRICTIONS

- 15. All building systems outside the immediate construction area shall be kept fully operational during normal working hours.
- 16. Protect building site from flying debris.
- 17. Coordinate with your building manager and/or security office as to the use of cameras in the building.

1.02 GOVERNMENT OCCUPANCY

- A. The Government will occupy the site and the existing building during the entire period of construction. Cooperate with the Government's representatives during construction operations to minimize conflicts, mitigate noise, and facilitate Government usage. Perform the Work in a manner that does not interfere with the Government's operations.
- B. The Government reserves the right to occupy, place, and install equipment in completed areas of the building prior to Substantial Completion, provided such occupancy does not interfere with completion of the Work. The Government's installation of equipment and partial occupancy shall not constitute acceptance of the total Work.
 - 1. Prior to partial Government occupancy, mechanical and electrical systems for the space shall be fully operational, and required inspections and tests shall be successfully completed. Upon occupancy, the Government will operate and maintain mechanical and electrical systems serving the occupied portions of the building.
 - 2. Upon occupancy, the Government will assume responsibility for maintenance and custodial service for the occupied portions of the building.

1.03 WORKING HOURS

- A. 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: ______AM to _____PM.
- B. Government Unoccupied Hours: Government personnel are not scheduled to occupy the building during times not indicated as Government Occupied Hours.
- C. Contractor's General Working Hours: The Contractor working hours shall be generally established to occur during Government Occupied Hours.
- D. Contractor's Required Working Hours: The following work shall be performed during Government Unoccupied Hours:
 - 1. Noisy and/or odor-producing work that may disrupt tenant operations in adjacent spaces.
 - 2. While U.S. Courts are in session.
- E. Work accomplished during Government Unoccupied Hours shall be performed at no additional cost to the Government. Contractor shall submit a proposed schedule and gain the Contracting Officer's approval at least 48 hours before proceeding with any work during Government Unoccupied Hours.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 01 25 00 SUBSTITUTION PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

A. Section includes administrative and procedural requirements for substitutions.

1.02 DEFINITIONS

- A. Substitutions: Proposed changes to the Contract Documents by the Contractor for products, materials, equipment, and methods of construction.
 - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms
 - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner

1.03 SUBMITTALS FOR CAUSE OR CONVENIENCE:

- A. Substitution Requests: Per Submittal Procedures Section 013300 submit electronic copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the Government and separate contractors that will be necessary to accommodate proposed substitution.
 - b. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable specification section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, energy and resource performance goals, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - c. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - d. Samples, where applicable or requested.
 - e. Certificates and qualification data, where applicable or requested.
 - f. List of similar installations for completed projects with project name, location and contact information of owner and architect/engineer of record.
 - g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - h. Research reports evidencing compliance with building code in effect for project, when applicable for the proposed substitution.
 - i. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery. Provide a schedule fragnet with a time impact analysis to allow the Government to consider the proposed substitution.
 - j. Cost information, including a proposal of change, if any, in the Contract Sum.

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SUBSTITUTION PROCEDURES

- k. Proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
- I. The Contracting Officer may require the Contractor to provide a contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- 2. The Contracting Officer or Contracting Officer's Representative (CO) or (COR) Action: If necessary, the Contracting Officer or COR will request additional information or documentation for evaluation. The Contractor shall be entitled to receive notice of action on submittals within a reasonable time, given the volume or complexity of the submittals and the criticality of the affected activities to Substantial Completion as may be indicated in the Project Schedule. The Contractor shall not be entitled to receive notice of action on submittals containing variations from Contract requirements in less than twenty working days.
- B. Failure by the government to respond does not constitute acceptance of the proposed substitution.

1.04 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage qualified testing agency to perform compatibility tests recommended by manufacturers.

1.05 PROCEDURES

A. Coordination: Modify or adjust affected work as necessary to integrate work of the approved substitutions.

PART 2 PRODUCTS

2.01 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately upon discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
 - 1. Conditions: The Contracting Officer (CO) will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, the Contracting Officer (CO) will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - b. Substitution request is fully documented and properly submitted.
 - c. If requested substitution involves schedule impact Contractor has identified time impact and a mitigation plan.
 - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - e. Requested substitution is compatible with other portions of the Work.
 - f. Requested substitution has been coordinated with other portions of the Work.
 - g. Requested substitution provides specified warranty.
 - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: The Contracting Officer (CO) will consider requests for substitution if received within 30 days after the Notice to Proceed. Requests received after that

time may be considered or rejected at discretion of the Contracting Officer (CO) or the Contracting Officer Representative (COR).

- 1. Conditions: The Contracting Officer will consider Contractor's request for substitution when the following conditions are satisfied.
 - a. Requested substitution offers the Government a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional obligations the Government incurs..
 - b. Requested substitution does not require extensive revisions to the Contract Documents.
 - c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - d. Substitution request is fully documented and properly submitted.
 - 1) If requested substitution involves schedule impact Contractor has identified time impact and a mitigation plan.
 - 2) Requested substitution has received necessary approvals of authorities having jurisdiction.
 - 3) Requested substitution is compatible with other portions of the Work.
 - 4) Requested substitution has been coordinated with other portions of the Work.
 - 5) Requested substitution provides specified warranty.
 - 6) If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 29 00 PAYMENT PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

A. This Section specifies administrative and procedural requirements necessary to prepare and to process Requests for Payment.

1.02 DEFINITIONS

- A. Schedule of Values: A detailed written statement (masterformat/uniformat) furnished by the Contractor outlining the portions of the contract sum, which allocates values (price & percentage) for the various parts of the work and used as the basis for payment application and reviewing progress payments. The Agreement provides further details.
- B. Request for Payment: A contractor's invoice and request for progress payment with substantiating information consistent with approved schedule of values.

1.03 SCHEDULE OF VALUES

- A. Coordination: Submit completed Schedule of Values no later than [14] calendar days prior to scheduled date of initial Requests for Payment. What about cost loaded schedules?
- B. Identification: Complete the following Project Identification fields in the Schedule of Values:
 - 1. Project Name
 - 2. Project Number
 - 3. Project Location, City, State
 - 4. Base Contract Number
 - 5. Task Order Number
 - 6. Modification Number
 - 7. GSA Project Manager
 - 8. Contractor's Name and contact information
 - 9. Date of submittal
 - 10. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Requests for Payment and progress reports.
 - a. Work activity (by division or specific work activity)
 - b. Dollar value of each specific work activity both with an amount in dollars and whole cents, and as a percentage of the Contract Sum to nearest one-hundredth percent. Adjust the amounts to total to the Contract Sum and the percentages to total 100 percent.
 - c. Each item in the schedule of values and Requests for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item. (i.e. no stand alone item for Overhead, and Profit)
 - d. Modifications that affect value.
 - e. Update affected work branches and subordinate line items and
 - f. resubmit the schedule of values before the next Request for Payment when Modifications result in a change in the Contract Sum
 - g. Line item for mobilization and de-mobilization
 - h. Line item for close out (% to be negotiated with GSA COR)
 - 11. Options: Provide a separate Schedule of Values for each exercised Option.
 - 12. Each item in the Schedule of Values and Requests for Payment shall be complete. 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.

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PAYMENT PROCEDURES

1.04 REQUESTS FOR PAYMENT

- A. Each Request for Payment following the initial Request for Payment shall be consistent with previous Requests.
 - 1. Initial Request for Payment, Request for Payment at time of Substantial Completion, and final Request for Payment involve additional requirements.
- B. Payment Request Times: Submit Request for Payment to GSA by the 10th day of the month. The period covered by each Request for Payment is one month, ending on the last day of the month, unless directed differently by GSA.
 - Submit one paper draft copy (aka pencil copy) of Request for Payment to the CO or enter in ePM (when applicable) along with construction progress report seven days prior to due date for review by GSA. Provide documentation evidencing the cost of work performed to be included in the Request for Payment. Resolve questions resulting from GSA review of draft Request for Payment and construction progress report prior to submitting Request for Payment.
- C. Request Preparation: All payments must be executed by a person authorized to legally bind the Contractor.
 - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 - 2. Include amounts for work completed following effective date of previous Request for Payment, whether or not payment has been received. Include only amounts for work completed as of effective date of current Request for Payment.
 - 3. Include amounts of Modifications issued before last day of construction period covered by Request.
- D. Stored Materials: Differentiate between items stored on-site and items stored off-site.
 - 1. Provide certificate of insurance, and consent of surety to payment, for stored materials.
 - 2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation.
 - 3. Provide summary documentation for stored materials indicating the following:
 - a. Value of materials previously stored and remaining stored as of effective date of previous Request for Payment.
 - b. Value of previously stored materials put in place after effective date of previous Request for Payment and on or before effective date of current Request for Payment.
 - c. Value of materials stored since effective date of previous Request for Payment and remaining stored as of effective date of current Request for Payment.
- E. Initial Request for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Request for Payment include the following:
 - 1. List of subcontractors.
 - 2. Schedule of values.
 - 3. Contractor's construction schedule per Agreement (startup if not final).
 - 4. Schedule of unit prices.
- F. Request for Payment at Substantial Completion: After GSA issues the Notice of Substantial Completion, submit a Request for Payment less previous payments made for portion of the Work claimed as substantially complete.
 - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 - 2. This Request shall reflect Notices of Substantial Completion issued previously for GSA occupancy of designated portions of the Work.
- G. Final Payment Request: The Agreement provides further details

PART 2 PRODUCTS (NOT USED) PART 3 EXECUTION (NOT USED)

END OF SECTION

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PAYMENT PROCEDURES

SECTION 01 31 00

PROJECT MANAGEMENT AND COORDINATION

PART 1 GENERAL

1.01 SUMMARY

- A. This section includes certain administrative provisions for managing and coordinating construction operations, including but not limited to the following:
 - 1. General project coordination.
 - 2. Administrative and supervisory personnel.
 - 3. Conferences and meetings.

1.02 GENERAL PROJECT COORDINATION

- A. Coordination of Trades: Coordinate construction operations included in the various sections of the Specifications to provide an efficient and orderly installation of each part of the Work. Coordinate construction operations included under different sections of the Specifications that depend on each other for proper installation, connection or operation. Keep pipes, ducts, conduit, and the like as close as possible to ceiling slab, walls, and columns to take up a minimum amount of space. Locate pipes, ducts, and equipment so that they do not interfere with the intended use of eyebolts and other lifting devices. Assure all controls can be reached and operated.
 - 1. Schedule construction operations in the sequence required to obtain the best results where the installation of one part of the Work depends on installation of other components before or after that part.
 - 2. Coordinate installation of different components to provide maximum accessibility for required maintenance, service, testing and repair.
- B. Notification: Prepare and distribute memoranda to each party involved, outlining special procedures required for coordination. Include notices, reports and meeting minutes as part of the memoranda.
- C. Administrative Procedures: Coordinate scheduling and timing of administrative procedures with other construction activities to avoid conflicts and promote orderly progress of the Work. Administrative procedures include but are not limited to the following:
 - 1. Preparation of schedules.
 - 2. Installation and removal of temporary facilities.
 - 3. Security packages and systems by others (i.e. U.S. Marshals Service (USMS), Federal Protective Service (FPS), tenants, etc.)
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Project closeout activities.
 - 7. Startup and adjustment of systems.

1.03 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

A. The Contractor shall provide administrative and supervisory personnel for proper performance of the Work.

1.04 CONFERENCES AND MEETINGS

- A. Preconstruction Conference: The government shall schedule a preconstruction conference before starting construction at a time and place convenient to the Contractor. The conference shall review responsibilities and personnel assignments.
 - 1. Attendees: Participants at the conference shall be familiar with the project, shall be authorized to conclude matters relating to the Work, and shall minimally include representatives of the following parties:

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- a. Government.
- b. Architect.
- c. Contractor.
- d. Agenda: Subjects for discussion shall include items of significance that could affect progress, including but not limited to the following:
 - 1) Tentative construction schedule.
 - 2) Critical work sequencing.
 - 3) Designation of responsible personnel.
 - 4) Procedures for processing field decisions and Change Orders.
 - 5) Submittal of Shop Drawings, Product Data, and Samples.
 - 6) Use of the premises.
 - 7) Parking availability.
 - 8) Office, work, and storage areas.
 - 9) Equipment deliveries and priorities.
 - 10) Working hours.
- B. Progress Meetings: The Government or designee shall conduct progress meetings at the Project Site at regular intervals. Dates of meetings shall be coordinated with preparation of the payment request.
 - Attendees: In addition to the Contractor's and Government's representatives, each subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the status of the Project.
 - a. Contractor's Construction Schedule: Review progress since the last progress meeting. Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time. Provide (X) week schedule look ahead. [Coordinate further with team and legal on sections 13110 or 13120 regarding look-ahead schedules.]
 - b. Review the present and future needs of each entity present, including but not limited to the following:
 - 1) Time.
 - 2) Status of submittals.
 - 3) Deliveries.
 - 4) Change Orders.
 - c. Schedule Updating: The Contractor shall revise the Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. The revised schedule shall be issued concurrently with the report of each meeting.
 - 3. Administration of Progress Meetings: The Contractor is responsible for administration and record keeping for all progress meetings from pre-construction to final completion.
 - a. Prepare agenda and all other meeting materials.
 - b. Record and distribute meeting minutes.
 - 1) Distribute copies within three days after meeting to participants, including: Owner, Architect, other participants, and those affected by decisions made.

- A. Subcontract List: Within 10 calendar days from Notice to Proceed (NTP) prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Number and title of related Specification Section(s) covered by subcontract.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.01 GENERAL COORDINATION PROVISIONS

- A. Inspection of Conditions: Prior to installations, require the installer of each major component to inspect both the substrate and conditions under which work is to be performed.
- B. Construction in Progress: Keep construction in progress, and adjoining materials in place, clean during handling and installation. Apply protective coverings where required for protection from damage or deterioration.
- C. Completed Construction: Clean completed construction, and provide maintenance, as frequently as necessary to prevent damage or soiling or other deterioration through the remainder of the construction period. Adjust and lubricate operable components as necessary to assure operability without damage.
- D. Limiting Exposures: Supervise construction operations to prevent exposure of any part of construction, completed or in progress, to harmful, dangerous, damaging or otherwise deleterious conditions during the construction period. Such conditions include but are not limited to the following:
 - 1. Excessively high or low temperatures.
 - 2. Excessively high or low humidity.
 - 3. Pollution and air contamination.
 - 4. Water or ice.
 - 5. Chemicals and solvents.
 - 6. Heavy traffic.
 - 7. Soiling, staining, and corrosion.
 - 8. Unusual wear or other misuse.
 - 9. Contact between incompatible materials.
 - 10. Misalignment.
 - 11. Unprotected storage.
 - 12. Theft or vandalism.

END OF SECTION

SECTION 01 32 00

CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 GENERAL

1.01 SUMMARY

- A. This section includes certain schedules and reports required for documenting the progress of construction during performance of the Work.
- B. Coordinate the timing for preparation and processing of schedules and reports with the performance of other construction activities, and maintain a consistent and logical correlation between updated schedules and reports.
- C. All construction progress documentation should be created and transmitted electronically into GSA's electronic Project Management (ePM) database system.

1.02 SCHEDULE OF SUBMITTALS

- A. Prepare and submit a schedule of submittals required by the Contract Documents within 14 calendar days after issuance of the Notice to Proceed.
- B. Contractor shall create the schedule of submittals and other related documents. Prepare the schedule in tabular form, including but not limited to the following information:
 - 1. Specification section number.
 - 2. Description.
 - 3. Expected Submittal Date.

1.03 REPORTS

- A. Daily Construction Reports: Prepare electronic daily construction report recording the following information concerning but not limited to events at the site. All daily reports are to be uploaded to GSA's e-PM Include:
 - 1. List of subcontractors at the site.
 - 2. Count of personnel at the site.
 - 3. Accidents.
 - 4. Meetings and significant decisions.
 - 5. Summary of all work performed.

1.04 PART 2 PRODUCTS (NOT APPLICABLE)

1.05 PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 01 32 20

PHOTOGRAPHIC DOCUMENTATION

PART 1 GENERAL

1.01 GENERAL

A. Regular Construction Progress Photos. Contractor shall document on a weekly basis key components of the contract document.

1.02 SUBMITTALS

- A. Digital Photographs: Contractor shall submit and/or upload to ePM electronic files of each view to the GSA. Submit image files within 5 calendar days of taking photographs.
 - 1. Format: Minimum 3600 by 2400 pixels, in unaltered original files, with same aspect ratio as the sensor, un-cropped, in folder named by date of photograph, accompanied by key plan file.
 - 2. Identification: Provide the following information with each image description in file metadata tag:
 - a. Name of Project.
 - b. Date photographs were taken.
 - c. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.

1.03 USAGE RIGHTS

A. Comply with General Services Administration Acquisition Manual (GSAM) Clause 552.227-70, Government Rights (Unlimited). See the construction contract for more information.

PART 2 PRODUCTS

2.01 PHOTOGRAPHIC MEDIA

A. Digital Images: JPEG format with minimum 3600 by 2400 megapixels or greater.

PART 3 EXECUTION

3.01 CONSTRUCTION PHOTOGRAPHS

- A. Preconstruction Photographs: Before construction is started, photographer shall take photographs of the site and surrounding properties from different points of view selected by GSA. The contractor may choose to provide additional photographs.
- B. Construction Period Photographs: At intervals during construction, photographer shall take photographs of the project's progress from different points of view. Vantage points shall be selected by the photographer unless otherwise directed by GSA.
 - 1. Frequency: Take photographs weekly and coinciding with the cutoff date associated with each application for payment.
 - 2. Number: Take not less than four photographs each time, to best show the status of construction and progress since taking previous photographs.

END OF SECTION

SECTION 01 33 00 SUBMITTAL PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

- A. This Section includes certain administrative and procedural requirements for shop drawings, coordination drawings, schedules, samples and certain other quality assurance submittals.
- B. This section does not include requirements for the following submittals that are included in their specific sections:
 - 1. Inspection and test reports specified in Division 1 Section "Quality Control."
 - 2. Warranties specified in Division 1 Section "Product Requirements."
 - 3. Closeout submittals specified in Division 1 Section "Closeout Procedures."
 - 4. Record documents specified in Division 1 Section "Project Record Documents."
 - 5. Operation, maintenance and instruction manuals specified in Division 1 Section "Operation and Maintenance Documentation."
 - 6. Reports, schedules and other submittals specified in Division 1 Section "Construction Progress Documentation".
- C. Shop drawings, coordination drawings and schedules are further categorized and defined as follows:
 - 1. Shop drawings include drawings and schedules prepared for specific parts of the project, except for coordination drawings.
 - 2. Coordination drawings are specified in Division 1 Section "Project Management and Coordination."
 - 3. Product data includes manufacturer's standard catalogs, pamphlets and other printed materials that show and describe materials and items, and includes but is not limited to the following:
 - a. Product specifications.
 - b. Installation instructions.
 - c. Color charts.
 - d. Catalog cuts.
 - e. Rough-in diagrams and templates.
 - f. Wiring diagrams.
 - g. Performance curves.
 - h. Operational range diagrams.
 - i. Mill reports.
- D. Samples of actual materials and items shall be provided at such scale to allow delivery for review, as well as for field samples or mock-ups of full-size physical examples erected on-site or elsewhere, to establish a true-scale standard by which the corresponding work will be judged or a standard for compliance testing.
- E. Other quality assurance submittals include materials specifically prepared for the project, except drawings and schedules, and include but are not limited to the following:
 - 1. Design data and calculations.
 - 2. Certifications of compliance or conformance.
 - 3. Manufacturer's instructions and field reports.
- F. Approvals do not supersede requirements of the contract documents.

1.02 GENERAL SUBMITTAL REQUIREMENTS

A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities and with the Submittal Schedule specified in Division 1 Section

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"Construction Progress Documentation". Unless otherwise specified, submittals shall be transmitted via e-mail or file transfer as PDF electronic files to GSA according to the contractor's approved construction schedule and submittal schedule. Transmit each submittal sufficiently in advance of the scheduled performance of related construction activities to avoid delaying the Work, allowing for the review times specified for submittals.

- 1. Coordinate each submittal with other submittals and related activities that require sequential scheduling, to allow for testing, purchase, fabrication and product delivery in a timely manner.
- 2. Schedule transmittal of different categories of submittals for the same element of Work and for different elements of related parts of the Work at the same time. Notwithstanding the foregoing sentence, the Contractor shall provide a complete submittal package for each Division of the specification so as to enable the Government to review the related sections together. Coordinate submittals to enable approvals and acceptances so as not to inhibit orderly progress of the Work.
- 3. Allow sufficient time for submittal review, corrections following the initial review, and re-submittal review before activities scheduled after the submittal approval.
- 4. Failure on the part of the Contractor to indicate approval or acceptance on submittals prior to submission to Contracting Officer will result in their being returned to the Contractor without being acted upon.
- 5. Any resubmission required after Government review shall be made within 10 calendar days after return of the submittal, unless specifically authorized otherwise by GSA.
- 6. Submittals which are determined to be incomplete or otherwise substandard will be returned to the Contractor with no further review. Delays due to incomplete or rejected submittals will not be excused.
- 7. Construction will not be allowed to proceed if submittals are not received in a timely manner, and will not result in an extension to the Contractor's Construction Schedule.
- 8. Failure by the Contractor to provide the required submittals in a timely manner may result in withheld payments until submittals are up-to-date.
- 9. The contractor to schedule and allow a minimum of ten working days for the Architect/Engineer submittal review. The comment period initiates upon the receipt of the submittal by the office performing the primary review. The period commences upon issue of the submittal by the office performing the primary review. In the event the architect/engineer receives an extraordinary lengthy or complex submittal whose review may not be able to be accomplished within the stipulated submittal review period, architect/engineer to notify the Construction Manager Agency (CMa) in writing with a request for extended review period within 3 working days of receipt of the submittal. Such submittals may include structural steel, curtain wall, or complex systems requiring coordination with other systems.
- B. Submittal Identification and Information: Identify and incorporate information in each electronic submittal file as follows:
 - 1. Name file with submittal number or other unique identifier, including revision identifier.
 - a. File name shall use Contract number and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Re-submittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
 - 2. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by GSA.
 - 3. Transmittal Form for Electronic Submittals: Use software-generated form from electronic project management software, if applicable and acceptable to GSA.
 - a. Project name.
 - b. Date.

- c. Name and address of Architect.
- d. Name of Contractor.
- e. Name of firm or entity that prepared submittal.
- f. Names of subcontractor, manufacturer, and supplier.
- g. Category and type of submittal.
- h. Submittal purpose and description.
- i. Specification Section number and title.
- j. Drawing number and detail references, as appropriate.
- k. Location(s) where product is to be installed, as appropriate.
- I. Related physical samples submitted directly.
- m. Transmittal number, numbered consecutively.
- n. Other necessary identification.

1.03 SHOP DRAWINGS AND COORDINATION DRAWINGS

- A. Submit originally prepared information, drawn accurately to scale. Do not reproduce Contract Documents or copy standard printed materials as the basis for Shop Drawings and Coordination Drawings.
- B. Include at minimum the following information on Shop Drawings and Coordination Drawings:
 - 1. Dimensions.
 - 2. Identification of products and materials.
 - 3. Compliance with specified standards.
 - 4. Notation of coordination requirements.
 - 5. Notation of dimensions established by field measurements.
 - 6. Highlighted or encircled deviations from the Contract Documents.
- C. Submittals: Unless otherwise indicated, submit one electronic file (.pdf) of each drawing submittal through e-mail or file transfer. The file will be marked with action taken and returned.
- D. Distribution: When submittal is approved or accepted, Contractor shall prepare final electronic files, for the following purposes.
 - 1. One file shall be marked and retained as a "Record Document."
 - 2. Additional prints shall be provided to the entities involved in the construction.

1.04 PRODUCT DATA

- A. Collect Product Data into a single submittal for each system or element of construction. Mark each copy to show specific product choices and options applicable to the project. Product Data shall include the following information, where applicable:
 - 1. Manufacturer's printed recommendations.
 - 2. Compliance with recognized trade association standards.
 - 3. Compliance with recognized testing standards.
 - 4. Applicability of testing agency labels and seals.
 - 5. Notation of dimensions verified for fit by field measurements.
 - 6. Notation of coordination requirements.
- B. Preliminary Submittal: Prior to submittal of complete Product Data, submit a preliminary single copy of that part of Product Data when selection of options is required, such as for color charts. Preliminary submittal will be returned, with selection noted, for the Contractor's use in subsequent submittals.
- C. Submittals: Unless otherwise indicated, submit one electronic copy of each Product Data submittal. One original copy will be retained and a copy will be marked with action taken and returned to the contractor.

- D. Distribution: When submittal is approved or accepted, Contractor shall distribute copies for the following purposes:
 - 1. One copy shall be marked and retained as a "Record Document."
 - 2. Additional copies shall be provided to the manufacturers, subcontractors, suppliers, installers, governing authorities and others as required for performance of the applicable construction activities.

1.05 SAMPLES

- A. Submit full-size, fully fabricated samples, cured and finished in the manner specified. Samples shall be physically identical to the material or product proposed for use.
- B. Where variation in color, pattern, texture or other characteristic is inherent in the material or product, submit at least 3 multiple units that show approximate limits of the variations.
- C. Refer to other specification sections for requirements for samples that illustrate workmanship, fabrication techniques, and details of assembly, connections, operations and similar construction characteristics.
- D. Refer to other specification sections for samples to be returned to the Contractor for incorporation in the Work. Such samples must be in undamaged condition at time of use.
- E. Preliminary Submittal: Where color, pattern, texture or similar characteristics are specified to be selected from a manufacturer's range of standard choices, submit a preliminary single set sample of available choices prior to submittal of the complete sample. Preliminary submittal will be returned, with selection noted, for the Contractor's use in subsequent submittals.
- F. Submittals: Unless otherwise indicated and except for field samples or mock-ups of full-size physical examples erected on-site or elsewhere, submit not less than three (3) sets of each sample submittal. One copy will be marked with action taken and returned. Comply with requirements in the individual specification section for field samples and mockups.
- G. Distribution: Except for field samples or mockups, when submittal is approved, Contractor shall distribute approved copies for the following purposes:
 - 1. One copy shall be marked and retained as a "Record Document" at the Project Site, and shall be available for comparison throughout the course of construction activity.
 - 2. Additional copies shall be provided to manufacturers, subcontractors, suppliers, installers, governing authorities and others as required for performance of the applicable construction activities.

1.06 OTHER QUALITY CONTROL SUBMITTALS

- A. Submit other quality control submittals in compliance with requirements in the individual specification sections, including Division 1.
- B. Certifications: Submit notarized certifications indicating compliance with specified requirements. Certifications shall be signed by an individual authorized to sign on behalf of the Contractor.

1.07 REVIEW ACTION ON SUBMITTALS

- A. For electronic submittals:
 - 1. Submit electronic submittals via e-mail or file sharing.
 - a. GSA will return annotated file. Retain one copy of file as an electronic Project record document file.
- B. Compliance with specified characteristics is the Contractor's responsibility, and is not part of the Contracting Officer's review and indication of action taken.
- C. The contract documents shall prevail in case of review action conflict.
- D. Submittals without approval or acceptance shall not be used.

- E. Action Stamp:
 - 1. For paper or non-electronic submittal: Each submittal will be stamped with a uniform action stamp. The stamp shall be marked to indicate one of the following actions taken:
 - a. For electronic submittal: Provide a digital signature with digital certificate on electronically submitted certificates and certifications where indicated. For notarized signature if required, provide paper copies for signature.
 - b. Final Unrestricted Release: Where marked "Approved" or "Accepted", the work covered by the submittal may proceed, provided it complies with the requirements of the Contract Documents.
 - c. Final But Restricted Release: Where marked "Approved " or "Accepted" "As Noted", the work covered by the submittal may proceed, provided it complies with the notations or corrections on the submittal and with the requirements of the Contract Documents.
 - d. Return for Re-submittal: Where marked "Not Approved" or "Not Accepted", Revise and Resubmit", do not proceed with the work covered by the submittal, including purchasing, fabrication, delivery or any other activity. Revise or prepare a new submittal according to the notations on the submittal or on the return transmittal. Resubmit without delay, repeating as necessary to obtain a final release action mark.
 - e. No Action: Where a submittal is for the record or for information or for another purpose not requiring review action, the submittal may not be returned or may be returned and marked "Action Not Required."
- F. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams showing factory-installed wiring.
 - b. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 - 5. Submit Product Data before or concurrent with Samples.
 - 6. Submit Product Data in the following format:
 - a. PDF electronic file.

1.08 SUBSTITUTION REQUEST PROCEDURES

A. Substitution Requests: See section 012500 Substitution Procedures

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION

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SUBMITTAL PROCEDURES

SECTION 01 35 25

FIRE PREVENTION & PROTECTION IN CONSTRUCTION, ALTERATION, AND DEMOLITION PROJECTS

PART1 GENERAL

1.01 SCOPE

A. This specification shall apply to structures in the course of construction, alteration, or demolition, including those in underground locations.

1.02 PURPOSE

A. This specification is intended to prescribe minimum safeguards for construction, alteration, and demolition operations in order to provide reasonable safety to life and property from fire during such operations.

1.03 APPLICATION

- A. This specification provides measures for preventing or minimizing fire damage during construction, alteration, and demolition operations.
- B. The Regional Fire Protection Engineer shall be consulted for guidance in application of this specification. The local responding fire department shall also be actively involved in all preplanning activities. The Authority Having Jurisdiction (AHJ) for all technical aspects of this specification and application thereof shall be the GSA Regional Fire Protection Engineer.
- C. Alteration activities shall be permitted to require the use of both the demolition and construction activity requirements, as applicable.
- D. A fire safety program shall be included in all construction, alteration, or demolition projects, and the right of the government to administer and enforce this program shall be established, even if the building is entirely under the jurisdiction of the contractor.

1.04 EQUIVALENT TECHNOLOGIES

A. Nothing in this specification is intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety over those prescribed in this specification. Technical documentation shall be submitted to the regional GSA fire protection engineering staff to determine equivalency. The system, method, or device shall be approved for the intended purpose by the GSA fire protection engineering staff prior to being utilized. Systems, methods, or devices that are submitted for review after construction, alteration, or demolition starts, or after the systems, methods, or devices have been used, may be summarily rejected due to contractual considerations and/or technical considerations.

1.05 REFERENCES

2.

- A. Applicable Publications: Perform construction, alteration, and demolition operations in a manner conforming to the requirements of the latest edition of the following publications including all amendments to these publications:
 - 1. International Code Council (ICC):
 - a. International Building Code
 - b. International Fire Code
 - c. International Mechanical Code
 - National Fire Protection Association (NFPA):
 - a. 10 Standard for Portable Fire Extinguishers
 - b. 30 Flammable and Combustible Liquids Code

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FIRE PREVENTION & PROTECTION IN CONSTRUCTION, ALTERATION, AND DEMOLITION PROJECTS 01 35 25 - 1 of 5

- c. 51B Standard for Fire Prevention During Welding, Cutting, and Other Hot Work
- d. 54 National Fuel Gas Code
- e. 58 Liquefied Petroleum Gas Code
- f. 70 National Electrical Code (NEC)
- g. 72 National Fire Alarm Code
- h. 80 Standard for Fire Doors and Fire Windows
- i. 101 Life Safety Code
- j. 241 Standard for Safeguarding Construction, Alteration, and Demolition Operations
- k. 13 Standard for the Installation of Sprinkler Systems
- I. 13R Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height
- m. 13D Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes
- n. 14 Standard for the Installation of Standpipe and Hose Systems.
- o. 1963 Standard for Fire Hose Connections]
- 3. Code of Federal Regulations
 - a. 29 CFR, Part 1910: Occupational Safety and Health Administration (OSHA) General Industry and Health Standards.
 - b. 29 CFR, Part 1926: OSHA Construction Industry Standards.
 - c. American Society of Mechanical Engineers (ANSI/ASME):
 - 1) 1. A17.1 Safety Code for Elevators and Escalators
 - d. Testing Services or Laboratories: Construction shall be done and equipment and materials used that are in accordance with the latest edition of the following publications from Underwriters Laboratories Inc. (UL), or Factory Mutual Engineering Corporation (FM):
 - 1) UL 864 Control Units for Fire Protective Signaling Systems
 - 2) UL Building Materials Directory
 - 3) UL Fire Protection Equipment Directory
 - 4) UL Fire Resistance Directory
 - 5) UL Electrical Construction Materials Directory
 - 6) FM P7825 Approval Guide
 - e. U. S. General Services Administration
 - 1) PBS-P100 Facilities Standards for the Public Buildings Service
 - (a) http://www.gsa.gov/p100
- B. Acquisition of Publications: Referenced CFR publications may be purchased from the Superintendent of Documents, U.S. Government Printing Office, U.S. Government Bookstore Chicago, IL 60605, Milwaukee, WI 53203, Detroit, MI 48226, Cleveland, OH 44199, Columbus, OH 43215, and Washington, D.C. 20402 [1-866-512-1800 or www.gpoaccess.gov]. The National Fire Protection Association publications are available from the NFPA, Quincy, MA 02269 [1-800-344-3555 or www.nfpacatalog.org]. The International Code Council Publications are available through the ICC Store [1-800-786-4452 or www.iccsafe.org/store].

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 FIRE SAFETY PROGRAM

A. Prior to commencing construction, the contractor shall appoint an on site fire safety program manager. For projects where the government retains the services of a construction manager or on site technical representative, the fire safety program manager shall be from that oversight

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organization. For operations in an occupied building where the government already has the services of a fire safety program manager, the government shall have the right to extend the services of this manager to the construction, alteration, or demolition site to provide those services.

- B. The fire safety program manager shall have knowledge of the applicable fire protection standards, available fire protection systems, and fire inspection procedures.
- C. The fire safety program manager shall assure that all requirements of this specification and of referenced codes and standards are being complied with throughout. This manager shall also have the authority to enforce provisions of this specification to assure compliance herewith.
- D. The Contractor's site specific fire safety program shall be reviewed, and implementation of fire safety provisions pertinent to the work shall be discussed. For this reason, a copy of the contractor's site specific fire safety program shall be provided to the Contracting Officer at least 15 days prior to the beginning of construction, alteration, or demolition activities. Refer to paragraphs 1.3.B., 1.3.D and 3.3.A in this section for further information.
- E. In case of a conflict between applicable regulations, the more stringent requirements shall apply. Any guidance in regard to interpretation of codes and standards shall be sought from the GSA Regional Fire Protection Engineer. The GSA Regional Fire Protection Engineer shall make the final decision on the proper compliance with this specification in case of conflicts.

3.02 COMPLIANCE WITH REGULATIONS

- A. Contractor Responsibility: The Contractor shall assume full responsibility and liability for compliance with all applicable codes, standards, and regulations pertaining to the fire & life safety of persons during execution of the work, and shall hold the government harmless for any action or omission on the Contractor's part, or that of the Contractor's employees or subcontractors, that results in illness, injury, or death.
- B. The Contractor shall have written fire safety programs in compliance with NFPA 241 and the International Fire Code.
- C. The Contractor shall provide for required fire department pre-planning, fire department notification procedures and equipment as required by this specification, training of all on site contractor personnel on fire safety procedures, provision of fire extinguishers as required, protection of existing fire protection equipment and systems, and all other required equipment, procedures, and staff required by GSA standards and codes cited therein.
- D. Any contractor found operating outside of the approved fire safety program/plan shall be identified and removed from the project for the duration of the project. The contractor shall have neither extension of schedule nor any additional payment for delays as a result of contract personnel failing to comply with the approved fire protection impairment plan.

3.03 EMERGENCY SUSPENSION OF WORK

- A. When the Contractor is notified by the Contracting Officer, or the Contracting Officer's authorized representative, of non-compliance with the fire safety provisions of the Contract, the Contractor shall immediately, unless otherwise instructed, correct the unsafe or unhealthy condition.
- B. If the Contractor fails to comply promptly, all or part of the Work will be stopped by notice from the Contracting Officer or the Contracting Officer's authorized representative.

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FIRE PREVENTION & PROTECTION IN CONSTRUCTION, ALTERATION, AND DEMOLITION PROJECTS 01 35 25 - 3 of 5

- C. When, in the opinion of and by notice given by the Contracting Officer or the Contracting Officer's authorized representative, satisfactory corrective action has been taken by the Contractor, work shall resume.
- D. The Contractor shall not be allowed any extension of time or compensation for damages in connection with a work stoppage for an unsafe or unhealthy condition.

3.04 SUBMITTALS

- A. Fire Safety Programs: The Contractor shall submit, for approval, copies of the project fire safety program, as applicable to the work scope, or required as a result of the fire safety program review, including but not necessarily limited to the following:
 - 1. Fire Protection Systems impairment procedures.
 - 2. Hot Work procedures.
 - 3. Temporary Heating Equipment.
 - 4. Ban on Smoking in Building and provisions for smokers.
 - 5. Waste Disposal/Housekeeping
 - 6. Flammable and Combustible Liquids and Flammable Gases.
 - 7. Utilities
 - 8. Life safety measures to be provided to assure adequate life safety systems of egress for building occupants affected by the construction, alteration, or demolition. (i.e. alternate egress routes, temporary emergency lighting, relocated exit signage, training of floor fire wardens, etc.)
 - 9. Protection of tenants, visitors, and others not related to operation.

3.05 FIRE AND EXPLOSION REPORTS

- A. A copy of each loss report that the Contractor or Subcontractors submits to their insurance carriers as a result of a fire or explosion shall be submitted to the Contracting Officer Representative (COR) within seven calendar days after the date of the incident.
- B. In the event a fire or explosion results in the injury of any individual(s) or the death of any individual(s), the Contractor, shall verbally notify the Contracting Officer immediately. If the incident results in an evacuation of the facility for 1 hour or longer or if the building is deemed unsafe or uninhabitable by local authorities after an incident, the Contractor shall verbally notify the Contracting Officer immediately. A written report shall be forwarded to the GSA Regional Fire Protection Engineer no later than 48 hours following the incident.
- C. In the event a fire or explosion takes place in a construction, alteration, or demolition site, the Contractor shall cooperate with Federal, State, and Local fire investigators to determine the cause. If the incident triggers a Federal Board of Inquiry, the Contractor shall provide all information and contractor personnel required by the Board.

3.06 PROTECTION OF PERSONNEL

- A. The Contractor shall take all necessary precautions to prevent injury to the public, occupants, or damage to property of others. The public and occupants includes all persons not employed by the Contractor or a subcontractor.
- B. Where practical, the work area shall be fenced, barricaded, or otherwise blocked off from the public or occupants to prevent unauthorized entry into the work area. Care must be taken not to eliminate the means of egress for occupants of occupied areas of the building.

3.07 OPERATIONS WITHIN GOVERNMENT BUILDINGS

A. Disruptions to fire alarm and sprinkler systems shall be kept to a minimum or avoided. Delineate phasing of construction to ensure that installations of new systems are expedited, and existing

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FIRE PREVENTION & PROTECTION IN CONSTRUCTION, ALTERATION, AND DEMOLITION PROJECTS systems are kept in service until the replacement system is operational. See GSA Facilities Standards for the Public Buildings Service, PBS – P100 for further information.

- B. Temporary storage of equipment to be installed, combustible construction materials, or combustible packing materials shall not be permitted in unprotected structures under construction or alteration unless authorized by the authority having jurisdiction.
 - 1. Storage shall not be permitted in protected structures until protection is in service.
 - 2. Yard storage of equipment to be installed or combustible construction materials shall not be stored closer than 9 m (30 ft.) from the structure under construction or alteration.
- C. Where existing sprinkler systems are in place, they shall only be turned off when work is to be done on the sprinkler system. Work shall be done in such a manner as allows for the return to service of all sprinklers at the end of the work shift. Sprinklers and standpipes shall not be removed from the construction area nor shut off for more than one shift at a time. Hot work shall be prohibited during sprinkler impairments.
- D. The Contractor shall be responsible for and liable for all damages both direct and indirect resulting from the Contractor's personnel or subcontractor's personnel damaging existing fire protection and life safety systems and equipment during any construction, alteration, or demolition. When such damage occurs, the Contractor is responsible for immediately notifying the GSA Property Manager & the Contracting Officer, immediately repairing the damage and remaining on site until all damage has been repaired.
- E. The Contractor shall phase the installation of standpipes and sprinklers in accordance with the IFC and NFPA 241.
- F. The Contractor shall perform roofing operations as required in NFPA 241.
- G. Where a fire watch is required by GSA standards or codes referenced therein, that fire watch shall be provided with at least one approved means for notification of the fire department, and their sole duty shall be to perform constant patrols and watch for the occurrence of fire. Fire watches assigned as a part of any fire safety or impairment plan shall be trained and have documentation of hands on fire extinguisher training complying with 29 CFR 1910 within the previous twelve months. Likewise, they shall be trained on how to sound the alarm within the building during any impairment and to independently notify the public fire department of a fire emergency within the building. All fire watch personnel shall have a direct means of communication with the project superintendent.

END OF SECTION

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FIRE PREVENTION & PROTECTION IN CONSTRUCTION, ALTERATION, AND DEMOLITION PROJECTS 01 35 25 - 5 of 5

SECTION 01 40 00

QUALITY ASSURANCE & CONTROL REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY

- A. This section includes administrative and procedural requirements for quality assurance and quality control services.
- B. Quality Assurance & Control: The Contractor is solely responsible for developing, implementing, and providing for all quality control and related processes in the Contractor's Quality Control Plan to ensure that all parts of the project meet or exceed all of the requirements as set forth in the Contract Documents.
 - 1. The testing and inspections indicated in the Specifications (Testing) is a spot checking program identified by the AE per design or building code requirements, preformed by an Independent Testing Agency (Agency), and is not intended as a portion of the Contractor's Quality Control Plan.
 - 2. The presence of the Agency shall in no way relieve the Contractor of his obligation to perform the work in accordance with the Contract Documents.
 - 3. The Testing indicated in the Specifications cannot be used to refute conditions of suspected poor quality noticed in the field.
 - 4. In order to provide for a measure of the Contractor's quality control, the Government, either with its own employees or contractors, may monitor the Contractor's quality control and related processes. This monitoring is not a part of the Contractor's Quality Control Plan.
 - 5. To the extent that the Contractor fails or otherwise refuses or neglects to develop, implement, or provide for all quality control and related processes, the Government may, in addition to any other available remedies under the Contract, elect to perform quality assurance beyond that indicated in the Specifications and charge the Contractor for any and all costs related thereto.
- C. Quality assurance and quality control include tests, inspections and related actions, including reports, performed by the Contractor, manufacturers, independent agencies or governing authorities.
 - 1. These testing and inspection services are required for, products, customized fabrication and installation procedures as well as for items to be professionally designed by the Contractor (delegated design).
 - 2. Product testing shall be done by a Nationally Recognized Testing Laboratory (NRTL) and National Voluntary Laboratory Accreditation Program (NVLAP), or other GSA approved testing facility.
- D. The independent quality assurance testing and inspection (Testing) requirements for individual construction materials and activities are included in the Specification sections that specify those construction materials and activities.
- E. Mock-ups: Full-size physical assemblies that are constructed on-site unless otherwise directed by GSA. Mock-ups are constructed to verify selections made under Sample submittals; to demonstrate aesthetic effects as well as qualities of materials and execution; to review coordination, testing, or operation; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mock-ups may be done on the interior or exterior. Mock-ups are not Samples. Approved mock-ups establish the standard by which the Work will be judged.
- F. Definitions
 - 1. Source Quality Control Testing is done at the product source.

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QUALITY ASSURANCE & CONTROL REQUIREMENTS

2. Field Quality Control Testing is done on site.

1.02 TESTING AND INSPECTION REPORTS

- A. Submit a certified written report of each test, inspection or other quality control service via electronic (or hard) copy to the GSA, Contractor and the A/E.
- B. Testing and inspection reports shall include but not be limited to the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making the test or inspection.
 - 6. Designation of the work and test method.
 - 7. Identifications of product and specification section.
 - 8. Complete test or inspection data.
 - 9. Test results and an interpretation of test results.
 - 10. Ambient conditions at the time of sample taking and testing.
 - 11. Certify whether tested or inspected Work complies with Contract Document requirements.
 - 12. Name and signature of laboratory inspector.
 - 13. Recommendations on retesting.
- C. All quality operations shall within 24 hours notify, by personal contact and written notice, GSA's representative and the Contractor of irregularities or deficiencies observed in the Work during performance of their services.
- D. All quality operations shall maintain a log of all their tests and inspections and a separate log of those that do not conform to the requirements of the Contract Documents. Both logs shall be published and reviewed weekly with the Contractor and the Government and/or at the weekly meeting.

1.03 RESPONSIBILITIES

- A. Contractor Responsibilities: Unless specifically indicated otherwise, the Contractor shall provide the quality control services including those required by local jurisdictions.
 - 1. Obtain copies of applicable codes, standards, procedures, regulations, etc. relative to materials, procedures, testing and inspection on the Project and make those available at the Project site for reference.
- B. Contractor shall submit each testing agency's firm name, and credentials to perform the specified services, to the Government for GSA's approval at least 15 calendar days before scheduled inspections or tests.
- C. Retesting: The Contractor is responsible for retesting, including repeated inspections and other services, where results of the initial quality control services indicate noncompliance. The Contractor shall be responsible for the Agency or an equally qualified agency for these services. If the Agency does not provide the retesting or inspection, the Contractor shall be responsible for having the Agency observe the testing and inspection work.
 - 1. Tests for Suspected Deficient Work: If in the opinion of the Government, any of the work of the Contractor that does not appear to conform to requirements, the Contractor shall make the tests that the Government deems advisable to determine its conformance to the Contract Documents.
 - 2. The government shall pay the costs if the tests prove the suspected work to be satisfactory.
- D. Associated Services: The Contractor shall cooperate with others, including the Agency, performing tests, inspections and other quality services, and shall provide reasonable auxiliary services as requested. 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:

- 1. Provide access to the work and all documents (Contract documents, shop drawings, product data, Contractor and Sub-Contractor testing and inspections, etc.).
- 2. Furnish incidental labor and facilities necessary to facilitate inspections and tests.
- 3. Provide adequate quantities of representative samples of materials that require testing or assist the agency in taking samples.
- 4. Provide facilities for storage and curing of test samples and equipment.
- 5. Deliver samples to testing laboratories.
- 6. Provide security and protection of samples and test equipment at the Project site.
- E. Duties of the Independent Testing Agency (Agency): The Agency engaged to perform tests, inspections and other quality services shall cooperate with GSA's representative and the Contractor in performance of the Agency's duties.
 - 1. The Agency shall provide qualified personnel to perform required inspections and tests.
 - 2. The Agency shall provide certifications and a list of personnel assigned to each portion of the work.
 - 3. The Agency is not authorized to release, revoke, alter or enlarge requirements of the Contract Documents or approve or accept any portion of the Work.
 - 4. The agency shall not perform any duties of the Contractor.
 - 5. The Testing Agency's proposal shall contain the outlined Testing based on a unit price basis for tests and inspections and on an hourly basis for personnel.
 - 6. The Agency shall certify the test results and observations.
 - 7. The Agency shall interpret whether or not their results and observations meet specified Project requirements.
 - 8. The Agency shall submit reports per Section: Testing and Inspection Reports, above.
 - 9. The Agency shall maintain logs per Section: Testing and Inspection Reports, above.
 - 10. The Agency shall review the applicable certificates of the Contractor's personnel to verify the validity and current status of the certificate.
 - 11. For construction personnel without necessary certificates, the Agency shall oversee the certification process of construction personnel to ensure their qualifications to perform the specified duties. The Contractor shall be responsible to the Agency for these services.
 - 12. The Agency shall obtain and review the project plans and specifications with the Government as soon as possible prior to the start of construction.
 - 13. The Agency shall attend preconstruction conferences to coordinate materials inspection and testing requirements with the planned construction schedule. The Agency shall participate in such conferences where the Testing is indicated throughout the course of the project.
- F. Independent Testing Agency Payment: The Contractor shall obtain and include the Agency's cost in the Contract Sum.
 - 1. The Contractor shall submit payments for the Agency, track the Agency's budget and keep the GSA informed on projected Agency costs and remaining budget.
 - 2. Only the GSA can modify the Agency's scope.
- G. Coordination: The Contractor shall coordinate the sequence of activities to accommodate required services with a minimum of delay.
 - 1. Activities shall be coordinated to avoid the necessity of removing and replacing construction to accommodate inspections and tests.
 - 2. The Contractor shall be responsible for scheduling times for inspections, tests, taking samples and similar activities.

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QUALITY ASSURANCE & CONTROL REQUIREMENTS

1.04 QUALIFICATIONS OF THE INDEPENDENT TESTING AGENCY (AGENCY) AND CONTRACTOR TESTING AGENCIES

- A. A qualified independent testing agency shall be an accredited entity engaged to perform tests and inspections, both at the Project site or elsewhere and to report on and to interpret results of those tests or inspections. Testing agencies shall be acceptable to GSA and the Agency shall be authorized by authorities having jurisdiction to operate in jurisdiction where project is located.
- B. Unless other accreditation is specifically specified in the applicable individual section, each testing agency shall be prequalified as complying with the American Council of Independent Laboratories "Recommended Requirements for Independent Laboratory Qualifications", or shall be recognized by the Occupational Safety and Health Administration (OSHA) in accordance with 29 CFR Part 1910.7 to test and approve equipment or materials for their safe intended use. Each testing agency shall specialize in the types of tests and inspections to be performed.
- C. Testing agencies shall be authorized by authorities having jurisdiction to operate in the jurisdiction where the project is located. Testing agency qualifications: NRTL (Nationally Recognized Testing Laboratory) per 29 CFR 1910.7, and NVLAP (National Voluntary Laboratory Accreditation Program) per NIST., and documented per ASTM 329 and is acceptable to GSA

1.05 CONTRACTOR QUALITY CONTROL PLAN

- A. Contractor's Quality-Control Plan: Submit within 5 days from NTP for quality-control activities and responsibilities. Identify personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out Contractor's quality-control responsibilities. Coordinate with the construction schedule. The procedures, controls, inspections, and tests shall be indicated by specification section and shall include the specific actions that the Contractor's QC team will take to verify compliance of the work with the specifications and drawings.
- B. Quality-Control Personnel Qualifications: Engage qualified full-time personnel trained and experienced in managing and executing quality-assurance and quality-control procedures similar in nature and extent to those indicated in the Specifications.
 - 1. Provide a project quality-control manager, who may also serve as Project Superintendent.
 - 2. Submittal Procedure: Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.
 - 3. Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship. Indicate types of corrective actions to be required to bring work into compliance with standards established by the Contract requirements and approved mock-ups.
- C. Provide reports per Section 1.2 Testing and Inspection Reports, above.
- D. Other Reports
 - 1. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
 - a. Name, address, and telephone number of technical representative making report.
 - b. Statement on condition of substrates and their acceptability for installation of product.
 - c. Statement that products at Project site comply with requirements.
 - d. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - e. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - f. Statement if conditions, products, and installation will affect warranty.
 - g. Other required items indicated in individual Specification Sections.

- 2. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:
 - a. Name, address, and telephone number of factory-authorized service representative making report.
 - b. Statement that equipment complies with requirements.
 - c. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - d. Statement if conditions, products, and installation will affect warranty.
 - e. Other required items indicated in individual Specification Sections.
- 3. Permits, Licenses, and Certificates: For the Government's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.01 REPAIR AND PROTECTION

- A. Upon completion of testing, inspection, sample taking and other quality control services, repair damaged construction and restore substrates and finishes to like new conditions. Comply with the requirements of the Contract Document, including Division 1 Section "Cutting and Patching."
- B. Protect construction exposed by or for quality control service activities, and protect repaired construction. Cleaning, repair and protection of testing areas is the Contractor's responsibility, regardless of the assignment of responsibility for testing, inspection or other quality control or assurance services.

END OF SECTION

SECTION 01 42 00 REFERENCES

PART 1 GENERAL

1.01 DEFINITIONS

- A. Agreement: The Agreement forms part of the Contract between the parties.
- B. "Building Manager" is the Government employee responsible for the administration, operation and maintenance of the building.
- C. Contract: see Agreement.
- D. "Cutting" refers to removal of material by cutting, sawing, drilling, breaking, chipping, grinding, excavating and similar operations.
- E. "Furnish" means to supply and deliver to the Project site, ready for unloading, unpacking, assembling, installation and similar operations.
- F. "General Terms and Conditions" are defined by the Agreement.
- G. "Government" refers to the General Service Administration, Public Buildings Service (GSA PBS).
- H. "Indicated" refers to graphic representations, notes or schedules on the Drawings, or to requirements elsewhere in the Specifications or other Contract Documents. Terms such as "shown", "noted", "scheduled" and "specified" have the same meaning as "indicated" and are used to further help locate the reference, but no limitation on location is intended.
- I. "Install" describes operations at the Project site, including unloading, temporary storage, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations.
- J. "Installer", unless otherwise noted or under separate contract with the Government, is the Contractor or another entity engaged by the Contractor, either directly or indirectly through subcontracting, to perform a particular construction operation at the Project site, including installation, erection, application and similar operations. Installers shall be skilled in the operations they perform. Where indicated, installers shall also be Specialists as defined in the Construction Contract Clauses. [Coordinate with your other contracts, i.e. court security with ADT, et al, and edit this paragraph accordingly as these are also installers.]
- K. "Label": This must be provided by a National Recognized Testing Laboratory (NRTL), or other entity approved by GSA. The burden of documentation for validation shall be provided by the Contractor.
- L. "Notice to Proceed" is the Contracting Officer's notification by letter to the Contractor to proceed with the Contract. Issuance of the Notice to Proceed may activate the time period for the completion of certain work, including Substantial Completion and Contract Completion.
- M. "Owner" is the Government.
- N. "Patching" refers to restoration of a surface to its original completed condition by filling, repairing, refinishing, closing and similar operations.
- O. "Project site" refers to the space available to the Contractor for performance of the Work, either exclusively or in conjunction with others performing other work.
- P. "Provide" means to furnish and install, complete in place and ready for full use.
- Q. "Punch List" is the entire listing of all incomplete and/or defective work including items that must be completed pursuant to Contract Completion.

- R. "Regulations" are found in the FAR, GSAM, and CFR including orders issued by the government.
- S. "Special Conditions" refer collectively to Section 00800 "Supplementary Conditions" and any other sections with numbers starting with 00 [Coordinate with base set.]
- T. "Substantial Completion" is defined in the Agreement, with additional conditions in Specification Section 017700 Closeout.
- U. "Superintendent" refers to the Contractor's on site representative who is responsible for continuous field supervision, coordination, planning, scheduling, and completion of the work and, unless another person is designated by the contract specification as the safety officer, jobsite safety. [Edit accordingly: Prospectus Level Capital projects will require a full time, on site, safety officer.]
- V. "Testing Agency" or "testing laboratory" is an independent entity engaged to perform specific inspections or tests, either at the Project site or elsewhere, and to report the results of those inspections and tests. [Coordinate with sections 014000 and 014025 once it has been determined who will be performing this testing-- the Government or the Contractor.]
- W. Where "directed", "authorized", "selected", "approved", or a similar term is used in conjunction with the Contractor's submittals, applications, requests and other activities, and the specifications state that an individual other than the Contracting Officer, such as the Contracting Officer's Representative (COR), shall provide this action, it is understood that only the Contracting Officer has this authority unless the Contracting Officer provides written authorization to a different individual. The Contracting Officer shall provide the written authorization to the Contractor, upon request.
 - 1. When the individual is authorized by the Contracting Officer, the Contractor may still appeal the action to the Contracting Officer.
 - 2. The Contracting Officer's decision will be final, subject to the Disputes clause.

1.02 BUILDING DESIGN STANDARDS

A. USCH_BSD: Building Design Standards for the Everett Dirksen United States Courthouse.

1.03 INDUSTRY STANDARDS

- A. Applicability of Standards: The Contract Documents require the Contractor to meet, satisfy, or otherwise follow various industry standards. Unless otherwise stated in the Contract Documents, the industry standards are incorporated into the Contract Documents as an Exhibit and Other Attachment (see Agreement, Order of Precedence) by reference and are made a part of the Exhibits and Other Attachments as if fully set forth as an Exhibit and Other Attachment.
- B. Conflicting Requirements. Refer to the Agreement for the Order of Precedence clause and the latest version of GSA's P100 Facilities Standards.
- C. Publication Date. The publication date for any industry standard is the most recent version as of the date that the Government issues the Solicitation. When an applicable industry standard has been revised after contract award that may result in an increase in cost or time, the Contractor shall submit a change order proposal for the Government's consideration.
- D. Specialized Work. In certain instances, a Specification section may require that the Contractor engage a specialized company or individual to perform certain work. In such instances, the Contractor shall subcontract for such work. The Contractor may not perform any such work with its own, in-house employees.
- E. Abbreviations and Acronyms used in the Specifications and other Contract Documents mean the recognized name of a trade association, standards-producing organization, and authority

having jurisdiction or other entity applicable to the context of the particular provision. Except as otherwise indicated, refer to the current editions of the following publications for abbreviations:

- 1. "Encyclopedia of Associations: National Organizations of the U.S.", published by Gale Research.
- 2. "National Trade and Professional Associations of the United States", published by Columbia Books.
- 3. "Means Illustrated Construction Dictionary New Unabridged Edition" published by R.S. Means Company, Inc.
- 4. "Abbreviations and Acronyms," paragraphs A. through E. identified herein.
- F. Abbreviation and Acronyms Listing. The following names are subject to change and are believed, but are not assured, to be accurate and up-to-date as of the date of the Contract Documents.
 - 1. ACI American Concrete Institute
 - 2. AIA The American Institute of Architects
 - 3. AISC American Institute of Steel Construction
 - 4. ANSI American National Standards Institute
 - 5. APA American Plywood Association (see EWA)
 - 6. ASHRAE American Society of Heating, Refrigerating and Air Conditioning Engineers.
 - 7. ASTM American Society for Testing and Materials
 - 8. AWI Architectural Woodwork Institute
 - 9. AWS American Welding Society
 - 10. BAS Building Automation System
 - 11. BHMA Builders Hardware Manufacturers Association
 - 12. BIM Building Information Model
 - 13. CABO Council of American Building Officials
 - 14. CDA Copper Development Association Inc.
 - 15. CE Corps of Engineers (U.S. Department of the Army)
 - 16. CFR Code of Federal Regulations (Publications available from the Government Printing Office)
 - 17. CMPM CM Project Manager
 - 18. CM Construction Manager
 - 19. CSI Construction Specifications Institute
 - 20. DHI Door and Hardware Institute
 - 21. DOC Department of Commerce (Publications available from the Government Printing Office)
 - 22. DOJ Department of Justice
 - 23. DOT Department of Transportation
 - 24. EPA Environmental Protection Agency
 - 25. FAA Federal Aviation Administration
 - 26. FCC Federal Communications Commission
 - 27. FDA US Food and Drug Administration
 - 28. FGMA Flat Glass Marketing Association (See GANA)
 - 29. FHA Federal Housing Administration (U.S. Department of Housing and Urban Development)
 - 30. FM Factory Mutual System
 - 31. GANA Glass Association of North America
 - 32. ILI Indiana Limestone Institute of America
 - 33. LEED Leadership in Energy and Environmental Design
 - 34. MIL Military Standardization Documents (U.S. Department of Defense)

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- 35. NBHA National Builders Hardware Association (See DHI)
- 36. NIST National Institute of Standards and Technology
- 37. NEC National Electrical Code
- 38. NFPA National Fire Protection Association
- 39. NIST National Institute of Standards and Technology (U.S. Department of Commerce)
- 40. NRCA National Roofing Contractors Association
- 41. NWWDA National Wood Window and Door Association
- 42. O & M Operations & Maintenance
- 43. OSHA Occupational Safety and Health Administration (U.S. Department of Labor)
- 44. PCI Precast/Prestressed Concrete Institute
- 45. QAQC Quality Assurance Quality Control
- 46. RFP Request For Proposal
- 47. SDI Steel Door Institute
- 48. SMACNA Sheet Metal and Air Conditioning Contractors' National Association
- 49. TCA Tile Council of America
- 50. USDA U.S. Department of Agriculture
- 51. USGBC U.S. Green Building Council
- 52. USMS U.S. Marshals Service
- 53. USPS U.S. Postal Service
- 54. VOC Volatile Organic Compound

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SUMMARY

- A. This section includes requirements for temporary utilities, support facilities and protection.
- B. Provide temporary facilities and controls required for construction activities except, for facilities and controls indicated as existing or provided by the Government or others.

1.02 UTILITY USE CHARGES

- A. Water Service: The Contractor may use water from the Government's existing water system, without metering and without payment of use charges.
- B. Sewer Service: Contractor may use the Government's existing sewer system, without payment of use charges.
- C. Electric Power Service: Contractor may use electric power from the Government's existing electric power system, without metering and without payment of use charges.

1.03 QUALITY ASSURANCE

- A. Standards and Regulations: In temporary facilities, comply with industry standards, applicable laws, and regulations of authorities having jurisdiction, including but not limited to the following:
 - 1. Building code requirements.
 - 2. Health and Safety regulations.
 - 3. NFPA 241 "Standards for Safeguarding Construction, Alterations and Demolition Operations".
- B. Inspections: Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.

1.04 PROJECT CONDITIONS

- A. Install, operate, maintain and protect temporary facilities and controls.
 - 1. Keep temporary facilities clean and neat in appearance.
 - 2. Operate temporary facilities in a safe and efficient manner.
 - 3. Relocate temporary facilities if needed as Work progresses.
 - 4. Do not overload temporary services and facilities or permit them to interfere with progress.
 - 5. Do not allow hazardous, dangerous or unsanitary conditions, or public nuisances to be on-site.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Provide undamaged materials in serviceable conditions and suitable for use intended.
- B. Water: Shall be potable and approved by local health authorities.
- C. Wood: Lumber complying with DOC PS 20 and applicable grading rules of an inspection agency certified by ALSC's Board of Review for specific use. Provide preservative treated lumber where partially or fully in contact with the earth, concrete or masonry. Provide fire retardant treated lumber for temporary purposes where fire rated products are normally required.

2.02 EQUIPMENT

- A. Provide equipment in serviceable condition and suitable for use intended.
 - 1. Electric Power Cords: Grounded extension cords.

2. Lamps and Light Fixtures: General service lamps of wattage required for adequate illumination.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Use qualified personnel for installation of temporary facilities.
- B. Locate facilities where they will serve the project with minimum interference to performance of construction activities. Maintain, relocate and modify facilities as required for the duration of the performance of the Work.

3.02 TEMPORARY SUPPORT FACILITIES

A. Collection and Disposal of Waste/Salvaged Material: Collect waste from construction areas and elsewhere daily. Collect salvaged/recycled material from construction areas and elsewhere as necessary. Enforce requirements strictly and dispose of material lawfully.

3.03 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential uses to minimize waste and abuse.

END OF SECTION

SECTION 01 59 30 SECURITY REGULATIONS

PART 1 GENERAL

1.01 SECURITY REQUIREMENTS

A. Refer to the Construction Contract Agreement Section III, Terms and Conditions, for HSPD-12 suitability investigation requirements for Contract employees requiring access to the facility. Also see http://www.GSA.gov/HSPD12 for more security suitability requirements.

1.02 GENERAL SECURITY REQUIREMENTS, CLASSIFIED AREAS.

- A. Contractors and their staff will be required to comply with security regulations imposed by the occupying agency including any necessary clearances required for access to classified areas. Access to the project site will be limited to specific times established by the Government.
- B. After award of the Contract, all Contractor employees requiring access to classified areas shall be required to furnish information for security clearances and shall comply with security regulations as imposed by the occupying agency and defined in this section.

1.03 GENERAL SECURITY REGULATIONS, RESTRICTED ACCESS.

- A. Agency Security Regulations: All persons employed within the boundaries of the restricted-access areas therein, and all persons permitted to enter such property and areas shall comply with the security regulations that have been established for this Contract.
 - 1. The Contractor agrees on behalf of themselves and all subcontractors that the following security regulations will be observed by Contractor and subcontractor personnel on the property. The Contractor shall make it a specific provision of his subcontracts that these regulations be accepted.
 - 2. At the commencement of the work under this Contract, the following security facilities and procedures will apply for classified areas within the facility:
 - a. The Contractor shall provide information about all Contractor and subcontractor personnel and others who require continuing access to the site, before access is required and when access ceases.
 - b. Within 30 calendar days after the award of the Contract, the Contractor shall submit a list on the Contractor's letterhead stationary of all employees, subcontractors and their employees, and others who will perform work or otherwise require access to the classified area. Personnel shall be listed in alphabetical order by company. The list shall include their full.
 - c. The Contractor shall notify the Government in writing when personnel are no longer employed by the Contractor or a subcontractor that have been cleared.
 - 3. At the commencement of the work under this contract, the following security procedures shall apply to the Contractor and all subcontractors.
 - a. Comply with the security regulations of the building.
 - b. Personnel may be subject to inspection of their personal effects when entering and leaving the facility. In addition, unscheduled inspections of personnel may be made while on site.
 - c. In any work scheduled within the classified area is canceled, notify the Contracting Officer or his designated representative.
 - 4. The Occupant Agency reserves the right to close down the job site and order Contractor personnel off the premises in the event of a national emergency or a shut-down, for as long as security problems persist. The Contractor may only return to the site with verbal approval from the Occupant Agency and the Contracting Officer or his authorized representative.

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SECURITY REGULATIONS

- 5. The Government reserves the right to exclude or remove from the site or building any employee of the Contractor or a subcontractor whom the Government deems incompetent, careless, insubordinate or otherwise objectionable, or whose continued employment on the work is deemed by the Government to be contrary to the public interests. The Government further reserves the right to complete processing of the security documentation for personnel assigned to work within classified areas prior to access to such areas by the personnel.
- 6. For overtime work within the classified area, the Contractor shall give the Contracting Officer or his designated representative at least 5 calendar days notice. This notice is required so that security escorts may be provided and is separate and distinct from any notices required for utility shutdown or other outages. Also, the Contractor shall notify the Government if personnel will not report to the job site on a particular day so that the security escort can be released for other duties.
- 7. A detailed weekly schedule shall be submitted once a week by the close of business on the last day of the previous week's work for work planned within classified areas. The schedule shall include the following:
 - a. Specific location of work for each trade.
 - b. Description of work for each trade.
 - c. Number of persons who will be on site for each location and trade.
 - d. Specific impacts required, such as equipment or utility shutdowns.
 - e. Hours of operation.

P2 PRODUCTS (NOT USED)

P3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01 59 50 SAFETY AND HEALTH

PART 1 GENERAL

1.01 SUMMARY

- A. References: In addition to publications referenced in the Construction Contract Clauses, the following Code of Federal Regulations (CFR), publications apply to conduct of the work. . State and local safety and health regulations that apply are not cited herein. Current editions at the date of the agreement apply. The more stringent requirements apply.
 - 1. 29 CFR, Part 1910: Occupational Safety and Health Administration (OSHA) General Industry and Health Standards.
 - 2. 29 CFR, Part 1926 " Safety and Health Regulations for Construction"
 - 3. 40 CFR 260, "Hazardous Waste Management System"
 - 4. 40 CFR 261, "Identification and Listing of Hazardous Waste."
 - 5. 40 CFR, Part 761, EPA Polychlorinated Biphenyls (PCBs), Manufacturing, Processing, Distribution in Commerce and Use Prohibitions. [GSA Project Team: Check if any work involves sealant removal as PCBs may be present.]
 - 6. National Fire Protection Association (NFPA) 70E Electrical Safety Requirements for Workplace Safety
 - 7. U.S. Army Corps of Engineers (USCOE) Safety and Health Requirements Manual, EM 385-1-1, current edition.
 - 8. Federal Standard: Fed. Std. 313A, Material Safety Data Sheets, Preparation and the Submission of.
- B. Acquisition of Publications:
 - 1. Codes of Federal Regulations (CFR) and the U.S. Army Corps of Engineers EM 385-1-1 may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.
 - 2. NFPA publications may be purchased from the National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

1.02 SAFETY MEETING

- A. Prior to commencing construction, representatives of the Contractor, including the principal on-site project representative and one or more safety representatives, shall meet with designated representatives of the government for the purpose of reviewing the Contract's safety and health requirements,. The safety and health program shall be reviewed, and specific implementation of safety and health provisions pertinent to the Work shall be discussed.
- B. Meetings shall be weekly. Contractor shall prepare meeting minutes for each meeting and load into ePM. Contractor's project manager, safety officer, project superintendant and any other supervisors shall be required to attend these meetings with the Government and its designated on site representatives.

1.03 SAFETY AND HEALTH PROGRAM

- A. Contractor Responsibility: The Contractor shall assume full responsibility and liability for compliance with applicable codes, standards and regulations pertaining to the health and safety of personnel during execution of the Work, and shall hold the Government harmless for any action on the Contractor's part, or that of the Contractor's employees or subcontractors, that results in illness, injury or death.
- B. Site Safety and Health Officer: A trained and experienced individual shall be delegated in writing as the Site Safety and Health Officer (SSHO)

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SAFETY AND HEALTH

- C. First Aid and Emergency Response Requirements: The Contractor shall provide for emergency first aid equipment. Additionally, a 20-pound ABC-rated fire extinguisher shall be maintained on-site as well as absorbent material of sufficient quantity to collect any spill which might occur during this project. A listing of emergency phone numbers and points of contact for fire, hospital, police, ambulance, and other necessary contacts shall be posted at the Contractor's site.
- D. Contractor shall provide for site visitors Personal Protective Equipment (PPE) per OSHA for use during their visits. Provide a minimum of 10 sets with replacements for items not suitable for re-use.

1.04 SUBMITTALS

- A. The Contractor shall submit for approval copies of the project safety and health programs, as applicable to the work scope or required as a result of the safety meeting.
 - 1. Occupational Noise Exposure.
 - 2. Fall Protection.
 - 3. Personnel Protective Equipment.
 - 4. Control of Hazardous Energy.
 - 5. Electrical Safety Related Work Practices.
- B. Contractor's Safety Plan: In addition to specific safety and health programs applicable to the project, Contractor shall submit firm's general safety plan at the pre-construction conference listing emergency procedures and contact persons with home addresses and telephone numbers.
- C. Permits: If hazardous materials are disposed of off-site, submit copies of shipping manifests and permits from applicable federal, state or local authorities and disposal facilities, and submit certificates that the material has been disposed of in accordance with regulations. Contractor shall be responsible for obtaining the Environmental Protection Agency's (EPA) Hazardous Waste Generator ID Number for disposal of contractor generated hazardous waste; submit in ePM with 15 days of receiving Generator ID Number from the EPA.
- D. Accident Prevention Plan (APP): In addition to specific accident prevention plans applicable to the project, Contractor shall submit firm's general APP.
- E. Accident Reporting: Submit an electronic copy of each accident report in ePM that the Contractor or Subcontractors submits to their insurance carriers, within seven calendar days after the date of the accident.
- F. Emergency call down tree: Include an emergency call down tree containing contact info for all team members as part of the Contractor Safety Plan.
- G. If the contractor brings hazardous materials onto the property, the contractor shall submit a hazardous material management plan which shall, at a minimum, identify and provide the Material Safety Data Sheet (MSDS) for each material, describe proper handling and storage procedures for each material, and describe the contractor's plan for responding to a spill or release of the material(s).

PART 2 PRODUCTS

2.01 PERSONNEL PROTECTIVE EQUIPMENT

A. Special facilities, devices, equipment and similar items used by the Contractor in execution of the Work shall comply with the applicable regulations.

PART 3 EXECUTION

3.01 HAZARDOUS MATERIALS AND CONDITIONS

A. The Contractor shall advise GSA of any hazardous material and/or hazardous condition encountered during execution of the work. GSA shall determine if the Contractor must perform additional tests and if the work for the particular material or condition shall cease. Work shall recommence at the direction of GSA. The SSHO shall take measures to protect personnel until GSA has rendered its decision.

3.02 EMERGENCY SUSPENSION OF WORK

- A. When the Contractor is notified by GSA of non-compliance with the safety or health provisions of the Contract, the Contractor shall immediately cease work in the subject area unless otherwise instructed, and correct the unsafe or unhealthy condition.
 - 1. If the Contractor fails to comply promptly, all or part of the Work will be stopped by notice from GSA.
 - 2. When GSA determines that satisfactory corrective action has been taken by the Contractor, work shall resume.
 - 3. The Contractor shall not be allowed any extension of time or compensation for damages in connection with a work stoppage for an unsafe or unhealthy condition.

3.03 PROTECTION OF PERSONNEL

- A. The Contract shall take necessary precautions to prevent injury to the public, occupants, and work forces. The public and occupants includes all persons not employed by the Contractor or a subcontractor.
- B. The work area shall be fenced, barricaded or otherwise blocked off from the public or occupants to prevent unauthorized entry into the work area. Control by authorized personnel shall be done where passage through is necessary for the work.
 - 1. Provide traffic barricades and traffic control signage where construction activities occur in vehicular areas.
 - 2. Corridors, aisles, stairways, doors and exitways shall not be obstructed or used in a manner to encroach upon routes of ingress or egress utilized by the public or occupants, or to present an unsafe or unhealthy condition to the public or occupants.
 - 3. Store, position and use equipment, tools, materials, in a manner that does not present a hazard to the public or occupants
 - 4. Store and transport refuse and debris in a manner to prevent unsafe and unhealthy conditions for the public and occupants. Cover refuse containers, and remove refuse on a frequent regular basis acceptable to GSA. Use tarpaulins or other means to prevent loose transported materials from dropping from trucks.

3.04 ENVIRONMENTAL PROTECTION

- A. Dispose of solid, liquid and gaseous contaminants in accordance with applicable federal, state, and local codes, laws, ordinances and regulations.
- B. Comply with applicable federal, state and local noise control laws, ordinances and regulations, including but not limited to 29 CFR 1910.95 and 29 CFR 1926.52.

END OF SECTION

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SAFETY AND HEALTH

SECTION 01 60 00 PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY

- A. This Section includes administrative and procedural requirements governing the Contractor's selection of products for use in the Project, including manufacturers' standard warranties on products and special warranties.
- B. The following definitions are not intended to change the meaning of other terms used in the Contract Documents, such as "specialties," "systems," "structure," "finishes," "accessories," and similar terms that are self-explanatory and have well-recognized meanings in the construction industry.
 - 1. "Products" means items purchased for incorporation in the Work, whether purchased for the Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and other terms of similar intent.
 - 2. "Materials" means products substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the Work.
 - 3. "Equipment" means products with operational parts, whether motorized or manually operated, and products that require service connections, such as wiring or piping.
- C. See 01 2500 Substitution Procedures for requests for substitutions:
- D. Warranties: Standard, and special warranties required by the individual sections of the Specifications shall provide guarantees in terms of time limits or rights of the Government in addition to those contained in the Construction Contract Clauses.
 - 1. Standard product warranties shall be preprinted written warranties published by individual manufacturers for particular products, and shall be specifically endorsed to the Government by the manufacturer.
 - 2. Special warranties shall be specifically written to incorporate particular requirements of the Contract Documents, and shall be endorsed to the Government by the entities responsible for the work, as stated in the individual section.

1.02 SUBMITTALS

- A. Submittals: See section 013300 Submittals
- B. Substitutions: See section 012500 Substitution Procedures

1.03 QUALITY CONTROL

- A. Source Limitations: To the fullest extent possible, provide products of the same kind from a single source. Equipment of the same function shall be manufactured by the same entity, unless otherwise indicated.
- B. Compatibility of Options: When the Contractor is given the option of selecting between 2 or more products for use on the Project, the product selected shall be compatible with products previously selected.
- C. Labels and nameplates: Except for required labels and operating data, do not attach or imprint manufacturer's or producer's nameplates or trademarks on surfaces of products that will be exposed to view in occupied spaces or on the exterior.
 - 1. Labels: Locate required product labels and stamps on concealed surfaces or, where required for observation after installation, on accessible surfaces that are not conspicuous. Labels indicating compliance with recognized organizations require confirmation by submitted documents.

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PRODUCT REQUIREMENTS

- 2. Equipment Nameplates: Provide a permanent nameplate on each item of service-connected or power-operated equipment. Locate nameplate on an easily accessible surface that is inconspicuous in occupied spaces. The nameplate shall contain the following information:
 - a. Name of product manufacturer.
 - b. Model and serial numbers.
 - c. Operating data such as capacity, speed and ratings.
 - d. Name and phone number of Installer.
- 3. Protection: Labels and nameplates shall be protected from defacement and other damage during the remainder of the Work.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver, store and handle products according to the manufacturer's recommendations, using means and methods that will prevent damage, deterioration and loss, including theft.
 - 1. Schedule product delivery to minimize long-term storage at the site and to prevent overcrowding of construction spaces.
 - 2. Coordinate delivery with installation time to provide minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft and other losses.
 - 3. Deliver products to the site in an undamaged condition, in the manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting and installing.
 - 4. Inspect products upon delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected. Coordinate inspection with Government, GSA COR or designated representative (i.e Bldg. Manager, CM, etc.).
 - 5. Store products at the site in a manner that will facilitate inspection and measurement of quantity or counting of units.
 - 6. Store heavy materials away from the Project structure in a manner that will not endanger the supporting construction.
 - 7. Store products subject to damage by the elements above ground, under cover in a weather-tight enclosure, with ventilation adequate to prevent condensation. Maintain temperature and humidity within range required by manufacturer's instructions.

PART 2 PRODUCTS

2.01 PRODUCT COMPLIANCE AND REQUIREMENTS

- A. Provide products complete with accessories, trim, finish, safety guards, devices and other items needed for a complete installation and the intended use and effect. Where specified and available, provide standard products of types that have been produced and used successfully in similar situations on other projects.
- B. Product Selection Procedures: The Contract Documents, including the Construction Contract Clauses, govern product selection. Requirements for product selection include the following:
 - 1. Where the Specifications lists manufacturers' names or product designations, the Contractor may provide any product that complies with the requirements, subject to the following conditions:
 - a. Available Manufacturers: Where a Specification paragraph or subparagraph titled "Available Manufacturers" lists a minimum of three manufacturers' names, provide a compliant product by one of the manufacturers named or by another manufacturer.
 - b. Available Products: Where a Specification paragraph or subparagraph titled "Available Products" lists minimum of three product designations, provide one of the products designated or another compliant product.

- c. Basis of Design: Where a Specification paragraph or subparagraph titled "Basis of Design" includes a product designation, provide the product designated, or request a Substitution of a compliant product by a named or other manufacturer.
- 2. Descriptive Requirements: Where Specifications describe a product or assembly, listing the characteristics required, provide a product or assembly that provides the characteristics and otherwise complies with Contract requirements.
- 3. Performance Requirements: Where Specifications require compliance with performance requirements, provide products that comply with these requirements and are recommended by the manufacturer for the application indicated. Manufacturer's recommendations may be contained in published product literature or by the manufacturer's certification of performance.
- 4. Prescriptive Requirements: Where Specifications require products that are produced using specified ingredients and components, including specific requirements for mixing, fabricating, curing, finishing, testing and similar operations in the manufacturing process, provide products produced in accordance with the prescriptive requirements that otherwise comply with Contract requirements.
- 5. Codes, Standards and Regulations: Where Specifications require compliance with an imposed code, standard or regulation, select a product that complies with these requirements.
- 6. Visual Matching: Where Specifications require matching an established Sample, the Government's decision will be final on whether a proposed product matches satisfactorily. Where no product available within the specified category matches satisfactorily and complies with other specified requirements, comply with provisions concerning "substitutions" for selections of a matching product in another product category.
- 7. Visual Selection: Where specified product requirements include the phrase "as selected from manufacturer's standard colors, patterns, textures" or a similar phrase, select a product and manufacturer that complies with other specified requirements. The Government will select the color, pattern and texture from the manufacturer's product line.
- C. The Contractor's submittal and the Government's acceptance of Shop Drawings, Product Data, or Samples for construction activities not complying with Contract Documents do not constitute an acceptable or valid request for substitution, nor do they constitute approval.

2.02 WARRANTY REQUIREMENTS

- A. Related Damages and Losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.
- B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an adjustment for depreciation.
- C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work.
- D. Rejection of Warranties: The Government reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
- E. Where the Contract Documents require a special warranty, or similar commitment for the Work or part of the Work, the Government reserves the right to refuse to accept the Work until the

Contractor presents evidence that entities required to countersign such commitments are willing to do so.

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 01 70 00 EXECUTION REQUIREMENTS

PART 1 GENERAL

1.01 SUMMARY

- A. This section includes certain general procedural requirements governing the Contractor's execution of the Work, including, but not limited to laying out the work, general installation of products, correction of defective work, and cleaning.
- B. Substitutions: Changes in methods of construction required by the Contract Documents proposed by the Contractor after award of the Contract shall comply with the procedures and conditions specified for Substitutions in the Construction Contract Clauses and Division 1 Section 016000 "Product Requirements".

1.02 QUALITY CONTROL

- A. Workmanship Standards: 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. Remove and replace work that does not comply with workmanship specified and standards recognized in the construction industry for the applications indicated. Remove and replace work damaged or deteriorated by faulty workmanship or replacement of other work.
 - 1. 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.
 - 2. Specialists: Where the individual sections of the specifications require specialists to perform the work, comply with the requirements specified in the Construction Contract Clauses. The assignment of a specialist shall not relieve the 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 Contractor.
 - 3. 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.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine applicable substrates and conditions under which the Work will be performed before starting construction operations.
- B. If unsafe or otherwise unsatisfactory conditions are encountered take corrective action before proceeding. Provide GSA with a written report documenting the conditions with the corrective actions taken.

3.02 PREPARATION

- A. Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Confirm dimensional requirements of the contract documents can be met.
- B. Verify space requirements of items shown diagrammatically on Drawings.

3.03 INSTALLATION

- A. Locate the Work and components of the Work accurately.
 - 1. Make vertical work plumb and horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and to maximize ease of removal for replacement.
 - 3. Conceal pipes, ducts, and wiring in finished areas unless construction documents have designated otherwise.
- B. Install products at the time and under conditions that will produce satisfactory results.
 - 1. Maintain temperature, humidity and other weather controls for best performance.
 - 2. Isolate units of non-compatible work to prevent deterioration.
- C. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- D. Conduct construction operations so that no part of the Work is subjected to damaging operations, or loading in excess of that structurally designed for the occupancy.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful or unacceptable levels of noise.
- F. Odors and Fumes: To the greatest extent practicable, do not use products that produce harmful or noticeable odors or fumes. If necessary to use such products, coordinate ventilation requirements to produce the ambient condition required for the work and to minimize energy consumption, and to protect personnel from fumes and other harmful effects.
- G. Anchors and Fasteners: Provide anchors and fasteners that will withstand stresses, vibration and physical distortion. Anchor each component securely in place, accurately located and aligned with other Work.
 - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by GSA.
 - 2. Allow for building movement, including thermal expansion and contraction.
- H. Joints: Make like joints of uniform width within contiguous surfaces. Where joint locations in exposed work are not indicated, arrange joints for a uniform and balanced visual effect.
- I. Adjust operating components for proper operation

3.04 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

3.05 CORRECTION OF INSTALLED DEFECTIVE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.
- B. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and proper adjustment of operating equipment.
- C. Restore permanent facilities used during construction to their specified condition.
- D. Remove and replace damaged surfaces that are exposed to view if the surfaces cannot be repaired without visible evidence of repair.
- E. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired to operate properly.
- F. Remove and replace chipped, scratched or broken surfaces.

- A. Maintain the project work areas free of waste material and debris. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
- B. Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the work, broom- or vacuum-clean the entire work area.
- C. Keep installed work clean. Clean installed surfaces in accordance with the recommendations of the manufacturer or fabricator of the product installed, using only the cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and will not damage exposed surfaces.
- D. Remove debris from concealed spaces prior to enclosing.
- E. Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at the time of project completion.

3.07 PROTECTION

- A. Protect installed work from soiling and damage.
- B. Protective Coverings: Provide appropriate protective coverings for work that might be damaged by subsequent operations. Maintain protective coverings in place until project completion.

END OF SECTION

01 70 00 - 3 of 3

SECTION 01 73 10 CUTTING AND PATCHING

PART 1 GENERAL

1.01 SUMMARY

- A. This section includes procedural requirements for cutting and patching in existing work.
- B. Definition: Cutting and patching includes cutting into existing construction to provide for the installation or performance of other work and subsequent fitting and repair required to restore surfaces to their original condition. Drilling holes for fasteners and similar operations are not "cutting and patching".
- C. Refer to other sections for other requirements and limitations applicable to cutting and patching individual parts of the Work.

1.02 SUBMITTALS

- A. Cutting and Patching Plan: In accordance with section 013300, submit a proposal to GSA's representative, describing procedures at least 14 calendar days in advance of the time cutting and patching will initially be performed.
 - 1. Include the following information, as applicable:
 - a. Description of the extent of cutting and patching required. Show how it will be performed and indicate why it cannot be avoided.
 - b. Temporary protection of existing structures, surfaces, finishes, equipment, etc. to remain in place during construction.
- B. Approval by GSA to proceed with cutting and patching does not waive the right to later require complete removal and replacement of unsatisfactory work.

1.03 QUALITY CONTROL

- A. Requirements for Structural Work: Do not cut and patch structural elements in a manner that would change their load-carrying capacity or load-deflection ratio.
- B. Operational Limitations: Do 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.
- C. Visual Requirements: Do 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. Do not cut and patch construction in a manner that would result in visual evidence of cutting and patching. Remove and replace construction that is cut and patched in a visually unsatisfactorily manner.
 - 1. Retain the original installer or fabricator to cut and patch exposed work if the original installer or fabricator is identified in the Contract Documents or is known to the Contractor and is available for the work.
 - 2. If it is not possible to engage the original installer or fabricator, engage a Specialist who is specifically experienced in the work.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Use materials identical to existing materials to the maximum extent available.
- B. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
- C. Use materials whose installed performance will equal or surpass that of existing materials.

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CUTTING AND PATCHING

PART 3 EXECUTION

3.01 INSPECTION

- A. Before cutting, examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed. If unsafe or unsatisfactory conditions are encountered, take corrective action before proceeding.
- B. Before proceeding with cutting and patching involving two or more trades, meet at the Project site with the entities providing or affected by the cutting and patching. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

3.02 PREPARATION

- A. Provide temporary support of work to be cut.
- B. Protect existing conditions during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of the Project that might be exposed during cutting and patching operations. If work is being executed in a historic building then a historic treatment plan is required as specified in 013510 Historic Building Treatment Procedures.
- C. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

3.03 PERFORMANCE

- A. Employ skilled workmen to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay. Any adverse noise or odor producing work must be performed in accordance with Section 011400 Work Restrictions. Cutting: Cut existing construction using methods least likely to damage elements retained and adjoining construction. Where possible, review proposed procedures with the original installer and comply with the original installer's recommendations.
 - 1. In general, use hand or small power tools designed for sawing or grinding, not for hammering and chopping.
 - 2. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 3. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.
- B. Patching: Patch with durable seams that are as invisible as possible. Comply with specified tolerances.
 - 1. Inspect and test patched areas to demonstrate integrity of the installation.
 - 2. Restore exposed finishes of patched areas and extend finish restoration into adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - 3. Where removed walls or partitions extends one finished area into another finished area, patch and repair floor and wall surfaces to provide an even surface of uniform color and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.

3.04 CLEANING

- A. Clean areas and spaces where cutting and patching are performed. Completely remove all evidence of the Work.
- B. Thoroughly clean piping, conduit, and similar features before applying paint, restored pipe coverings, or other finishing materials.

END OF SECTION

SECTION 01 77 00 CLOSEOUT PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

- A. See section III of the Agreement for Definition of Substantial Completion.
- B. This Section includes administrative and procedural requirements for Contract closeout including, but not limited to, the following:
- C. Closeout requirements for specific construction activities are included in the individual sections in Divisions 2 through 49.

1.02 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for Substantial Completion, complete the following.
 - 1. Provide supporting documentation for completion as indicated elsewhere in the Contract Documents.
 - 2. Submit a list to the Government, of incomplete items, the value of incomplete construction, and reasons the Work is not complete.
 - 3. Obtain and submit releases enabling the Government unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 4. Warranties and guarantees shall not begin until substantial completion. Warranties and guarantees for any equipment that comes on line at a later date which is accepted by the Government shall commence on that date..
 - 5. The punch list of non-completed work and items shall be entire, valued, and submitted.
 - 6. Completion of punch list items must be completed within 14 calendar days, unless note otherwise.
- B. Inspection Procedures: On receipt of a request for inspection, GSA will either proceed with inspection or advise the Contractor of unfulfilled requirements. GSA will notify the Contractor of Substantial Completion following the inspection or advise the Contractor of construction that must be completed or corrected before Substantial Completion.
 - 1. GSA will repeat the inspection when requested and when assured that the Work is substantially complete.
 - 2. Results of the completed inspection will form the basis of the requirements for Final Acceptance.
 - 3. Items that are not included on the punch-list will not relieve the Contractor from performing all work required and in accordance with the construction documents.

1.03 FINAL ACCEPTANCE FOR CONTRACT COMPLETION

- A. Preliminary Procedures: Before requesting re-inspection for Final Acceptance, complete the following:
 - 1. Submit an updated final statement, accounting for final additional changes to the Contract price.
 - 2. Submit a certified copy of the previous Substantial Completion inspection list of items to be completed or corrected. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance, and shall be endorsed and dated by the Contractor.
 - 3. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications and similar documents. State warranty commencement dates.

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CLOSEOUT PROCEDURES

- 4. Scan warranties and bonds and assemble complete warranty and bond submittal package as individual electronic PDF files.
- 5. Submit record documents including BIM, model and data and similar final record information. See Section 017810 Project Record Documents for BIM requirements.
- 6. Deliver tools, spare parts, extra stock and similar items.
- 7. Complete final clean-up requirements including touch-up painting of marred surfaces.
- 8. At the end of the acceptance submit final payment request with releases and supporting documentation not previously submitted and accepted.
- B. Re-inspection Procedure: GSA will re-inspect the Work upon receipt of notice from the Contractor that the Work, including inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to GSA.
 - 1. Upon completion of re-inspection, GSA will notify the Contractor of Final Acceptance or will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled and are required for Final Acceptance.
 - 2. If necessary, re-inspection will be repeated.
- C. Contractor's Responsibility for Re-Inspection Following Substantial Completion: If the final completion or acceptance is delayed for more than [thirty (30)?] calendar days following substantial completion through no fault of the Government, CM, or the A/E; the Contractor shall be responsible for the Government's additional costs associated with re-inspections. During this 30-day period, the CM and/or A/E will make only one (1) re-inspection to verify completion of the punch list. Any additional re-inspections, administrative services, or direct costs will be considered CM and/or A/E additional services. The Government's actual costs for CM and/or A/E additional re-inspections, or direct costs will be charged to the Contractor through an appropriate contract modification in the form of a credit to the Government.

1.04 RECORD DOCUMENT SUBMITTALS

- A. Do not use record documents for construction purposes. Protect record documents from deterioration and loss in a secure, fire-resistant location. Provide access to record documents for GSA's reference during normal working hours.
- B. Record As-Built Drawings: Maintain both electronic media copies and a clean, undamaged set of blue or black line white-prints of all Contract Documents. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark the drawing that is most capable of showing conditions fully and accurately. Where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date. Electronic record copies showing changes shall be done clearly such that the changes are understood so that they can be constructed. Upload to ePM.
 - 1. Mark record print sets with red erasable pencil. Use other colors to distinguish between variations in separate categories of the Work.
 - 2. Mark new information not shown on Contract Drawings or Shop Drawings.
 - 3. Note related modification numbers where applicable.
 - 4. Organize record drawing sheets into manageable sets. Bind sets with durable-paper cover sheets. Print suitable titles, dates, and other identification on the cover of each set.
- C. Record Specifications: Maintain one complete copy of the Specifications with addenda. Include one copy of other written construction documents, such as modifications issued in printed form during construction.
 - 1. Mark these documents to show substantial variations in actual Work performed in comparison with the text of the original contract Specifications and modifications.

- Give particular attention to substitutions and selection of options, and information about concealed construction that cannot otherwise be readily determined later by direct observation. Provide digital photos or videos of construction areas before being concealed.
- 3. Note related record drawing information and Product Data.
- D. Record Product Data: Maintain one copy of each Product Data submittal. Note related modifications and markups of Record Drawings and Specifications.
 - 1. Mark these documents to show significant variations in actual Work performed in comparison with information submitted. Include variations in products delivered to the site and from the manufacturer's installation instructions and recommendations.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
- B. Use cleaning products that comply with Green Seal GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable Volatile Organic Compounds (VOC) levels.

PART 3 EXECUTION

3.01 CLOSEOUT PROCEDURES

- A. Operation and Maintenance Instructions: Arrange for each Installer of equipment that requires regular maintenance to meet with the Government's personnel to provide instruction in proper operation and maintenance. Provide instruction by manufacturer's representatives if installers are not experienced in operation and maintenance procedures. Include a detailed review of the following:
 - 1. Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package as individual electronic PDF files.

3.02 FINAL CLEANING

- A. Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial cleaning and maintenance program. Comply with manufacturer's instructions.
- B. Do not use caustic or acidic cleaning materials that will mar or etch finished work.
 - 1. Complete the following cleaning operations before requesting inspection for Final Acceptance.
 - a. Remove labels that are not permanent labels.
 - b. Clean transparent materials, including mirrors and glass in doors and windows. Removing glazing compounds and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.
 - c. Clean exposed exterior and interior hard-surfaced finishes to a dust-free condition, free of stains, films, and similar foreign substances. Restore reflective surfaces to their original condition. Leave concrete floors broom clean. Vacuum carpeted surfaces on floors and soft surfaces in any other location.
 - d. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication and other substances. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and lamps. Replace disposable air filters and clean permanent air filters.

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CLOSEOUT PROCEDURES

Clean exposed surfaces of diffusers, registers, and grills. Clean interiors of all ductwork to render facility safe for human occupancy.

- e. Remove debris and surface dust from limited-access spaces including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics and similar spaces.
- C. Removal of Protection: Remove temporary protection and facilities installed for the protection of the Work during construction.
- D. Compliance: Comply with the regulations of authorities having jurisdiction and with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Government property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from the site and dispose of it lawfully.
- E. Remaining Materials of value that remain after completion of associated work, become Government property. Dispose of or salvage/recycle these materials as directed by GSA.

3.03 REPAIR OF THE WORK

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
- B. Repair, or remove and replace, defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition. All components of the construction including operational and material shall be in new condition and new working order at the completion of Repair of the Work.

END OF SECTION

SECTION 01 78 22

OPERATION AND MAINTENANCE DOCUMENTATION

PART 1 GENERAL

1.01 SUMMARY

- A. This section includes administrative and procedural requirements for operation and maintenance electronic and hard copy manuals and instructions, including the following.
 - 1. Instruction manuals covering the care, preservation and maintenance of materials and finishes.
 - 2. Operation, maintenance, troubleshooting and parts manuals for equipment and building operating systems.
- B. Additional Requirements: Refer to all of the individual Specification sections for additional requirements for the care and maintenance of materials and finishes, and for the operation and maintenance of the various pieces of equipment and operating systems and for manual preparation.
 - 1. Division 013300 section for Submittal Procedures.
 - 2. Division 017700 Section Closeout Procedures.

1.02 QUALITY CONTROL

- A. Operation and Maintenance Manual Preparation: In preparation of manuals, use personnel thoroughly trained and experienced in the maintenance of the material or finish involved, or in the design, operation, maintenance and manufacturing of the equipment or system involved.
 - 1. Where manuals require written instructions, use the personnel skilled in technical writing where necessary for communication of essential data.
 - 2. Where manuals require drawings or diagrams, use draftspersons capable of preparing drawings clearly in an understandable and transferrable format.
 - 3. Instructions of Government Personnel: Use instructors thoroughly trained and experienced in the design, operation maintenance and manufacturing of the equipment or system involved to instruct Government operation and maintenance personnel.

1.03 SUBMITTALS

- A. Submittal Schedule: Comply with the following schedule for submitting the aforementioned electronic manuals:
 - 1. Before Substantial Completion, when each installation that requires operation and maintenance and related manuals is nominally complete, submit draft copies of each manual to the Government for review by the building manager. The Government will return one copy of the draft with comments within suggest 21 calendar days after receipt.
 - 2. Make corrections or modifications to comply with the Government's comments.
 - 3. Submit copies of each approved manual to the Government within 21 calendar days before training of government personnel is performed and after receipt of the Government's comments.
- B. PDF electronic file & hard copy (when requested). Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Government.

PART 2 PRODUCTS

2.01 MANUAL CONTENT

A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information. Include a section in the directory for each of the following:

- B. Format: Organize each manual into separate sections for each related product or piece of equipment. Each manual shall contain a title page, table of contents, general information, copies of Product Data, written text, drawings and copies of each warranty and service contract issued.
 - 1. Title Page: Provide a title page in a transparent, plastic envelope as the first sheet of each manual. As a minimum, provide the following information:
 - a. Subject matter covered by the manual.
 - b. Name and address of the Project.
 - c. Name, address, and telephone number of the Contractor.
 - 2. Table of Contents: After title page, include a typewritten table of contents for each emergency, operation, and maintenance volume: arranged systematically according to the Specifications format. Include a list of each product included, identified by product name or other appropriate identifying symbol and indexed to the content of the volume. Where more than one volume is required to accommodate the data, provide a comprehensive table of contents for all volumes in each volume of the set.
 - 3. General Information: Provide a general information section immediately following table of contents, listing each product included in the manual, identified by product name. Under each product, list the name, address, and telephone number of the subcontractor or installer and the maintenance contractor. Clearly delineate the extent of responsibility for each of these entities. Include a local source for replacement parts for equipment.
 - 4. Product Data: Where the manuals include manufacturer's standard printed data, include only those sheets that are pertinent to the part or product installed. Mark each sheet to identify each part or product included in the installation. Where the Project includes more than one item contained in the product data, identify each item, using appropriate references from the Contract Documents. Identify data that is applicable to the installation, and delete references to information that is not applicable.
 - 5. Written Text: Prepare text to provide necessary information where manufacturer's standard printed data is not available, and the information is necessary for proper maintenance of materials or finishes, or for proper operation and maintenance of equipment or systems. Provide customized text for this project that explains the systems operation and design intent. Organize text in a consistent format under separate headings for different procedures. Where necessary, provide a logical sequence of instruction for each operation or maintenance procedure, the sequence of operation, seasonal operational changes, and night time setbacks.
 - 6. Drawings: Provide specially prepared drawings where necessary to supplement manufacturer's printed data to illustrate the relationship of component parts of equipment or systems or to provide control or flow diagrams. Coordinate these drawings with information contained in Project Record Drawings to assure correct illustration of the completed installation.
 - 7. Warranties and Service Contracts: Provide a copy of each warranty or service contract in the appropriate manual for the information of the Government's operating personnel. Provide written data outlining procedures to follow in the event of product failure. List circumstances and conditions that would affect the validity of warranty.

2.02 EQUIPMENT AND SYSTEMS OPERATION AND MAINTENANCE MANUALS

A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem and a separate section for each piece of equipment not part of a system. The Title page and Table of Contents shall be as described herein above.

- A. Prior to the Substantial Completion inspection, instruct the Government's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Provide instruction at mutually agreed times.
- B. Use operation and maintenance manuals for each product, piece of equipment or system as the basis of instruction. Review contents in detail to explain all aspects of operation and maintenance.
- C. Posted Logs and Instructions: Place operating logs and instructions in see-through vinyl or other weather protective sleeves or framed enclosures, and post for use by Government personnel in locations approved by the Government.

2.04 PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 01 82 00 DEMONSTRATION AND TRAINING

PART 1 GENERAL

1.01 SUMMARY

- A. This Section includes administrative and procedural requirements for instructing Government operation and maintenance (O&M) personnel, including the following:
 - 1. Demonstration of operation, maintenance, and repair including preventive maintenance of systems, subsystems, and equipment.
 - 2. Training in operation, maintenance, and repair including preventive maintenance of systems, subsystems, and equipment.
 - 3. Demonstration and training video recordings.
- B. Related Requirements:
 - 1. Divisions 02 through 49 Sections for specific requirements for demonstration and training for products in those Sections.

1.02 SUBMITTALS

- A. Instruction Program: Submit outline of instructional program for demonstration and training, including a schedule of proposed dates, times, length of instruction time, instructors' names and credentials for each training module, and learning objective and outline for each training module.
- B. Attendance Record: For each training module, submit list of participants and length of instruction time.
- C. Demonstration and Training on flash drive, CD (compact disc), or DVD (digital video disc). Submit three copies at end of each training module to the GSA Project Manager and Building Manager.

1.03 COORDINATION

- A. Coordinate instruction schedule with Government operations. Adjust schedule as required to minimize disrupting Government operations.
- B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.
- C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by the Government.

PART 2 PRODUCTS

2.01 INSTRUCTION PROGRAM

A. Reference Material: Conduct training using final operation and maintenance data submittals.

PART 3 EXECUTION

3.01 PREPARATION

- A. Assemble educational materials necessary for instruction, including documentation and training. Assemble training modules into a combined training manual.
- B. Set up instructional equipment at instruction location.

3.02 INSTRUCTION

A. Engage the instructors to instruct Government personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.

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DEMONSTRATION AND TRAINING

- 1. The Government will furnish Contractor with names and positions of participants.
- B. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
- C. Evaluation: At conclusion of each training module, assess and document each participant's mastery of module by use of an oral, written or demonstration performance-based test. Provide results to the Government.
- D. Demonstration and Training video or other electronic media: Using a videographer, record each training module separately. Include classroom instructions and demonstrations, board diagrams, and other visual aids, but not student practice.
- E. Cleanup: Collect and remove used and leftover educational materials. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

3.03 DEMONSTRATION AND TRAINING VIDEO RECORDINGS

- A. Video: use media and format acceptable to GSA.
- B. Recording: Mount camera on tripod before starting recording, unless otherwise necessary to adequately cover area of demonstration and training. Display continuous running time.
- C. Light Levels: Verify equipment markings are clearly visible prior to recording. Furnish additional portable lighting as required.
- D. Narration: Describe scenes on video recording by audio narration by microphone while dubbing audio narration off-site after video recording. Include description of items being viewed.
- E. Pre-Produced Video Recordings: Provide video recordings used as a component of training modules in same format as recordings of live training.

END OF SECTION

SECTION 02 41 00 DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Selective demolition of built site elements.
- B. Selective demolition of building elements for alteration purposes.

1.02 REFERENCE STANDARDS

- A. 29 CFR 1926 U.S. Occupational Safety and Health Standards; current edition.
- B. NFPA 241 Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2013.

1.03 QUALITY ASSURANCE

A. Demolition Firm Qualifications: Company specializing in the type of work required.1. Minimum of Three years of documented experience.

PART 2 PRODUCTS -- NOT USED

PART 3 EXECUTION

3.01 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
 - 1. Obtain required permits.
 - Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
 - 3. Provide, erect, and maintain temporary barriers and security devices.
 - 4. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
 - 5. Do not close or obstruct roadways or sidewalks without permit.
 - 6. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
 - 7. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.
- B. Do not begin removal until receipt of notification to proceed from Owner.
- C. Protect existing structures and other elements that are not to be removed.
 - 1. Provide bracing and shoring.
 - 2. Prevent movement or settlement of adjacent structures.
 - 3. Stop work immediately if adjacent structures appear to be in danger.

3.02 SELECTIVE DEMOLITION FOR ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as indicated.
 - 2. Report discrepancies to Architect before disturbing existing installation.
 - 3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
- B. Remove existing work as indicated and as required to accomplish new work.

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DEMOLITION

- 1. Remove items indicated on drawings.
- C. Protect existing work to remain.
 - 1. Prevent movement of structure; provide shoring and bracing if necessary.
 - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 - 3. Repair adjacent construction and finishes damaged during removal work.
 - 4. Patch as specified for patching new work.

3.03 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site.
- B. Leave site in clean condition, ready for subsequent work.
- C. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION

SECTION 07 92 00 JOINT SEALANTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Nonsag gunnable joint sealants.
- B. Joint backings and accessories.

1.02 REFERENCE STANDARDS

- A. ASTM C661 Standard Test Method for Indentation Hardness of Elastomeric-Type Sealants by Means of a Durometer; 2006 (Reapproved 2011).
- B. ASTM C920 Standard Specification for Elastomeric Joint Sealants; 2014.
- C. ASTM C1193 Standard Guide for Use of Joint Sealants; 2013.
- D. ASTM C1248 Standard Test Method for Staining of Porous Substrate by Joint Sealants; 2008 (Reapproved 2012).
- E. ASTM C1521 Standard Practice for Evaluating Adhesion of Installed Weatherproofing Sealant Joints; 2013.
- F. SCAQMD 1168 South Coast Air Quality Management District Rule No.1168; current edition.

1.03 SUBMITTALS

- A. See Section 01 33 00 Submittal Procedures for additional information.
- B. Product Data for Sealants: Submit manufacturer's technical data sheets for each product to be used, that includes the following.
 - 1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
 - 2. List of backing materials approved for use with the specific product.
 - 3. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
 - 4. Substrates the product should not be used on.
- C. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.
- D. Samples for Verification: Where custom sealant color is specified, obtain directions from Architect and submit at least two physical samples for verification of color of each required sealant.
- E. Preinstallation Field Adhesion Test Plan: Submit at least two weeks prior to start of installation.
- F. Preinstallation Field Adhesion Test Reports: Submit filled out Preinstallation Field Adhesion Test Reports log within 10 days after completion of tests; include bagged test samples and photographic records.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Installer Qualifications: Company specializing in performing the work of this section and with at least three years of documented experience.
- C. Preinstallation Field Adhesion Test Plan: Include destructive field adhesion testing of one sample of each combination of sealant type and substrate, except interior acrylic latex sealants, and include the following for each tested sample.
 - 1. Identification of testing agency.

- 2. Preinstallation Field Adhesion Test Log Form: Include the following data fields, with known information filled out.
 - a. Test date.
 - b. Copy of test method documents.
 - c. Age of sealant upon date of testing.
 - d. Test results, modeled after the sample form in the test method document.
 - e. Indicate use of photographic record of test.
- D. Field Adhesion Test Procedures:
 - 1. Allow sealants to fully cure as recommended by manufacturer before testing.
 - 2. Have a copy of the test method document available during tests.
 - 3. Record the type of failure that occurred, other information required by test method, and the information required on the Field Quality Control Log.
 - 4. When performing destructive tests, also inspect the opened joint for proper installation characteristics recommended by manufacturer, and report any deficiencies.
 - 5. Deliver the samples removed during destructive tests in separate sealed plastic bags, identified with project, location, test date, and test results, to Owner.
 - 6. If any combination of sealant type and substrate does not show evidence of minimum adhesion or shows cohesion failure before minimum adhesion, report results to Architect.
- E. Destructive Field Adhesion Test: Test for adhesion in accordance with ASTM C1521, using Destructive Tail Procedure.
 - 1. Sample: At least 18 inch long.
 - 2. Minimum Elongation Without Adhesive Failure: Consider the tail at rest, not under any elongation stress; multiply the stated movement capability of the sealant in percent by two; then multiply 1 inch by that percentage; if adhesion failure occurs before the "1 inch mark" is that distance from the substrate, the test has failed.
 - 3. If either adhesive or cohesive failure occurs prior to minimum elongation, take necessary measures to correct conditions and re-test; record each modification to products or installation procedures.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Non-Sag Sealants: Permits application in joints on vertical surfaces without sagging or slumping.
 - 1. Dow Chemical Company:
 - consumer.dow.com/en-us/industry/ind-building-construction.html/#sle.
 - 2. Master Builders Solutions by BASF: www.master-builders-solutions.basf.us/en-us/#sle.
 - 3. Sika Corporation: www.usa-sika.com/#sle.
 - 4. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com/#sle.
 - 5. Substitutions: See Section 01 25 00 Substitution Procedures for additional information.

2.02 JOINT SEALANT APPLICATIONS

- A. Scope:
 - 1. Exterior Joints: Seal open joints, whether or not the joint is indicated on the drawings, unless specifically indicated not to be sealed. Exterior joints to be sealed include, but are not limited to, the following items.
 - a. Joints between door, window, and other frames and adjacent construction.
 - b. Joints between different exposed materials.
 - c. Other joints indicated below.
 - 2. Do not seal the following types of joints.

- a. Joints indicated to be treated with manufactured expansion joint cover or some other type of sealing device.
- b. Joints where sealant is specified to be provided by manufacturer of product to be sealed.
- c. Joints where installation of sealant is specified in another section.
- d. Joints between suspended panel ceilings/grid and walls.

2.03 JOINT SEALANTS - GENERAL

A. Sealants and Primers: Provide products having lower volatile organic compound (VOC) content than indicated in SCAQMD 1168.

2.04 NONSAG JOINT SEALANTS

- A. Non-Staining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
 - 1. Movement Capability: Plus and minus 50 percent, minimum.
 - 2. Non-Staining To Porous Stone: Non-staining to light-colored natural stone when tested in accordance with ASTM C1248.
 - 3. Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.
 - 4. Hardness Range: 15 to 35, Shore A, when tested in accordance with ASTM C661.
 - 5. Color: To be selected by Architect from manufacturer's standard range.
 - 6. Cure Type: Single-component, neutral moisture curing.
 - 7. Service Temperature Range: Minus 65 to 180 degrees F.
 - 8. Basis of Design: BASF MasterSeal NP 100, High Performance Hybrid Sealant.

2.05 ACCESSORIES

- A. Backer Rod: Cylindrical cellular foam rod with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by backing and sealant manufacturers for specific application.
- B. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.
- C. Masking Tape: Self-adhesive, nonabsorbent, non-staining, removable without adhesive residue, and compatible with surfaces adjacent to joints and sealants.
- D. Joint Cleaner: Non-corrosive and non-staining type, type recommended by sealant manufacturer; compatible with joint forming materials.
- E. Primers: Type recommended by sealant manufacturer to suit application; non-staining.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that joints are ready to receive work.
- B. Verify that backing materials are compatible with sealants.
- C. Verify that backer rods are of the correct size.
- D. Preinstallation Adhesion Testing: Install a sample for each test location indicated in the test plan.
 - 1. Test each sample as specified in PART 1 under QUALITY ASSURANCE article.
 - 2. Notify Architect of date and time that tests will be performed, at least 7 days in advance.
 - 3. Record each test on Preinstallation Adhesion Test Log as indicated.

- 4. If any sample fails, review products and installation procedures, consult manufacturer, or take whatever other measures are necessary to ensure adhesion; re-test in a different location; if unable to obtain satisfactory adhesion, report to Architect.
- 5. After completion of tests, remove remaining sample material and prepare joint for new sealant installation.

3.02 PREPARATION

- A. Remove loose materials and foreign matter that could impair adhesion of sealant.
- B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.
- C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
- D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.

3.03 INSTALLATION

- A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Perform installation in accordance with ASTM C1193.
- C. Install bond breaker backing tape where backer rod cannot be used.
- D. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
- E. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.
- F. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

3.04 FIELD QUALITY CONTROL

- A. Perform field quality control inspection/testing as specified in PART 1 under QUALITY ASSURANCE article.
- B. Remove and replace failed portions of sealants using same materials and procedures as indicated for original installation.

3.05 POST-OCCUPANCY

A. Post-Occupancy Inspection: Perform visual inspection of entire length of project sealant joints at a time that joints have opened to their greatest width; i.e. at low temperature in thermal cycle. Report failures immediately and repair.

END OF SECTION

SECTION 08 11 13 HOLLOW METAL DOORS AND FRAMES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Non-fire-rated hollow metal doors and frames.
- B. Thermally insulated hollow metal doors with frames.

1.02 REFERENCE STANDARDS

- A. ADA Standards Americans with Disabilities Act (ADA) Standards for Accessible Design; 2010.
- B. ANSI/SDI A250.4 Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames and Frame Anchors; 2011.
- C. ANSI/SDI A250.8 Specifications for Standard Steel Doors and Frames (SDI-100); 2014.
- D. ANSI/SDI A250.10 Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames; 2011.
- E. ASTM A653/A653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2015.
- F. ASTM A1008/A1008M Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable; 2015.
- G. ASTM A1011/A1011M Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength; 2014.
- H. ICC A117.1 Accessible and Usable Buildings and Facilities; 2009.
- I. NAAMM HMMA 840 Guide Specifications for Installation and Storage of Hollow Metal Doors and Frames; 2007.

1.03 SUBMITTALS

- A. See Section 01 33 00 Submittal Procedures for additional information.
- B. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening methods, and finishes.
- C. Shop Drawings: Details of each opening, showing elevations, glazing, frame profiles, and any indicated finish requirements.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years documented experience.
- B. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of documented experience.
- C. Maintain at project site copies of reference standards relating to installation of products specified.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Comply with NAAMM HMMA 840 or ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.
- B. Protect with resilient packaging; avoid humidity build-up under coverings; prevent corrosion and adverse effects on factory applied painted finish.

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PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Hollow Metal Doors and Frames:
 - 1. Ceco Door, an Assa Abloy Group company: www.assaabloydss.com/#sle.
 - 2. Curries, an Assa Abloy Group company: www.assaabloydss.com/#sle.
 - 3. Republic Doors, an Allegion brand: www.republicdoor.com/#sle.
 - 4. Steelcraft, an Allegion brand: www.allegion.com/#sle.
 - 5. Substitutions: See Section 01 25 00 Substitution Procedures for additional information.

2.02 DESIGN CRITERIA

- A. Requirements for Hollow Metal Doors and Frames:
 - 1. Steel used for fabrication of doors and frames shall comply with one or more of the following requirements; Galvannealed steel conforming to ASTM A653/A653M, cold-rolled steel conforming to ASTM A1008/A1008M, or hot-rolled pickled and oiled (HRPO) steel conforming to ASTM A1011/A1011M, Commercial Steel (CS) Type B for each.
 - 2. Accessibility: Comply with ICC A117.1 and ADA Standards.
 - 3. Door Edge Profile: Manufacturers standard for application indicated.
 - 4. Typical Door Face Sheets: Flush.
 - 5. Zinc Coating for Typical Interior and/or Exterior Locations: Provide metal components zinc-coated (galvanized) and/or zinc-iron alloy-coated (galvannealed) by the hot-dip process in accordance with ASTM A653/A653M, with manufacturer's standard coating thickness, unless noted otherwise for specific hollow metal doors and frames.
 - a. Based on SDI Standards: Provide at least A40/ZF120 (galvannealed) when necessary, coating not required for typical interior door applications, and at least A60/ZF180 (galvannealed) for corrosive locations.
- B. Combined Requirements: If a particular door and frame unit is indicated to comply with more than one type of requirement, comply with the specified requirements for each type; for instance, an exterior door that is also indicated as being sound-rated must comply with the requirements specified for exterior doors and for sound-rated doors; where two requirements conflict, comply with the most stringent.

2.03 HOLLOW METAL DOORS

- A. Door Finish: Factory primed and field finished.
- B. Exterior Doors: Thermally insulated.
 - 1. Based on SDI Standards: ANSI/SDI A250.8 (SDI-100).
 - a. Level 3 Extra Heavy-duty.
 - b. Physical Performance Level A, 1,000,000 cycles; in accordance with ANSI/SDI A250.4.
 - c. Model 1 Full Flush.
 - d. Door Face Metal Thickness: 16 gage, 0.053 inch, minimum.
 - e. Zinc Coating: A60/ZF180 galvannealed coating; ASTM A653/A653M.
 - 2. Door Thickness: 1-3/4 inch, nominal.
 - 3. Weatherstripping: Refer to Section 08 71 00.

2.04 HOLLOW METAL FRAMES

- A. Comply with standards and/or custom guidelines as indicated for corresponding door in accordance with applicable door frame requirements.
- B. Frame Finish: Same as hollow metal door.
- C. Exterior Door Frames: Full profile/continuously welded type.

- 1. Galvanizing: Components hot-dipped zinc-iron alloy-coated (galvannealed) in accordance with ASTM A653/A653M, with A40/ZF120 coating.
- 2. Frame Metal Thickness: 16 gage, 0.053 inch, minimum.
- 3. Weatherstripping: Separate, see Section 08 71 00.

2.05 FINISHES

A. Primer: Rust-inhibiting, complying with ANSI/SDI A250.10, door manufacturer's standard.

2.06 ACCESSORIES

- A. Astragals for Double Doors: Specified in Section 08 71 00.
- B. Grout for Frames: Portland cement grout with maximum 4 inch slump for hand troweling; thinner pumpable grout is prohibited.
- C. Silencers: Resilient rubber, fitted into drilled hole; provide three on strike side of single door, three on center mullion of pairs, and two on head of pairs without center mullions.
- D. Temporary Frame Spreaders: Provide for factory- or shop-assembled frames.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify that opening sizes and tolerances are acceptable.
- C. Verify that finished walls are in plane to ensure proper door alignment.

3.02 PREPARATION

A. Coat inside of frames to be installed in masonry or to be grouted, with bituminous coating, prior to installation.

3.03 INSTALLATION

- A. Install doors and frames in accordance with manufacturer's instructions and related requirements of specified door and frame standards or custom guidelines indicated.
- B. Coordinate frame anchor placement with wall construction.
- C. Grout frames in masonry construction, using hand trowel methods; brace frames so that pressure of grout before setting will not deform frames.
- D. Install door hardware as specified in Section 08 71 00.
- E. Coordinate installation of electrical connections to electrical hardware items.

3.04 TOLERANCES

A. Maximum Diagonal Distortion: 1/16 inch measured with straight edge, corner to corner.

3.05 ADJUSTING

A. Adjust for smooth and balanced door movement.

END OF SECTION

SECTION 08 71 00 DOOR HARDWARE

PART 1 GENERAL

1.01 REFERENCE STANDARDS

- A. BHMA (CPD) Certified Products Directory; 2016.
- B. BHMA A156.1 American National Standard for Butts and Hinges; 2013.
- C. BHMA A156.3 American National Standard for Exit Devices; 2014.
- D. BHMA A156.4 American National Standard for Door Controls Closers; 2013.
- E. BHMA A156.18 American National Standard for Materials and Finishes; 2012.
- F. BHMA A156.21 American National Standard for Thresholds; 2014.
- G. BHMA A156.22 American National Standard for Door Gasketing and Edge Seal Systems, Builders Hardware Manufacturers Association; 2012.
- H. DHI (LOCS) Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames; 2004.
- I. ITS (DIR) Directory of Listed Products; current edition.
- J. NFPA 70 National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- K. NFPA 80 Standard for Fire Doors and Other Opening Protectives; 2016.
- L. NFPA 105 Standard for Smoke Door Assemblies and Other Opening Protectives; 2016.
- M. NFPA 252 Standard Methods of Fire Tests of Door Assemblies; 2012.
- N. UL (DIR) Online Certifications Directory; current listings at database.ul.com.
- O. UL 10C Standard for Positive Pressure Fire Tests of Door Assemblies; Current Edition, Including All Revisions.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate the manufacture, fabrication, and installation of products that door hardware is installed on.
- B. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.
- C. Preinstallation Meeting: Convene a preinstallation meeting one week prior to commencing work of this section; attendance is required by affected installers and the following:
 - 1. Architect.
 - 2. Hardware Installer.

1.03 SUBMITTALS

- A. See Section 01 33 00 Submittal Procedures for additional information.
- B. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project, and includes construction details, material descriptions, finishes, and dimensions and profiles of individual components.
- C. Samples for Verification:
 - 1. All new materials must match the finish of existing materials.
 - 2. Provide samples of finish where new materials are proposed.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum three years of documented experience.
- B. Installer Qualifications: Company specializing in performing work of the type specified for commercial door hardware with at least three years of documented experience.
- C. The work under this contract involved removal, refurbishment and re-installation of existing stainless steel doors and hardware. The entity preforming this work must demonstrate that they have experience with this type of work.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Package hardware items individually; label and identify each package with door opening code to match door hardware schedule.

PART 2 PRODUCTS

2.01 DESIGN AND PERFORMANCE CRITERIA

- A. Provide specified door hardware as required to make doors fully functional, compliant with applicable codes, and secure to extent indicated.
- B. Provide individual items of single type, of same model, and by same manufacturer.
- C. Provide door hardware products that comply with the following requirements:
 - 1. Applicable provisions of federal, state, and local codes.
 - 2. Fire-Rated Doors: NFPA 80, listed and labeled by qualified testing agency for fire protection ratings indicated, based on testing at positive pressure in accordance with NFPA 252 or UL 10C.
 - 3. Hardware on Fire-Rated Doors: Listed and classified by UL (DIR), ITS (DIR), or testing firm acceptable to authorities having jurisdiction as suitable for application indicated.
 - 4. Listed and certified compliant with specified standards by BHMA (CPD).
 - 5. Products Requiring Electrical Connection: Listed and classified by UL (DIR) as suitable for the purpose specified.
- D. Electrically Operated and/or Controlled Hardware: Provide necessary power supplies, power transfer hinges, relays, and interfaces as required for proper operation; provide wiring between hardware and control components and to building power connection in compliance with NFPA 70.
- E. Fasteners:
 - 1. Provide fasteners of proper type, size, quantity, and finish that comply with commercially recognized standards for proposed applications.
 - a. Aluminum fasteners are not permitted.
 - b. Provide phillips flat-head screws with heads finished to match door surface hardware unless otherwise indicated.
 - 2. Provide stainless steel machine screws and lead expansion shields for concrete and masonry substrates.
 - 3. Fire-Rated Applications: Comply with NFPA 80.
 - a. Provide wood or machine screws for hinges mortised to doors or frames, strike plates to frames, and closers to doors and frames.
 - b. Provide steel through bolts for attachment of surface mounted closers, hinges, or exit devices to door panels unless proper door blocking is provided.

2.02 BASIS OF DESIGN REFURBISHER

- A. For refurbishment of the Stainless Steel Doors and Hardware and the Revolving Door, Door systems of Naperville, IL has been involved in the design process and identifying the scope of work and is a prefered vendor for this project:
 - 1. Door Systems, contact Joseph Henson at: 630-250-0101; joseph.henson@kone.com.
 - 2. Other qualified contractors and vendors will also be acceptable.

2.03 HINGES (AT NEW HM DOORS).

- A. Manufacturers:
 - 1. McKinney; an Assa Abloy Group company: www.assaabloydss.com.
 - 2. Hager Companies: www.hagerco.com/#sle.
- B. Hinges: Complying with BHMA A156.1, Grade 1.
 - 1. Provide hinges on every swinging door.
 - 2. Provide following quantity of butt hinges for each door:
 - a. Doors up to 60 inches High: Two hinges.
 - b. Doors From 60 inches High up to 90 inches High: Three hinges.

2.04 PIVOTS (AT SS DOORS BEING REFURBISHED)

- A. It is the intent to refurbish and reuse the existing pivots. Replacement will only be considered if the existing pivots are beyond repair.
- B. Manufacturers:
 - 1. McKinney or Rixson; an Assa Abloy Group company: www.assaabloydss.com.
 - 2. DORMA USA, Inc; LM Series: www.dorma.com/#sle.
 - 3. Stanley, dormakaba Group: www.stanleyhardwarefordoors.com/#sle.

2.05 EXIT DEVICES.

- A. Manufacturers:
 - 1. Corbin Russwin, Sargent, or Yale; an Assa Abloy Group company: www.assaabloydss.com.
 - 2. DORMA USA, Inc; 8000 Series and 9000 Series: www.dorma.com/#sle.
 - 3. Stanley, dormakaba Group: www.stanleyhardwarefordoors.com/#sle.
 - 4. Von Duprin, an Allegion brand: www.allegion.com/us.
- B. Exit Devices: Complying with BHMA A156.3, Grade 1.
 - 1. Lever design to match lockset trim.
 - 2. Provide cylinder with cylinder dogging or locking trim.
 - 3. Provide exit devices properly sized for door width and height.
 - 4. Provide strike as recommended by manufacturer for application indicated.
 - 5. Provide UL (DIR) listed exit device assemblies for fire-rated doors and panic device assemblies for non-fire-rated doors.

2.06 CLOSERS (AT NEW HM DOORS)

- A. Manufacturers; Surface Mounted:
 - 1. Corbin Russwin, Norton, Rixson, Sargent, or Yale; an Assa Abloy Group company: www.assaabloydss.com.
 - 2. DORMA USA, Inc; 7400 Series, 8600 Series, and TS93: www.dorma.com/#sle.
 - 3. LCN, an Allegion brand: www.allegion.com/us.
 - 4. Stanley, dormakaba Group: www.stanleyhardwarefordoors.com/#sle.
- B. Closers: Complying with BHMA A156.4, Grade 1.
 - 1. Type: Surface mounted to door.

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2. Provide door closer on each exterior door.

2.07 KICK PLATES (AT NEW HM DOORS)

- A. Manufacturers:
 - 1. Hiawatha, Inc, an Activar Construction Products Group company: www.activarcpg.com/hiawatha.
 - 2. Ives, an Allegion brand: www.allegion.com/us.
- B. Kick Plates: Provide along bottom edge of push side of every door with closer, except aluminum storefront and glass entry doors, unless otherwise indicated.
 - 1. Size: 8 inch high by 2 inch less door width (LDW) on push side of door.

2.08 ASTRAGALS

- A. Manufacturers:
 - 1. Pemko; an Assa Abloy Group company: www.assaabloydss.com.
 - 2. Hager Companies: www.hagerco.com/#sle.
 - 3. Zero International, Inc: www.zerointernational.com.
- B. Astragals: Complying with BHMA A156.22.
 - 1. Material: Stainless steel.
 - 2. Provide non-corroding fasteners at exterior locations.

2.09 THRESHOLDS

- A. Manufacturers:
 - 1. Pemko; an Assa Abloy Group company: www.assaabloydss.com.
 - 2. Hager Companies: www.hagerco.com/#sle.
 - 3. Zero International, Inc: www.zerointernational.com.
- B. Thresholds: Complying with BHMA A156.21.
 - 1. Provide threshold at each exterior door, unless otherwise indicated.
 - 2. Type: Flat surface.
 - 3. Material: Stainless steel.
 - 4. Threshold Surface: Fluted horizontal grooves across full width.
 - 5. Field cut threshold to profile of frame and width of door sill for tight fit.
 - 6. Provide non-corroding fasteners at exterior locations.
 - 7. Access panel for recessed hardare (where required).

2.10 WEATHERSTRIPPING AND GASKETING

- A. Manufacturers:
 - 1. Pemko; an Assa Abloy Group company: www.assaabloydss.com.
 - 2. Hager Companies: www.hagerco.com/#sle.
 - 3. Zero International, Inc: www.zerointernational.com.
- B. Weatherstripping and Gasketing: Complying with BHMA A156.22.
 - 1. Head and Jamb Type: Self-adhesive.
 - 2. Door Sweep Type: Encased in retainer.
 - 3. Provide gasketing for smoke and draft control doors that complies with local codes, requirements of assemblies tested in accordance with UL 1784.
 - 4. Provide weatherstripping on each exterior door at head, jambs, and meeting stiles of door pairs, unless otherwise indicated; .
 - 5. Provide door bottom sweep on each exterior door, unless otherwise indicated.
 - 6. It is assumed that weatherstripping and gasleting will be custom and special order to fit existing conditions.

- A. Manufacturers:
 - 1. Ives, an Allegion brand: www.allegion.com/us.
 - 2. Rockwood; an Assa Abloy Group company: www.assaabloydss.com.
- B. Silencers: Provide at equal locations on door frame to mute sound of door's impact upon closing.
 - 1. Single Door: Provide three on strike jamb of frame.
 - 2. Pair of Doors: Provide two on head of frame, one for each door at latch side.
 - 3. Material: Rubber, gray color.

2.12 OTHER HARDWARE:

A. As noted on the drawings or required for a complete installation.

2.13 FINISHES

- A. Finishes: Provide door hardware of same finish, unless otherwise indicated.
 - 1. Finish at new Hollow Metal Doors: 625; bright chromium plated over nickel, with brass or bronze base material (former US equivalent US26); <u>BHMA A156.18</u>.
 - 2. Finish at existing Stainless Steel Doors: To match existing finishes.
 - 3. Exceptions:
 - a. Where base material metal is specified to be different, provide finish that is an equivalent appearance in accordance with BHMA A156.18.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that doors and frames are ready to receive this work; labeled, fire-rated doors and frames are properly installed, and dimensions are as indicated on shop drawings.

3.02 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions and applicable codes.
- B. Install hardware on fire-rated doors and frames in accordance with applicable codes and NFPA 80.
- C. Install hardware for smoke and draft control doors in accordance with NFPA 105.
- D. Use templates provided by hardware item manufacturer.
- E. Door Hardware Mounting Heights: Distance from finished floor to center line of hardware item.
 - 1. For Steel Doors and Frames: Install in compliance with DHI (LOCS) recommendations.
- F. Set exterior door thresholds with full-width bead of elastomeric sealant at each point of contact with floor providing a continuous weather seal; anchor thresholds with stainless steel countersunk screws.

3.03 FIELD QUALITY CONTROL

A. Provide an Architectural Hardware Consultant (AHC) to inspect installation and certify that hardware and installation has been furnished and installed in accordance with manufacturer's instructions and as specified.

3.04 ADJUSTING

- A. Adjust work under provisions of Section 01 70 00 Execution and Closeout Requirements.
- B. Adjust hardware for smooth operation.

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DOOR HARDWARE

C. Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.

3.05 CLEANING

- A. Clean finished hardware in accordance with manufacturer's written instructions after final adjustments have been made.
- B. Clean adjacent surfaces soiled by hardware installation.

3.06 PROTECTION

- A. Protect finished Work under provisions of Section 01 70 00 Execution and Closeout Requirements.
- B. Do not permit adjacent work to damage hardware or finish.

END OF SECTION

SECTION 09 91 13 EXTERIOR PAINTING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Surface preparation.
- B. Field application of paints.
- C. Scope: Finish exterior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.
- D. Do Not Paint or Finish the Following Items:
 - 1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
 - 2. Items indicated to receive other finishes.
 - 3. Items indicated to remain unfinished.
 - 4. Fire rating labels, equipment serial number and capacity labels, and operating parts of equipment.
 - 5. Floors, unless specifically indicated.
 - 6. Glass.
 - 7. Concealed pipes, ducts, and conduits.

1.02 REFERENCE STANDARDS

- A. 40 CFR 59, Subpart D National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency; current edition.
- B. MPI (APSM) Master Painters Institute Architectural Painting Specification Manual; Current Edition, www.paintinfo.com.
- C. SCAQMD 1113 South Coast Air Quality Management District Rule No.1113; current edition.
- D. SSPC-SP 1 Solvent Cleaning; 2015.
- E. SSPC-SP 6 Commercial Blast Cleaning; 2007.

1.03 SUBMITTALS

- A. See Section 01 33 00 Submittal Procedures for additional information.
- B. Product Data: Provide complete list of products to be used, with the following information for each:
 - 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
 - 2. MPI product number (e.g. MPI #47).
 - 3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.
- C. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.
 - 1. Where sheen is specified, submit samples in only that sheen.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified, with minimum three years documented experience.
- B. Applicator Qualifications: Company specializing in performing the type of work specified with minimum three years experience and approved by manufacturer.

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EXTERIOR PAINTING

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.06 FIELD CONDITIONS

- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
- C. Provide lighting level of 80 ft candles measured mid-height at substrate surface.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Provide paints and finishes used in any individual system from the same manufacturer; no exceptions.
- B. Paints:
 - 1. PPG Paints: www.ppgpaints.com/sle.
 - 2. Pratt & Lambert Paints: www.prattandlambert.com.
 - 3. Sherwin-Williams Company: www.sherwin-williams.com.
 - 4. Benjamin Moore: www.benjaminmoore.com
- C. Primer Sealers: Same manufacturer as top coats.
- D. Substitutions: See Section 01 25 00 Substitution Procedures for additional information.

2.02 PAINTS AND FINISHES - GENERAL

- A. Paints and Finishes: Ready mixed, unless required to be a field-catalyzed paint.
 - 1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
 - 2. Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
 - 3. Supply each paint material in quantity required to complete entire project's work from a single production run.
 - 4. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.
- B. Volatile Organic Compound (VOC) Content:
 - 1. Provide paints and finishes that comply with the most stringent requirements specified in the following:
 - a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.
 - b. SCAQMD 1113 Rule.
 - 2. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.

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- C. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Architect from the manufacturer's full line.
- D. Colors: To be selected from manufacturer's full range of available colors.
- 1. Selection to be made by Architect after award of contract.

2.03 PAINT SYSTEMS - EXTERIOR

- A. Paint E-OP Exterior Surfaces to be Painted, Unless Otherwise Indicated: Including primed metal.
 - 1. Two top coats and one coat primer.
 - 2. Top Coat(s): Exterior Latex; MPI #119.
 - 3. Primer: As recommended by top coat manufacturer for specific substrate.
 - a. Existing door frames and metal panels, where noted, to be fully prepped and painted.
 - b. New doors and frames are factory primed, field scope will be touch-up only.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.
- C. Test shop-applied primer for compatibility with subsequent cover materials.

3.02 PREPARATION

- A. Clean surfaces thoroughly and correct defects prior to application.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces for finishing.
- D. Seal surfaces that might cause bleed through or staining of topcoat.
- E. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- F. Ferrous Metal:
 - 1. Solvent clean according to SSPC-SP 1.
 - Remove rust, loose mill scale, and other foreign substances using using methods recommended in writing by paint manufacturer and blast cleaning according to SSPC-SP 6 "Commercial Blast Cleaning". Protect from corrosion until coated.
- G. Metal Doors to be Painted: Prime metal door top and bottom edge surfaces.

3.03 APPLICATION

- A. Apply products in accordance with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual".
- B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- C. Apply each coat to uniform appearance.
- D. Sand metal surfaces lightly between coats to achieve required finish.
- E. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

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EXTERIOR PAINTING

F. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.04 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.05 PROTECTION

- A. Protect finishes until completion of project.
- B. Touch-up damaged finishes after Substantial Completion.

END OF SECTION