

34 sequassen street
hartford, CT 06106
p. 860-293-0093
f. 860-293-0094



MAIER design group, llc.
architecture & interiors

SPECIFICATIONS

EAST GRANBY HIGH SCHOOL
EXTERIOR DOOR REPLACEMENT
95 SOUTH MAIN STREET
EAST GRANBY, CT

BID RELEASE 8/2/2024
MDG PROJECT No. 2024.013



MAIER design group, llc.

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SCHEDULE OF DRAWINGS

SHEET	TITLE	ISSUED
G-0	COVER PAGE.....	8/2/2024
G-1	GENERAL INFORMATION SHEET	8/2/2024
A100	MASTER LOCATION PLAN.....	8/2/2024
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A201	DETAILS	8/2/2024

END OF SCHEDULE OF DRAWINGS

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PART 1 GENERAL

1.1 SECTION INCLUDES

A. This Section summarizes the Work of the Project, including the following:

1. Project Description.
2. Time of Completion.
3. Work Under Other Contracts.
4. Work Day.
5. Contractor Qualifications.
6. Work Sequence.
7. Examination of Site.
8. Contractor Qualifications
9. Contractor's Use of Premises.
10. Owner Occupancy.

1.2 RELATED SECTIONS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

1.3 PROJECT DESCRIPTION

A. Work shall be as indicated in the drawings and specifications prepared by Maier Design Group. Refer to the complete set of Drawings and Specifications for more complete information.

The improvements specifically being undertaken in this project includes removal and replacement of twenty five (25) exterior doors, frames and associated hardware located at the East Granby High School and the patching and repair of finishes affected by the work. This is not meant to be a complete list and bidders must review the accompanying drawings and specifications to determine the full scope of the project.

1.4 TIME OF COMPLETION

- A. Work required by the project shall commence upon receipt of a Notice to Proceed. Substantial Completion as defined in the Contract Documents must be achieved and evidenced by a Certificate of Substantial Completion dated no later than 60 weeks after the date of the notice to proceed.
- B. The Contractor shall cooperate and coordinate with the Owner and the Owner's Representative to assure that the schedule will be maintained. All work must be strictly coordinated with the Owner. It is assumed that the building will be occupied during the construction.

1.5 WORK UNDER OTHER CONTRACTS

1. NOT USED

1.6 WORK DAY

- A. The normal workday shall be 7:00 AM to 4:30 PM Monday through Friday, excluding Holidays, for non-noisy work and from 8:00 AM to 4:30 PM Monday through Friday, excluding Holidays, for noisy work. The contractor shall adhere to local Noise Ordinances in determining schedule.
- B. No person shall be employed to work or permitted to work more than eight hours in any day or more than forty hours in any week on any work provided for under this Contract. The observance of such limitations of hours of work may be suspended as deemed appropriate by the Owner or the Owner's Representative.
- C. If the Contractor determines that work on this project must be performed during a time other than normal working hours, costs for any premium time must be included in the Base Bid.

1.7 CONTRACTOR QUALIFICATIONS

- A. The Contractor shall have been regularly engaged in construction and the installation and fabrication of the type work set forth in the Contract Documents for a period of not less than five (5) years prior to the Bid date set forth in the Contract Documents.
- B. The Contractor shall have adequate equipment, facilities and personnel for the proper performance of the work set forth in the Contract Documents, and all such equipment, facilities and personnel shall be subject to the approval of the Owner.

1.8 WORK SEQUENCE

- A. The adjacent buildings will be occupied throughout the duration of the project. Work must be closely coordinated and scheduled with the Owner.
- B. On-Site storage of any/all materials must be approved by the Owner and the Owner's Representative. A site logistic plan must be prepared and approved by the Owner and the Owner's Representative. All storage costs are borne by the Contractor. Any long-term storage locations must be coordinated with the Owner and the Owner's Representative.
- C. No exterior building penetrations may remain open to the elements overnight. Any and all such openings or penetrations must be fully secured at the end of each work day.
- D. If or when facilities are occupied by the Owner or Tenants, any and all work must be closely coordinated with the Owner and the Owner's Representative.

1.9 EXAMINATION OF SITE

- A. The Contractor is required to attend the Pre-Bid meeting and to fully acquaint himself with the Site and with the existing conditions so that he may fully understand the facilities, difficulties, and restrictions attending the execution of the work under the Contract. The failure of the Contractor to visit the Site and acquaint himself with the existing conditions shall in no way relieve the Contractor from any obligations with respect to the work included in the Contract. The submission of a Bid by the Contractor shall be taken as evidence of compliance with this Section.
- B. The Contractor shall include in his Bid all costs for the full completion of all work under the Contract as indicated on the Drawings and specified herein including all items of work required and necessary due to existing conditions encountered in-the-field during the process of performing the work. All costs in connection with encountered existing

conditions that could have reasonably been anticipated shall be performed by the Contractor at no additional cost to the Owner.

1.10 CONTRACTOR USE OF PREMISES

- A. General: Limit use of the premises to construction activities in areas indicated; allow for Owner occupancy and use by the public.
 - 1. Confine operations to areas within Contract limits indicated. Portions of the site beyond areas in which construction operations are indicated are not to be disturbed.
 - 2. Keep driveways and entrances serving the premises clear and available to the Owner, Owner's employees and Tenants at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site. Do not block fire lanes.
 - 3. Burial of Waste Materials: Do not dispose of any material on site, either by burial or by burning. Materials removed from the project during demolition and not otherwise indicated to be salvaged or returned to the Owner become the property of the Contractor.
- B. Existing Buildings: Maintain existing buildings in a weather tight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the buildings and occupants during the construction period.

1.11 INSPECTIONS

- A. The Contractor shall be responsible for the proper inspection of his work during its installation by his workmen, his sub-contractors, all lawful authorities, other workmen which may be engaged by the Owner.
- B. The Contractor shall obtain and pay for all necessary permits, fees, and other requirements prior to commencing any work. All required permit fees shall be included in the base bid.
- C. The Contractor shall comply with all laws relative to persons employed by him or his sub-contractors.

1.12 JOB SITE SAFETY

- A. Caution shall be exercised by the Contractor at all times for the protection of persons and property and all safety regulations and other provisions of applicable Federal, State and local laws, local ordinances, Building and Construction codes, including the requirements of the Occupational Safety and Health Administration, shall be observed. The Owner also maintains rules for construction and the Contractor shall abide by those rules and regulations at all times.
- B. The drawings do not include standards or guidelines for construction safety. The Contractor shall be responsible for the adequacy and safety of all construction methods and the safe prosecution of the Work, including but not limited to forms, false-work, scaffolding, protective barricades, protective rails and warning lights. It is expressly stipulated that any examination and/or approval by the Architect and/or their consultants of the contractor's plans for such items as well as for any other items needed for the prosecution of the work will cover only general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Contractor shall assume full and complete responsibility for safe prosecution of the Work at all times and for obtaining satisfactory results.

- C. Design, engineering, construction, maintenance, repair, and inspection of all temporary work is the sole responsibility of the Contractor. Any review or comments made by the Owner, the Owner's Representative, the Architect and/or their consultants in regards to temporary work shall not be construed of as acceptance or design of such work.
- D. During the course of the performance of the Work, if any operation, practice, or condition is deemed by the Owner, the Architect and/or their consultants to be unsafe, the Contractor, whether notified verbally or in writing, shall take such corrective action immediately as appropriate.
- E. Nothing in the foregoing paragraphs shall be construed as relieving the Contractor from full responsibility of safe prosecution of the Work at all times. In the event the Owner, the Owner's Representative, the Architect and/or their consultants are held by court of administrative body to be liable for personal injuries or damages to property arising from deficiencies in the job-site safety, the Contractor shall promptly defend, indemnify and hold them harmless.

1.13 INTENT

- A. It is the intention of the Drawings and Specifications that all work shall be fully completed, tested, and placed into final operation for the use intended. All materials, equipment, apparatus, appliance workmanship, etc., shall be new and of first-class quality.
- B. Any apparatus, appliance, material, or work not indicated on the drawings but mentioned in the Specifications, or vice versa, or all miscellaneous materials and workmanship not indicated on the Drawings or mentioned in the Specifications but necessary and required by the Owner to make the work complete and finished in all respects and made ready for use intended by the Owner, even if not particularly specified in the Drawings and Specifications, shall be provided by the Contractor without additional cost to the Owner.

1.14 APPROVAL OF MATERIALS

- A. Materials, workmanship, design, and arrangement of all work installed under the Contract shall be subject to the approval of the Architect, the Owner and/or the Owner's Representative.
- B. Within seven (7) days after the Notice to Proceed has been issued to the Contractor, and prior to the submission of any shop drawings for approval, the Contractor shall submit to the Architect for approval, a complete list of all manufacturers, equipment and materials proposed for use in the work. No approvals will be rendered by the Architect on any shop drawing submitted before the complete "List of Manufactures" is approved. Any item of equipment or materials not submitted for approval on the "List of Manufacturers" within the seven (7) day period will not be approved unless it shall be of the exact make and characteristic specified in the Contract Documents.
- C. The Contractor shall be liable for the removal and replacement of any material or equipment installed before it is approved at no extra cost to the Owner if, in the opinion of the Architect, said material or equipment does not meet the intent of the Drawings and Specifications.

1.15 SHOP DRAWINGS

- A. Prior to delivery to the job site, but sufficiently in advance of requirements necessary to allow the Architect ample time for review, the Contractor shall submit for review one electronic copy each of shop drawings for all equipment, materials, tapered insulation, piping, wiring, hardware, fixtures, equipment, etc., and further shall obtain review approval for same from the Architect before installing any of the same in the work of the Project. The Contractor shall afford the Design team a minimum of ten (10) business days for review of shop drawings and other submittals.
- B. The review shall be only for general conformance with the design concept and general compliance with the information given in the Contract Documents. It shall not include review of quantities, dimensions, weights or gauges, fabrication processes, construction methods, etc., all of which shall be the sole responsibility of the Contractor. The Contractor shall not be relieved from furnishing materials or work as may be required for the completion of all items of work intended by the Owner.
- C. Prior to submission of shop drawings, the Contractor shall thoroughly check each shop drawing and shall reject those not conforming to the Contract Documents and he shall indicate by his signature thereon that the shop drawings submitted in his opinion meet the full requirements of the Contract Documents. The requirements herein for shop drawings shall be in addition to the requirements set forth in the General Conditions, Section 01 33 00 Submittal Procedures and each of the Technical Sections.

1.16 SHUTDOWNS

- A. Any temporary shutdown by the Contractor of existing systems, construction, equipment, etc., shall be performed at such time as shall be agreed to by the Owner.
- B. The Owner shall be notified in writing of estimated duration of the shutdown period at least seven (7) days in advance of the date the work is to be performed. The maximum duration of any shutdown shall not exceed two (2) hours unless previously approved of in writing for a longer specified time.
- C. Work shall be arranged for continuous performance, including overtime periods if so required, to assure that existing operating services, equipment, passageways, construction, etc., shall be shut down only during the time actually required to make necessary connections.

1.17 WORK SCHEDULE:

- A. The Contractor shall submit a Work Schedule for approval by the Owner which shall set forth the date and time for each area and/or phase of site work, the commencement of any work under the contract. The Contractor shall schedule his work so that the installation of new work shall be fully completed as soon as possible. The Contractor shall prepare the Work Schedule in accordance with the limits of Contract Time set forth in the Contract Documents.
- B. The Contractor shall schedule his work in a manner to provide not less than three (3) days written notice to the Owner and the Owner's Representative to the performance of work under the contract. The Contractor shall take precautions to insure all walkways and entrances/exits remain clear and unobstructed for use by the occupants. The Contractor shall conform to the Work Schedule approved by the Owner.

1.18 CODES AND REGULATIONS:

- A. The Contractor shall comply with all codes and regulations of the local Municipality, the State of Connecticut, all utility companies (including but not limited to telephone and cable companies) and all other governing agencies having jurisdiction over the project.
- B. The Contractor shall, prior to the acceptance of all work by the Owner, furnish written proof of the acceptance of all work by the local Municipality, the Utility Companies, the State of Connecticut, and all other governing agencies having jurisdiction over the Project.
- C. The Contractor shall pay for all fees in connection with the installation of the work and he shall pay for all fees charged by the local Municipality, by Utility Companies, and all other governing Agencies having jurisdiction over the Project.

1.19 EXISTING IMPROVEMENTS:

- A. Maintain in operating condition, all active utilities, driveways, streets, parking areas, sidewalks, lighting systems, electric services, plumbing systems, heating systems, telephone systems, cable systems, fire alarm systems, and all other active utilities and improvements.
- B. The Contractor shall make interruptions to the existing systems only when necessary and shall maintain interruptions to the existing systems to an absolute minimum and only upon approval by the Owner, and he shall provide the Owner with complete information as to the time, location, sequence and length of each system interruption. Unless otherwise permitted by the owner, the Contractor shall maintain continuous service of all existing and new system or systems at all times to all adjacent tenant occupied buildings and areas.
- C. Maintain vehicular traffic through streets as per local Municipality requirements; do not completely block passage of vehicles and maintain at all times open traffic lanes for access by all types of vehicular traffic. Provide temporary barricades, enclosures, separators, signs, etc., as may be required for streets, sidewalks, vehicles, pedestrians, and other type traffic. The Contractor shall comply with all rules, regulations, and laws governing the work and for the continued customary use of the buildings and all areas of the Project Site.

1.20 CLEANING, REMOVAL OF DEBRIS

- A. The Contractor shall periodically (or as directed by the Owner during the progress of the work) remove and properly dispose of all debris and shall keep the premises clean and clear of all obstructions. Upon completion of the work, the Contractor shall remove all temporary construction, facilities and materials, and shall leave the Building and the Project Site in a neat and clean condition.
- B. All debris due to removal and installation of new work shall be removed daily from the Project Site by the Contractor.

1.21 INTERPRETATION OF DRAWINGS & SPECIFICATIONS

- A. Any questions or disagreements arising as to the true intent of this specification or the Drawings, or the kind and quality of work required thereby, shall be decided by the Architect, whose interpretations thereof shall be final, conclusive, and binding on all parties.
- B. In the case of any discrepancies between Drawings and Specifications, or within either document itself, the better quality, greater quantity or more costly work shall be included

in the Contract Price and shall be furnished and installed in the performance of the required work.

1.22 SUBSTITUTIONS

- A. Substitutions of equipment or materials other than those indicated on the Drawings or in the Specifications, shall be confined to only those manufacturer's listed, or those otherwise indicated, and may be made only upon written approval from the Architect. Any substitution requests shall be made in accordance with Section 01 25 00 Substitution Procedures.
- B. The Contractor shall submit his substitution for approval before releasing order for fabrication and/or shipment. Submittal will be forwarded with a letter of transmittal or cover letter listing all items for approval. The Architect reserves the right to disapprove such substitution, provided, in his opinion, the item offered is not equal to the item specified.
- C. Where a Contractor proposes to use an item of material or equipment other than that specified or detailed on Drawings, and which requires any redesign of the roof and/or structure, or architectural lay-out, all such redesign and all new drawings and details required thereof shall, with the approval of the Architect be prepared by the Contractor at his own expense.
- D. Where such approved deviation requires a different quantity and arrangement of material and equipment from that specified or indicated on the drawings, subject to the approval of the Architect, the Contractor shall provide any such material, structural supports, and any other items at no additional cost to the Owner.

1.23 ROYALTIES & PATENTS

- A. The Contractor shall pay all royalties and shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from loss on account thereof.
- B. If the Contractor observes that a process or article specified is an infringement of a patent, he shall promptly notify the Architect in writing, and any necessary changes shall be adjusted as provided in the Contract for changes in the work. If the Contractor performs any work specified, knowing it is to be an infringement of a patent, he shall bear all costs arising therefrom.

1.24 PROTECTION OF WORK & PROPERTY

- A. The Contractor shall be responsible for the maintenance and protection of all equipment, materials, and tools, supplied by him and stored or installed on the job site, from loss or damage of all causes, until final acceptance.
- B. The Contractor shall be responsible for the protection of any finished work of other trades from damage or defacement by his operations and must remedy any such injury at his own expense.

1.25 TESTS

- A. Testing shall be performed in accordance with Section 01 45 00 Quality Control.
- B. All equipment shall be tested as specified under the various sections of the work. Labor, materials, instruments, and power required for testing shall be furnished by the Contractor, unless otherwise indicated under the particular section of the Specifications.

1.26 AS-BUILT DRAWINGS

- A. The Contractor shall keep concurrent with the installation of the progress of the work, an accurate record of the as-built location and condition of all work performed under the Contract. All as-built information shall be recorded on a clean set of Black and White Contract Drawings and shall indicate the final location of all items of work complete with dimensions, sizes, notations, etc.
- B. Upon completion of all work and prior to Final Acceptance of all work under the Contract, the Contractor shall transfer all as-built information to a clean black and white Xerox copy of the Contract Documents. Submit all final as built Drawings to the Architect for final approval and acceptance.

1.27 OWNERSHIP OF DRAWINGS & SPECIFICATIONS

- A. All Drawings, Specifications, and copies thereof furnished by the Architect are his property and they are not to be used on other work and shall be returned to the Architect at the completion of the work.

1.28 CONTRACTOR CONDUCT

- A. All contractors and their employees shall conduct themselves in a manner that is lawful, courteous, businesslike, and respectful of all EMBNV staff, contractors, guests, and visitors.
- B. Contractors and their employees shall not engage in behavior that is rude, threatening, or offensive. Use of profane or insulting language is prohibited. Harassment of any type, including sexual harassment is strictly prohibited. Abusive, derogatory, obscene or improper language, gestures, remarks, whistling, cat calls or other disrespectful behavior will not be tolerated. Roughhousing, fighting, fisticuffs, physical threats, destruction of property, vandalism, littering, or physical abuse of anyone on site is not permitted under any circumstance.
- C. The use, possession, distribution, or sale of any weapon, alcohol, illegal drug, or controlled dangerous substance by any contractor or contractor's employee is prohibited. Offenders will be removed from the site and/or reported to the local police department.
- D. Contractors and their employees are not permitted to smoke in or near the building.
- E. The use of radios, "boom boxes" and similar units shall not be permitted at any time.
- F. Contractors and their employees are required to wear appropriate work wear, hard hats, safety gear and footwear while on-site. Articles of clothing shall not display offensive or inappropriate language, symbols or graphics.
- G. The Contractor is responsible for his/her employees, agents, consultants and guests. If prohibited conduct does occur, the contractor shall take all necessary steps to stop and prevent any future occurrence. Any breach of these conditions will result in the removal of the person responsible from the premises and prohibited actions could result in the termination of any contract or agreement with the Owner. The Contractor is required to report any matter involving a violation of these rules of conduct to the Owner or the Owner's Representative.

1.29 POINT OF CONTACT

- A. The contractor shall designate a point of contact to be on call and available by phone and/or in-person on an immediate basis to respond on behalf of the contractor in the event of an emergency.
- B. Refer to Section 01 31 13 – Project Coordination for additional information.

PART 2 SPECIAL CONTRACT PROVISIONS

2.1 NOT USED

PART 3 EXECUTION

3.1 NOT USED

END OF SECTION

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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This Section includes supplemental general conditions to the Contract:
 - 1. General Contract.
 - 2. Building Codes.
 - 3. Submission of Bid.
 - 4. Project Conditions.
 - 5. Conflicts.
 - 6. Pre-construction Conference
 - 7. Restoration Work
 - 8. Utility Connections and Fees

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

1.3 GENERAL CONTRACT

- A. Awarded Contractor shall execute AIA Document A101-2017 Standard Form of Agreement Between Owner and Contractor. The contract shall be as mutually negotiated and approved by the Owner and the General Contractor.
- B. All Subcontractors to the General Contractor shall execute AIA Document A401-2017 Standard Form of Agreement Between Contractor and Subcontractor. The terms and conditions of all subcontractor agreements shall be identical or subservient to the Owner Contractor Agreement.
- C. AIA Document A201-2017 General Conditions of the Contract for Construction shall be in force for the work of this contract and all subcontractor agreements. The terms, conditions and provisions of AIA Document A201 shall be considered to be a part of this work. Any notes or specifications in the Contract Documents are intended to supplement AIA A201, not supersede it. In the event of a conflict, AIA Document A201 shall take precedence over notes in the Contract Documents.

1.4 BUILDING CODES

- A. All work shall comply with all applicable codes, laws, standards and regulations current at the time of permit application including, but not limited to, the Connecticut State Building Code, NFPA 101 Life Safety Code, ADAAG, Connecticut General Statutes, and local ordinances and zoning.
- B. Contractor shall pay for and obtain all permits prior to commencing ANY work. The contractor shall indicate the permit value on the bid form. Any changes to permit fees due to change orders shall be handled as a SINGLE change order at the end of the job.
- C. The Contractor shall post the building permit on-site in a visible and conspicuous location. Electronic copies of all permits shall be delivered to the Owner and the Architect.

- D. The Contractor shall follow all AHJ (Authority Having Jurisdiction) requirements for interim inspections of the work.

1.5 SUBMISSION OF BID

- A. The Contractor shall be held to have examined the project location and to have compared it with the Drawings and Specifications and to have satisfied himself of the conditions existing at the site, the storage and handling of materials and all other matters that may be incidental to the Work under the Contract before submitting a proposal. Submission of a proposal will be considered as evidence that an examination has been made. No allowance will subsequently be made to the Contractor by reason of any error on his part due to his neglect to comply with the requirements of this clause.
- B. Submission of bid will be considered presumptive evidence that the Contractor is conversant with local facilities and difficulties, the requirements of the documents and of pertinent Local and State codes, state of labor and material markets, and has made due allowance in the bid for all contingencies.
- C. No compensation will be allowed for any difficulties which the Contractor could have discovered or reasonably anticipated prior to bidding.

1.6 PROJECT CONDITIONS

- A. The contractor shall assume full responsibility for his sub-contractors. Performance, timely completion of work, and adherence to the contract documents shall be monitored at all times by the contractor. Sub-contractors shall not be allowed to work unsupervised unless specific approval is given by the Architect and the Owner.
- B. Before performing Work or ordering any materials, the Contractor shall verify all dimensions of any existing and new Work and shall be responsible for their accuracy. Any differences found shall be submitted to the Architect for consideration before proceeding with the Work. No extra compensation will be permitted because of differences between actual dimensions and measurements indicated on the project Drawings.
- C. The project limits are established within the Drawings. Contractor shall confine his operations within the project limits and shall utilize the area in an efficient and orderly manner.
- D. The Contractor is responsible for coordinating the use of building facilities and utilities with the Owner and is prohibited from interrupting any occupant's day to day activities. Hours of operation, use of parking, access to facilities contained within the building and placement of dumpsters and other equipment will be dictated by the Owner. The Contractor will comply with these requirements.
- E. The Contractor shall coordinate ALL work included in the Contract with the Owner and shall perform ALL work in a manner that does not affect any existing maintenance or service agreements. The Contractor shall make every effort to employ sub-contractors recommended by the Owner.
- F. Extreme care must be taken to minimize and contain noise, dust and construction debris. Materials may be stored on site at a location to be determined by the Owner, however materials must not exceed beyond the designated area. All materials and equipment required for the work shall be stored or placed so as not to endanger the general public, the Owner's employees and clients, or the Contractors own workers.

- G. The Contractor shall provide suitable protection for the general public and their own workers for the duration of the work. No exits shall be blocked, adequate lighting shall be maintained throughout all areas affected by the work, and all life safety and security equipment and systems must remain fully operational and accessible.

1.7 CONFLICTS

- A. All manufactured articles, material, and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned, as directed by manufacturer's instructions.
- B. Wherever possible, building standard materials shall be utilized unless specifically designated otherwise by these documents. In case of a discrepancy between apparent building standards and specified products, request written clarification from the Architect prior to proceeding.
- C. Any dimensions, finishes or materials noted M.E., Match Existing, VIF, Verify, or +/- shall be checked and confirmed by the Contractor in the field. Errors or omissions attributable to inadequate or incomplete field measurements or field determinations made by the Contractor or any of his agents, are the sole responsibility of the Contractor.
- D. Where conflicts between the drawings and/or specifications occur, the Contractor shall notify the Architect during the bidding period for a clarification. In the absence of a clarification during the bidding process, the more restrictive and/or more costly option shall apply unless specifically noted otherwise by the Architect.
- E. Any questions or disagreements arising as to the true intent of this specification or the Drawings, or the kind and quality of work required thereby, shall be decided by the Architect, whose interpretations thereof shall be final, conclusive, and binding on all parties.

1.8 PRE-CONSTRUCTION CONFERENCE:

- A. The Contractor shall schedule a Pre-Construction Conference with the Owner, Architect, building staff and all other interested parties to review the project and scope of work. The Pre-Construction Conference will be scheduled after the notice of award and prior to the start of any work. The Pre-Construction Conference will be held at the site and will at a minimum include the following:
 - 1. Review scope of work.
 - 2. Review project logistics including but not limited to; site access, storage of materials, removal of debris, interruptions to building operations.
 - 3. Working hours.
 - 4. Contractor's personnel who will have access to the building interiors.
 - 5. Staff points of contact.
- B. Refer to Section 01 31 19 – Project Meetings for further information regarding the Pre-Construction Conference.
- C. The Contractor will prepare and distribute minutes of the Pre-Construction Meeting.

1.9 RESTORATION WORK:

- A. In addition to the work specified, the Contractor shall include the restoration of all existing work, including but not limited to sidewalks, structures, driveways, streets, parking areas, lawns, plants, shrubs, and all other existing Buildings and Site Improvements, which are damaged or destroyed by encroaching upon areas within or

beyond the project "Limits of Contract". All restoration work shall be done in a manner so as to restore all work to its original condition, using similar materials and construction and all such work shall be performed to the complete satisfaction of the Owner.

1.10 UTILITY CONNECTIONS AND FEES

A. Electric Utilities: Temporary and Permanent Power.

1. The Contractor shall be responsible to coordinate with the Local Electric Utility for installation/connection of electric service and other services provided by the Utility. Contractor may use existing building power as temporary service.
2. The Utility shall be responsible for installation/connection of the electric service and associated equipment to the building in accordance with the contract documents.
3. The Contractor shall be responsible for all associated costs for all services provided by the Electric Utility including usage fees for the duration of the project and any connection fees.

B. Telephone:

1. The Contractor shall be responsible to coordinate with the Local Telephone Utility for installation/connection of telephone service and all other services provided by the Utility.
2. The utility shall be responsible for installation/connection of the telephone service to the building in accordance with the contract documents.
3. The Contractor shall be responsible for all associated costs for all services provided by the telephone utility including connection fees.

C. Underground Utilities:

1. The Contractor shall be responsible to coordinate with the Local Municipality for installation/connection of water, storm drainage, and sanitary sewer lines.
2. The Contractor shall be responsible for all associated costs for all services provided by the Local Municipality including usage fees for the duration of the project and any connection fees.

D. Underground Gas Service:

1. The Contractor shall be responsible to coordinate with the Local Gas Utility/Company for installation/connection of gas service.
2. The utility shall be responsible for installation/connection of the gas service to the building in accordance with the contract documents.
3. The Contractor shall be responsible for all associated costs for all services provided by the gas utility including usage fees for the duration of the project and any connection fees.

E. Cable/Internet Service:

1. The Contractor shall be responsible to coordinate with the internet provide chosen by the Owner for installation/connection of cable service and all other services provided by the Utility.
2. The service provider shall be responsible to install/connect cable service to the building in accordance with the contract documents.

3. The Contractor shall be responsible for coordinating all services provided by the cable utility but the Owner will bear all costs directly.
- F. Coordination Of Services Provided by Utilities:
1. The Contractor shall be responsible to coordinate with the Local Utilities for installation/connection of service(s).
 2. The Contractor shall be responsible for all associated cost for services provided by the Local Utilities including usage and connection fees except as excluded above.

PART 2 PRODUCTS

2.1 NOT USED

PART 3 EXECUTION

3.1 NOT USED

END OF SECTION

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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements governing handling and processing allowances.
 - 1. Selected materials and equipment, and in some cases, their installation are shown and specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. Additional requirements, if necessary, will be issued by Change Order.
- B. Types of allowances required include the following:
 - 1. Lump sum allowances.
 - 2. Unit-cost allowances.

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

1.3 SELECTION AND PURCHASE

- A. Within 30 days after Contract award, advise the Architect and Owner's Representative of the date when the final selection and purchase of each product or system described by an allowance must be completed in order to avoid delay in performance of the Work.
 - 1. When requested by the Architect, obtain proposals for each allowance for use in making final selections; include recommendations that are relevant to performance of the Work.
 - 2. Purchase products and systems as selected by the Architect from the designated supplier.

1.4 SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.
- B. Submit invoices or delivery slips to indicate actual quantities of materials delivered to the site for use in fulfillment of each allowance.

1.5 UNUSED MATERIALS

- A. Return unused materials to the manufacturer or supplier for credit to the Owner, after installation has been completed and accepted.
- B. Where it is not economically feasible to return unused material for credit and when requested by the Architect, prepare unused material for the Owner's storage, and deliver to the Owner's storage space as directed. Otherwise, disposal of excess material is the Contractor's responsibility.

PART 2 PRODUCTS

2.1 NOT USED

PART 3 EXECUTION

3.1 INSPECTION

A. Inspect products covered by an allowance promptly upon delivery for damage or defects.

3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related construction activities.

PART 4 SCHEDULE

4.1 NO ALLOWANCES SCHEDULED

END OF SECTION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements for unit prices.
- B. A unit price is an amount stated on the Proposal Form or in the Specifications as a price per unit of measurement for materials or services that will be added to or deducted from the Contract Sum by Change Order in the event the quantities of Work required by the Contract Documents are increased or decreased.
- C. Unit prices shall include all necessary labor, material, overhead, profit and applicable taxes.
- D. Refer to individual Specification Sections for construction activities requiring the establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

1.3 GENERAL

- A. A "Unit Price Schedule" is included at the end of this Section. Specification Sections referenced in the Schedule contain requirements for materials and methods described under each unit price.
- B. The Owner reserves the right to reject the Contractor's measurement of work-in-place that involves use of established unit prices, and to have this Work measured by an independent surveyor acceptable to the Contractor at the Owner's expense.
- C. This schedule reflects those unit prices to be bid upon by the Contractor. Other unit prices, where established, are included in the body of the Specifications.

PART 2 PRODUCTS

2.1 NOT USED

PART 3 EXECUTION

3.1 NOT USED

PART 4 SCHEDULE

4.1 NO UNIT PRICES SCHEDULED

END OF SECTION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements for Alternates.

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

1.3 DEFINITION

- A. ALTERNATE: An Alternate is an amount proposed by Bidders and stated on the Bid Form for certain construction activities defined in the Bidding Requirements that may be added to or deducted from Base Bid amount if the Owner decides to accept a corresponding change in either the amount of construction to be completed, or in the products, materials, equipment, systems or installation methods described in Contract Documents.

1.4 COORDINATION

- A. Coordinate related Work and modify or adjust adjacent Work as necessary to ensure that Work affected by each accepted Alternate is complete and fully integrated into the project.

1.5 NOTIFICATION

- A. Immediately following the award of the Contract, prepare and distribute to each party involved, notification of the status of each Alternate. Indicate whether Alternates have been accepted, rejected or deferred for consideration at a later date. Include a complete description of negotiated modifications to Alternates.

1.6 SCHEDULE

- A. A "Schedule of Alternates" is included at the end of this Section. Specification Sections referenced in the Schedule contain requirements for materials and methods necessary to achieve the Work described under each Alternate.
- B. Include as part of each Alternate, miscellaneous devices, accessory objects and similar items incidental to or required for a complete installation whether or not mentioned as part of the Alternate.

PART 2 PRODUCTS

2.1 NOT USED

PART 3 EXECUTION

3.1 NOT USED

PART 4 SCHEDULES

4.1 NO ALTERNATES SCHEDULED

END OF SECTION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements for substitutes.

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.
- B. Section 01 33 00 – Submittal Procedures
- C. Section 01 60 00 – Materials and Equipment
- D. Division 02 through 33 Sections for specific requirements and limitations for substitutions.

1.3 SUBMITTALS

- A. Substitution Form: Submit three (3) completed copies of the Substitution Form included at the end of this section or CSI Form 13.1a Substitution Request Form along with three (3) copies of all supplementary documentation necessary to support the proposed substitution.

1.4 DEFINITIONS

- A. Substitutions: Requests for changes in products, materials, equipment, and methods of construction from those required by the Contract Documents.
 - 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 that are not required in order to meet other Project requirements but may offer advantages to Contractor or Owner.
- B. The following are not considered substitutions:
 - 1. Revisions to Contract Documents requested by the Owner or the Architect.
 - 2. Specified options of products and construction methods included in Contract Documents.

1.5 ALLOWABLE SUBSTITUTIONS

- A. Substitutions for Cause will be considered after the Bid Period so long as the Contractor submits a request for substitution immediately on discovery of need for change, but not less than Thirty (30) days prior to the time the proposed substitute or specified material is required for the timely execution of the work.
 - 1. Delays due to untimely submittal of substitution requests shall not be a basis for schedule extensions.
 - 2. Failure to purchase or otherwise secure an item in a reasonable amount of time after the award of a contract will not be considered a Substitution for Cause.
- B. Substitutions for Convenience will NOT be considered after the Bid Period except as specifically allowed by the Owner and Architect.

- C. Substitutions and/or options will not be considered if they are indicated or implied on Shop Drawings or project data submittals without a formal request submitted in accordance with this section.
- D. Additional costs incurred by an approved substitution including Architectural or Engineering design costs shall be at the Contractor's expense unless specifically indicated otherwise by the Owner on the approved Substitution Request Form.
- E. The Architect reserves the right to require substitute items to comply in color and pattern with specified items, if necessary, to maintain "design intent".

1.6 SUBSTITUTION CONDITIONS

- A. The Contractor's substitution request will be received and considered by the Architect when one or more of the following conditions are satisfied, as determined by the Architect; otherwise, requests will be returned without action except to record noncompliance with these requirements.
 - 1. Extensive revisions to Contract Documents are not required.
 - 2. Proposed changes are in keeping with the general intent of Contract Documents.
 - 3. The request is timely, fully documented and properly submitted.
 - 4. The request is directly related to an "or equal" clause or similar language in the Contract Documents.
 - 5. The specified product or method of construction cannot be provided within the Contract Time. The request will not be considered if the product or method cannot be provided as a result of failure to pursue the Work promptly or coordinate activities properly.
 - 6. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
 - 7. A substantial advantage is offered the Owner, in terms of cost, time, energy conservation or other considerations of merit, after deducting offsetting responsibilities the Owner may be required to bear. Additional responsibilities for the Owner may include additional compensation to the Architect for redesign and evaluation services, increased cost of other construction by the Owner or separate Contractors, and similar considerations.
 - 8. The specified product or method of construction cannot be provided in a manner that is compatible with other materials, and where the Contractor certifies that the substitution will overcome the incompatibility.
 - 9. The specified product or method of construction cannot be coordinated with other materials, and where the Contractor certifies that the proposed substitution can be coordinated.
 - 10. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provide the required warranty.

1.7 ARCHITECT'S ACTION

- A. If necessary, the Architect will request additional information or documentation for evaluation within seven (7) days of receipt of a request for substitution. The Architect will notify the Owner of their recommendation to accept or reject the submission. Upon the Owner's decision, the Architect will notify the Contractor of acceptance or rejection of

proposed substitution within seven (7) days of receipt of request, or seven (7) days of receipt of additional information or documentation, whichever is later.

1. Use product specified if the Architect does not issue a decision on use of a proposed substitution within time allocated.

B. The Architect shall indicate acceptance or rejection of a requested submittal on the Submittal Request Form.

1.8 CONTRACTOR'S OPTION

A. For products specified only by reference standards, the Contractor may select any product meeting standards by any manufacturer and indicate the selected type in the submission.

B. For products specified by naming several products or manufacturers, The Contractor may select any product and manufacturer named in the specifications and indicate the selected type in the submission.

C. For products specified by naming one or more products, but indicating the option of selecting equivalent products by stating "or equivalent" after specified product, the Contractor must have successfully submitted and received approval of a SUBSTITUTION REQUEST FORM during the bidding period.

D. The Contractor shall obtain written approval of substitutions prior to ordering materials, equipment, or products. Any costs incurred for returns, re-stocking, re-ordering, etc. of any materials, equipment, or products ordered before approval shall be entirely borne by the Contractor.

1.9 QUALITY ASSURANCE

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

1.10 PROCEDURES

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

B. Architect/Engineer shall review the request for substitution in accordance with the conditions and requirements stated within. Once a determination has been made by the Architect/Engineer, the Architect/Engineer will summarize the request and provide their findings and recommendations in writing to the Owner. The Owner will review and make the final determination of acceptance of the substitution. Such acceptance must be obtained in writing from the Owner. Provide the summary findings and Owner acceptance of the substitution with the change management document if applicable.

C. No Substitution Request is considered approved without the Owner's review and action.

1.11 TRADEMARKS, COPYRIGHTS, PATENTED DEVICES, MATERIALS, AND PROCESSES

A. It shall be the burden and responsibility of the Contractor to determine, before bidding, the existence of any patents, trademarks, or copyrights which are in any way infringed upon by the Drawings and Specifications.

B. The Contractor shall include a sufficient sum to cover all fees, royalties and claims for any material, patent rights, machine, appliance, copyright, trademark, or any arrangement that may be used upon or in any manner connected with or appurtenant to the work.

- C. If the Contractor is required or desires to use any design, device, material, or process covered by letters, patents, copyrights, or trademarks, contractor shall provide for such use by suitable written agreement with the patentee or patent owner, copyright owner, or trademark owner, which agreement shall provide that there will be no future or continuing royalties or payments by the Contractor or by the Owner. The Contractor and the surety shall, at all times, defend, save harmless, and indemnify the Owner, the Architect, and each of their officers, agents, sub-contractors and employees from and against all such fees, royalties, and claims or suits in connection therewith by reason of any infringement or alleged infringement of such patent rights, copyrights, or trademark rights.
- D. The Contractor shall pay all applicable royalties and license fees. The Contractor shall defend all suits or claims for infringement of any patent rights and save the Owner, local government, the Architect, and the Engineers harmless from loss on account thereof, except that The Owner shall be responsible for any such loss when a particular process, design, or the product of a particular manufacturer or manufacturers is specified. However, if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, the Contractor shall be responsible for such loss unless the Contractor promptly gives such information to the Architect of the Owner.

PART 2 PRODUCTS

2.1 NOT USED

PART 3 EXECUTION

3.1 NOT USED

END OF SECTION

SUBSTITUTION REQUEST FORM

Number: _____ Date: _____

(Proposer's Company Name and Trade)

hereby requests acceptance of the following product or system as a substitution in accordance with provisions of Section 01 60 00 Part 1.4.B Substitution Request Submittal.

1. SPECIFIED PRODUCT OR SYSTEM

Substitution request for: _____

Specification Section No.: _____ Article/ Paragraph: _____

2. REASON FOR SUBSTITUTION REQUEST

SPECIFIED PRODUCT...

- Is no longer available.
- Is unable to meet project schedule.
- Is unsuitable for the designated application.
- Cannot interface with adjacent materials.
- Is not compatible with adjacent materials.
- Cannot provide the specified warranty.
- Cannot be constructed as indicated
- Cannot be obtained due to one or more of the following:
 - Strike
 - Lockout
 - Bankruptcy of manufacturer or supplier
 - Similar occurrence (attach explanation)

PROPOSED PRODUCT...

- Will reduce construction time
- Will result in the cost savings below:
\$ _____
- Is for supplier's convenience
- Is for subcontractor's convenience
- Other: _____

3. SUPPORTING DATA

- Drawings, specifications, product data, performance data, test data, and any other necessary information to facilitate review of the Substitution Request are attached.
- Sample is attached. Sample will be sent if requested.

4. QUALITY COMPARISON

Provide all necessary side-by-side comparative data as required to facilitate review of Substitution Request (add additional sheets if necessary):

SPECIFIED PRODUCT	PROPOSED PRODUCT
Manufacturer: _____	_____
Name / Brand: _____	_____
Catalog No.: _____	_____
Vendor: _____	_____
Variations: _____	_____
Substitute Local Distributor or Supplier: _____	
Substitute Spare Parts Source: _____	
Maintenance Service Available: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Warranty: <input type="checkbox"/> Yes <input type="checkbox"/> No _____ Years (attach terms/sample warranty)	

5. PREVIOUS INSTALLATIONS

Identify at least three similar projects on which proposed substitution was used:

PROJECT #1

Project Name: _____

Project Address: _____

Architect Name: _____

Architect Contact Information: _____

Owner Name: _____

Owner Contact Information: _____

Project Contractor: _____

Date Installed: _____

PROJECT #2

Project Name: _____

Project Address: _____

Architect Name: _____

Architect Contact Information: _____

Owner Name: _____

Owner Contact Information: _____

Project Contractor: _____

Date Installed: _____

PROJECT #3

Project Name: _____

Project Address: _____

Architect Name: _____

Architect Contact Information: _____

Owner Name: _____

Owner Contact Information: _____

Project Contractor: _____

Date Installed: _____

6. EFFECT OF SUBSTITUTION

Proposed substitution affects other work or trades: No Yes (if Yes, explain)

Proposed substitution requires dimensional revisions or redesign of architectural, structural, M-E-P, life safety, or other work:

No Yes (if Yes, attach data explaining revisions)

7. STATEMENT OF CONFORMANCE OF REQUEST TO CONTRACT REQUIREMENTS

Contractor and Subcontractor have investigated the proposed substitution and hereby represent that:

- a. They have personally investigated the proposed substitution and believe that it is equal to or superior in all respects to specified product, except as stated above;
- b. The proposed substitution is in compliance with applicable codes and ordinances;
- c. The proposed substitution will provide same warranty as specified for specified product;
- d. They will coordinate the incorporation of the proposed substitution into the Work, and will include modifications to the Work as required to fully integrate the substitution;
- e. They have included complete cost data and implications of the substitution (attached);
- f. They will pay any redesign fees incurred by the Architect or any of the Architect's consultants, and any special inspection costs incurred by the Owner, caused by the use/approval of this product;
- g. They waive all future claims for added cost or time to the Contract related to the substitution, or that become known after substitution is accepted.
- h. The Architect's approval, if granted, will be based upon reliance upon data submitted and the opinion, knowledge, information, and belief of the Architect at the time decision is rendered and Addendum is issued; and that Architect's approval therefore is interim in nature and subject to reevaluation and reconsideration as additional data, materials, workmanship, and coordination with other work are observed and reviewed.

Contractor: _____

Date: _____ By: _____

Subcontractor: _____

Date: _____ By: _____

NOTE: UNRESPONSIVE OR INCOMPLETE REQUESTS WILL BE REJECTED AND RETURNED WITHOUT REVIEW.

8. ARCHITECT'S REVIEW AND ACTION

- Substitution is accepted.
- Substitution is accepted, with the following comments: _____

- Resubmit Substitution Request:
 - Provide more information in the following areas: _____

- Provide proposal indicating amount of savings / credit to Owner
- Bidding Contractor shall sign Bidder's Statement of Conformance
- Bidding Subcontractor shall sign Bidder's Statement of Conformance

- Substitution is not accepted:
 - Substitution Request received too late.
 - Substitution Request received directly from subcontractor or supplier.
 - Substitution Request not submitted in accordance with requirements.
 - Substitution Request Form is not properly executed.
 - Substitution Request does not indicate what item is being proposed.
 - Insufficient information submitted to facilitate proper evaluation.
 - Proposed product does not appear to comply with specified requirements.
 - Proposed product will require substantial revisions to Contract Documents.

By: _____

Date: _____

NOTE: The Architect has relied upon the information provided by the Contractor, and makes no claim as to the accuracy, completeness, or validity of such information. If an accepted substitution is later found to be not in compliance with the Contract Documents, Contractor shall provide the specified product.

NOTE: This substitution is not valid without the Owners Review and Action on the next page.

9. OWNER'S REVIEW AND ACTION

- Substitution is accepted.
- Substitution is not accepted.
- Owner will pay Architect directly for redesign fees.
- Include Architect's Additional Service fee for implementing the substitution in the Change Order.

By: _____

Title: _____

Date: _____

END OF SUBSTITUTION FORM

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies administrative and supervisory requirements necessary for Project coordination including, but not necessarily limited to:
 - 1. Coordination and Coordination Drawings.
 - 2. Administrative and supervisory personnel.
 - 3. General installation provisions.
 - 4. Cleaning and protection.
- B. Progress meetings, coordination meetings and pre-installation conferences are included in Section 01 31 19 – Project Meetings.
- C. Requirements for the Contractor's Construction Schedule are included in Section 01 33 00 – Submittal Procedures.

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

1.3 COORDINATION

- A. Coordinate construction activities included under various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections of the Specifications that are dependent upon each other for proper installation, connection, and operation.
 - 1. Where installation of one part of the Work is dependent on installation of other components, either before or after its own installation, schedule construction activities in the sequence required to obtain the best results.
 - 2. Where availability of space is limited, coordinate installation of different components to assure maximum accessibility for required maintenance, service and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Where necessary, prepare memoranda for distribution to each party involved outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.
 - 1. Prepare similar memoranda for the Owner and separate Contractors where coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of schedules.
 - 2. Installation and removal of temporary facilities.
 - 3. Delivery and processing of submittals.

4. Progress meetings.
 5. Project Close-out activities
 - D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.
 1. Salvage materials and equipment involved in performance of, but not actually incorporated in, the Work. Refer to other sections for disposition of salvaged materials that are designated as Owner's property.
 - E. Efficiency: Verify supplied products specified in other sections have a minimum or higher efficiency to comply with EPA's Energy Star, D.O.E., Eversource and CNG requirements for HVAC, lighting/controls; building envelope and appliances.
- 1.4 SUBMITTALS
- A. Submit under provisions of Section 01 33 00.
 - B. Coordination Drawings: The Contractor and his sub-contractors shall jointly prepare and submit Coordination Drawings to indicate where close and careful coordination is required for installation of products and materials fabricated off-site by separate entities. Coordination Drawings shall indicate where limited space availability necessitates maximum utilization of space for efficient installation of different components.
 1. Show the interrelationship of components shown on separate Shop Drawings.
 2. Indicate required installation sequences.
 - C. Staff Names: Submit within 3 days after "Notice to Proceed" a list of the Contractor's principal staff assignments, including the Superintendent and other personnel in attendance at the site; identify individuals, their duties and responsibilities; list their addresses, telephone numbers and include a copy of their resumes.
 1. Post copies of the list in conspicuous locations in the Work Area including Project meeting rooms, temporary field offices, and at temporary telephone locations.

PART 2 PRODUCTS

2.1 NOT USED

PART 3 EXECUTION

3.1 GENERAL COORDINATION

- A. Coordinate in field with affected trades for proper relationship to Work based on Project conditions.
- B. Notify Architect of conflicts and other coordination issues requiring resolutions prior to commencing construction in each affected area.
- C. Submit Contractor's certification to Architect that Coordination Drawings have been completed and coordination issues have been identified and resolved prior to commencing construction in each affected area.

- D. Make Coordination Drawings available in field office for review by Architect and Owner during entire period on construction.

3.2 GENERAL INSTALLATION PROVISIONS

- A. Inspection of Conditions: Require the Installer of each major component to inspect both the substrate and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.
- B. Manufacturer's Instructions: Comply with manufacturer's installation instructions and recommendations, to the extent that those instructions and recommendations are more explicit or stringent than requirements contained in Contract Documents.
- C. Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items.
- D. Provide attachment and connection devices and methods necessary for securing Work. Secure Work true to line and level. Allow for expansion and building movement.
- E. Visual Effects: Provide uniform joint widths in exposed Work. Arrange joints in exposed Work to obtain the best visual effect. Refer questionable choices to the Architect for final decision.
- F. Re-check measurements and dimensions, before starting each installation.
- G. Install each component to ensure the best possible results. Isolate each part of the completed construction from incompatible material as necessary to prevent deterioration.
- H. Coordinate temporary enclosures with required inspections and tests, to minimize the necessity of uncovering completed construction for that purpose.
- I. Mounting Heights: Where mounting heights are not indicated, install individual components at standard mounting heights recognized within the industry for the particular application indicated. Refer questionable mounting height decisions to the Architect for final decision.

3.3 CLEANING AND PROTECTION

- A. During handling and installation, clean and protect construction in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- B. Clean and maintain job site and completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- C. Limiting Exposures: Supervise construction activities to ensure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Where applicable, such exposures include, but are not limited to, the following:
 - 1. Excessive static or dynamic loading.
 - 2. Excessive internal or external pressures.
 - 3. Excessively high or low temperatures.
 - 4. Thermal shock.
 - 5. Excessively high or low humidity.

6. Air contamination or pollution.
7. Water or ice.
8. Solvents.
9. Chemicals.
10. Light.
11. Radiation.
12. Puncture.
13. Abrasion.
14. Heavy traffic.
15. Soiling, staining and corrosion.
16. Bacteria.
17. Rodent and insect infestation.
18. Combustion.
19. Electrical current.
20. High speed operation,
21. Improper lubrication,
22. Unusual wear or other misuse.
23. Contact between incompatible materials.
24. Destructive testing.
25. Misalignment.
26. Excessive weathering.
27. Unprotected storage.
28. Improper shipping or handling.
29. Theft.
30. Vandalism.

END OF SECTION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements for project meetings including but not limited to:
 - 1. Pre-Construction Conference.
 - 2. Pre-Installation Conferences.
 - 3. Coordination Meetings.
 - 4. Progress Meetings.

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.
- B. Construction schedules are specified in Section 01 33 00 – Submittal Procedures.

1.3 PRE-CONSTRUCTION CONFERENCE

- A. The successful bidder shall attend a preconstruction conference and organizational meeting at the site, with the Architect and Owner's Representative prior to commencing any field work to review responsibilities and personnel assignments and to insure that Specifications, drawings and all conditions are understood to properly complete this Contract.
- B. The meeting will be scheduled by the Owner's Representative.
- C. Attendees: The Owner, the Owner's Representative, the Architect and their consultants, the Contractor and its superintendent, major subcontractors, manufacturers, suppliers and other concerned parties shall each be represented at the conference by persons familiar with and authorized to conclude matters relating to the Work.
- D. The Contractor shall be responsible for taking a record of the meeting (minutes) and shall distribute the minutes to everyone concerned, promptly, including the Owner and Architect.
- E. Agenda: Discuss items of significance that could affect progress including such topics as:
 - 1. Construction schedule.
 - 2. Critical Work sequencing.
 - 3. Labor Market Regulations.
 - 4. Designation of responsible personnel and emergency phone numbers.
 - 5. Procedures for processing field decisions and Change Orders.
 - 6. Procedures for processing Applications for Payment.
 - 7. Distribution of Contract Documents and correspondence.
 - 8. Submittal of Shop Drawings, Product Data and Samples.
 - 9. Preparation of record documents.

10. Use of the premises, including dust control, noise control, lay-down areas, dumpster locations and parking.
11. Office, Work and storage areas.
12. Equipment deliveries and priorities.
13. Safety procedures, including the Owner's policies on hazardous materials, pest control, lead-based paints, lockout/tagout procedures, excavation and trenching, use of solvents, solvent- or epoxy-based paints, confined space entries and use of open flames.
14. First aid.
15. Unacceptable behavior.
16. Security.
17. Construction debris and housekeeping.
18. Working hours.

1.4 PRE-INSTALLATION CONFERENCES

- A. Conduct a pre-installation conference at the site before each construction activity that requires coordination with other construction. The Installer and representatives of manufacturers and fabricators involved in or affected by the installation, and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise the Architect and Owner's Representative of scheduled meeting dates.
- B. Review the progress of other construction activities and preparations for the particular activity under consideration at each pre-installation conference, including requirements for:
 1. Contract Documents.
 2. Options.
 3. Related Change Orders.
 4. Purchases
 5. Deliveries.
 6. Shop Drawings, Product Data and quality control Samples.
 7. Possible conflicts.
 8. Compatibility problems.
 9. Time schedules.
 10. Weather limitations.
 11. Manufacturer's recommendations.
 12. Compatibility of materials.
 13. Acceptability of substrates.
 14. Temporary facilities.
 15. Space and access limitations.

- 16. Governing regulations.
- 17. Safety.
- 18. Inspection and testing requirements.
- 19. Required performance results.
- 20. Recording requirements.
- 21. Protection.
- C. Record significant discussions and agreements and disagreements of each conference, along with the approved schedule. Distribute the record of the meeting (minutes) to everyone concerned, promptly, including the Owner and Architect.
- D. Do not proceed if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of Work and reconvene the conference at the earliest feasible date.

1.5 COORDINATION MEETINGS

- A. Conduct Project coordination meetings at regularly scheduled times convenient for all parties involved. Project coordination meetings are in addition to specific meetings held for other purposes, such as regular progress meetings and special pre-installation meetings.
- B. Request representation at each meeting by every party currently involved in coordination or planning for the construction activities involved.
- C. The Contractor shall record meeting results (minutes) and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

1.6 PROGRESS MEETINGS

- A. Conduct progress meetings at the Project site at regularly scheduled intervals. Notify the Owner and Architect of scheduled meeting dates. Coordinate dates of meetings with preparation of the payment request.
- B. Attendees: In addition to representatives of the Owner and Architect, each subcontractor, supplier or other entity concerned with current progress or involved in planning, coordination or performance of future activities shall be represented at these meetings by persons familiar with the Project and authorized to conclude matters relating to progress.
- C. 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 current status of the Project.
 - 1. Contractor's Construction Schedule: Review progress since the last 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.
 - 2. Review the present and future needs of each entity present, including such items as:
 - a. Interface requirements.
 - b. Time.

- c. Sequences.
 - d. Deliveries.
 - e. Off-site fabrication problems.
 - f. Access.
 - g. Site utilization.
 - h. Temporary facilities and services.
 - i. Hours of Work.
 - j. Hazards and risks.
 - k. Housekeeping.
 - l. Quality and Work standards.
 - m. Change Orders.
 - n. Documentation of information for payment requests
- D. Reporting: No later than 3 days after each progress meeting date, Contractor shall distribute copies of minutes of the meeting to each party present, to other parties who should have been present, the Owner and the Architect. Include a brief summary, in narrative form, of progress since the previous meeting and report.
- 1. Schedule Updating: Revise the construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue the revised schedule concurrently with the report of each meeting.

PART 2 PRODUCTS

2.1 NOT USED

PART 3 EXECUTION

3.1 NOT USED

END OF SECTION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements for submittals required for performance of the Work, including:
 - 1. Contractor's construction schedule.
 - 2. Submittal schedule.
 - 3. Shop Drawings.
 - 4. Coordination Drawings and layouts.
 - 5. Construction Reports.
 - 6. Product Data.
 - 7. Samples.
 - 8. Site Mobilization Plan
 - 9. Safety Plan.
 - 10. Construction Photographs.
- B. Administrative Submittals: Refer to other Division 01 Sections and other Contract Documents for requirements for administrative submittals, including, but not limited to:
 - 1. General and Supplementary General Conditions for:
 - a. Permits.
 - b. Applications for payment.
 - c. Performance and payment bonds.
 - d. Insurance certificates.
 - e. List of Subcontractors.
 - f. Schedule of Values.
 - 2. 01 77 00 – Closeout Procedures for:
 - a. Operations manuals
 - 3. 01 78 30 – Warranties and Bonds for:
 - a. Guarantees/Warranties.

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.
- B. Section 01 25 00 – Substitution Procedures

1.3 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit one (1) electronic Adobe Acrobat PDF format copy of each submittal sufficiently in advance of performance of related construction activities to avoid delay.
1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
 2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
 - a. The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
 3. Processing: Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for resubmittals.
 - a. Allow two weeks for initial review. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. The Architect will promptly advise the Contractor when a submittal being processed must be delayed for coordination.
 - b. Mass submittals are defined as six (6) or more submittals in a 24-hour period or twenty (20) or more submittals in a week. If "Mass Submittals" are received the Architect's review time stated above may be extended as necessary to perform proper review. Architect will review "Mass Submittals" based upon priority determined by Architect after consultation with Owner and Contractor.
 - c. If an intermediate submittal is necessary, process the same as the initial submittal.
 - d. Allow two weeks for reprocessing each submittal.
 - e. No extension of Contract Time will be authorized because of failure to transmit submittals to the Architect sufficiently in advance of the Work to permit processing.
- B. Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.
1. Provide a space approximately 4" x 5" on the label or beside the title block on Shop Drawings to record the Contractor's review and approval markings and the action taken.
 2. Include the following information on the label for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name and address of Contractor.
 - d. Name of manufacturer.
 - e. Number and title of appropriate Specification Section.

- C. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to University Representative using a transmittal form.

1.4 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Prepare a fully developed, horizontal bar-chart (Gantt) type Contractor's Construction Schedule. The schedule shall be a Critical Path Method (CPM) utilizing the precedence diagram method. Submit five (5) printed hard copies and 1 electronic Adobe Acrobat PDF format copy before the Contract Award.
1. The schedule shall be of sufficient detail to indicate all significant construction activities. The level of detail should be such that no activity should exceed 20 working days. Where similar activities continue beyond the 20-day limit, these activities should be broken into subgroups, specific areas, or phases so that the 20-day maximum duration is maintained.
 2. Each activity in the Contractor's Construction Schedule shall include:
 - a. A description that clearly identifies the activity and the location of the work.
 - b. The duration expressed in full workdays, not to exceed 20 working days. (Except in the case of non-construction activities such as procurement, fabrication, and delivery of equipment.)
 - c. An activity code, which shall identify the various work areas, as well as the CSI/Specification division work.
 - d. A responsible code, which shall individually and singularly denote the Contractor or subcontractor responsible for the work. No activity shall have more than one responsible entity.
 - e. The number of job hours required to perform work. The number of job hours shall be shown as a resource.
 - f. The approved lump sum line-item amount for the work, in hundreds of dollars, complete in place, and for the specified material as approved by the Owner. The total of all line-item values shall equal the Contract amount.
 - g. The quantity of units to be installed. The quantity of units shall be shown as a resource.
 - h. The ability to show the percent complete, using integers, to represent the installed progress as of the status date.
 - i. The actual start and finish dates.
 3. The construction schedule shall show a clear and definable critical path for the work as a whole as well as each of the definable work areas. All imposed or constrained dates shall be clearly identified. The Contractor shall submit an updated schedule to coincide with the first job meeting of the month reflecting the progress through the last day of the preceding month. The printed updates shall show progress bars for each activity as well as be printed on sheets of sufficient width to show the data for entire construction period. Each monthly update should include the submission of five (5) two hard copies.
 4. Coordinate the construction schedule with the submittal schedule, regulatory agency permits/approvals, as well as the requirements for Owner supplied materials/approvals. The construction schedule should indicate need dates for such

Owner provided materials/approvals and provide a separate monthly report updating these need dates.

5. Provide completion dates for each area of work that sufficiently allows time for area commissioning, Architect's review and certification of Substantial Completion, as well as punch list and close-out requirements.
- B. Phasing: Provide notations on the schedule to show how the sequence of the Work is affected by requirements for phased completion to permit Work by separate Contractors and partial occupancy by the Owner prior to Substantial Completion.
- C. Work Stages: Indicate important stages of construction for each major portion of the Work, including testing and installation.
- D. Distribution: Following response to the initial submittal, print and distribute copies to the Architect, Owner, subcontractors, and other parties required to comply with scheduled dates. Post copies in the Project meeting room and temporary field office.
 1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.
- E. Schedule Updating: Revise the schedule after each meeting or activity, where revisions have been recognized or made. Issue the updated schedule concurrently with report of each meeting.

1.5 SUBMITTAL SCHEDULE

- A. After development and acceptance of the Contractor's construction schedule, prepare a complete schedule of submittals. Submit the schedule within 10 days of the date required for establishment of the Contractor's construction schedule.
 1. Coordinate submittal schedule with the list of subcontracts, Schedule of Values and the list of products as well as the Contractor's construction schedule.
 2. Provide the following information:
 - a. Scheduled date for the first submittal.
 - b. Related Section number.
 - c. Submittal category item title.
 - d. Name of subcontractor.

1.6 SHOP DRAWINGS

- A. Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings and will be summarily rejected.
- B. Shop Drawings include fabrication and installation drawings, setting diagrams, schedules patterns, templates and similar drawings. Include the following information:
 1. Dimensions.
 2. Identification of products and materials included.
 3. Compliance with specified standards.

4. Notation of coordination requirements.
 5. Notation of dimensions established by field measurement.
 6. Notation of any deviation from Contract Document requirements and reasoning for such deviation.
 7. Sheet Size: Except for templates, patterns and similar full-size Drawings, submit Shop Drawings on sheets at least 8-1/2" x 11" but no larger than 24" x 36".
 8. Do not use Shop Drawings without an appropriate final stamp indicating action taken in connection with construction.
- C. Coordination drawings are a special type of Shop Drawing that show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or function as intended.
1. Preparation of coordination Drawings is specified in Section 01 31 13, Project Coordination, and may include components previously shown in detail on Shop Drawings or Product Data.
 2. Submit coordination Drawings for integration of different construction elements. Show sequences and relationships of separate components to avoid conflicts in use of space.

1.7 COORDINATION DRAWINGS AND LAYOUTS

A. General

1. Coordination drawings are not shop drawings and any review of coordination drawings by the architect shall not be construed of as approval or agreement.
2. Coordination drawings show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided and to function as intended.
3. Prepare composite coordination drawings to scale of 1/4" = 1'-0" or larger, detailing major elements, components, and systems of architectural, structural, mechanical, and electrical equipment and materials in relationship with each other, and with building components. Include dimensions.
4. Indicate locations where space is limited for installation and access and where sequencing and coordination of installations are of importance to efficient flow of Work affecting one or more trades.
5. Indicate scheduling, sequencing, movement, and positioning of large equipment into building during construction.
6. Show interrelationship of components to be shown on separated Shop Drawings.
7. Indicate required installation sequences.

1.8 DAILY CONSTRUCTION REPORTS

- A. Prepare a daily construction report recording the following information concerning events at the site, and submit duplicate copies to the Owner and Architect at weekly intervals:
1. List of subcontractors at the site.
 2. Approximate count of personnel at the site.
 3. High and low temperatures, general weather conditions.

4. Accidents and unusual events.
5. Meetings and significant decisions.
6. Stoppages, delays, shortages, and losses.
7. Meter readings and similar recordings.
8. Emergency procedures.
9. Orders and requests of governing authorities.
10. Change Orders received, implemented.
11. Services connected, disconnected.
12. Equipment or system tests and startups.
13. Partial Completions, occupancies.
14. Substantial Completions authorized.

1.9 PRODUCT DATA

- A. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams and performance curves. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings".
 1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:
 - a. Related Specification section number.
 - b. Project name.
 - c. Project number.
 - d. Manufacturer's printed recommendations.
 - e. Compliance with recognized trade association standards.
 - f. Compliance with recognized testing agency standards.
 - g. Application of testing agency labels and seals.
 - h. Notation of dimensions verified by field measurement.
 - i. Notation of coordination requirements.
 2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.

1.10 SAMPLES

- A. Submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture and pattern.

1. Mount, display, or package Samples in the manner specified to facilitate review of qualities indicated. Include the following:
 - a. Generic description of the Sample.
 - b. Product name or name of manufacturer.
2. Submit Samples for review of kind, color, pattern, and texture, for a final check of these characteristics with other elements, and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
 - a. Where variation in color, pattern, texture or other characteristics are inherent in the material or product represented, submit multiple units (not less than 3), that show approximate limits of the variations.
 - b. Selection of painting colors shall be made by the Architect, who will be responsible for obtaining approval of the using agency. After receipt of this approval, this selection will be given to the University Representative for return to the Contractor.
3. Preliminary submittals: Where Samples are for selection of color, pattern, texture or similar characteristics from a range of standard choices, submit a full set of choices for the material or product.
 - a. Preliminary submittals will be reviewed and returned with the Architect's mark indicating selection and other action.
4. Maintain sets of Samples, as returned, at the Project site, for quality comparisons throughout the course of construction.

1.11 SITE MOBILIZATION PLAN

- A. Prior to the start of operations on the site, the Contractor shall submit to the Owner's Representative, a Site Mobilization Plan which shall indicate pertinent dates and times, logistics, traffic flow and compliance with the General Requirements to a level of detail commensurate with the complexity of the construction and the sensitivity of the Owner's ongoing activities on site.

1.12 SAFETY PLAN

- A. Prior to, and as a condition of mobilization on site, the Contractor shall submit a Safety Plan consisting of no less than the following information:
 1. Material Safety Data Sheets for all potentially harmful substances.
 2. A list of Contractor, Subcontractor, and Owner's personnel to be notified in the event of an emergency.
 3. A list of Contractor's personnel to be notified by the Owner in the event of an emergency during "off" hours.
 4. Evacuation plans.
 5. Emergency medical procedures.
 6. Locations of emergency medical equipment.

1.13 CONSTRUCTION PHOTOGRAPHS

- A. On the date the work is begun and on or about the first day of each month thereafter (until the work is at least 95 percent complete), the Contractor shall take photographs of the construction.
- B. Take a minimum of twenty-four (24) digital pictures each time. Note the date the picture was taken, the Project number, identification of the view, and the vantage point. Deliver pictures to the Owner's Representative and the Architect on a CD or flash drive.
- C. As photographs are a record of the work progress, they shall be taken each month, whether or not they show work done during the preceding month. Deliver images within 10 days of their being taken.

1.14 ARCHITECT'S ACTION

- A. Except for submittals for record, information or similar purposes, where action and return is required or requested, the Architect will review each submittal, mark to indicate action taken, and return promptly.
 - 1. Compliance with specified characteristics is the Contractor's responsibility.
- B. Action Stamp: The Architect will stamp each submittal with a uniform, self-explanatory action stamp. The stamp will be appropriately marked, to indicate the action taken.

PART 2 PRODUCTS

2.1 NOT USED

PART 3 EXECUTION

3.1 NOT USED

END OF SECTION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements for quality control and quality control services.
- B. Quality control services include inspections and tests and related actions including reports, performed by independent agencies, governing authorities, and the Contractor.
- C. Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with Contract Document requirements.
- D. Requirements of this Section relate to customized fabrication and installation procedures, not production of standard manufactured products.
 - 1. Specific quality control requirements for individual construction activities are specified in the Sections that specify those activities. Those requirements, including inspections and tests, cover production of standard products as well as customized fabrication and installation procedures.
 - 2. Inspections, test and related actions specified are not intended to limit the Contractor's quality control procedures that facilitate compliance with Contract Document requirements.
 - 3. Requirements for the Contractor to provide quality control services required by the Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

1.3 RESPONSIBILITIES

- A. Owner Responsibilities: The Owner will provide inspections, tests and similar quality control services specified to be performed by independent agencies and not by the Contractor, except where they are specifically indicated as the Contractor's responsibility or are provided by another identified entity. Costs for these services are not included in the Contract Sum.
 - 1. The Owner will employ and pay for the services of an independent agency, testing laboratory or other qualified firm to perform services which are the Owner's responsibility.
- B. Contractor Responsibilities: The Contractor shall notify the Owner's Representative and testing laboratory 24 hours before the expected time of testing.
 - 1. Retesting: The Contractor is responsible for retesting where results of required inspections, tests or similar services prove unsatisfactory and do not indicate compliance with Contract Document requirements, regardless of whether the original test was the Contractor's responsibility.
 - a. Any cost of retesting construction revised or replaced by the Contractor is the Contractor's responsibility where tests were performed on original construction.

2. Additional Tests: The Contractor is responsible for employing and paying for additional tests if for the Contractor's convenience.
 3. Associated Services: The Contractor shall cooperate with agencies performing required inspections, tests and similar services and provide reasonable and customary auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include but are not limited to:
 - a. Providing access to the Work and furnishing incidental labor and facilities necessary to facilitate inspections and tests.
 - b. Taking adequate quantities of representative samples of materials that require testing or assisting the agency in taking samples.
 - c. Providing facilities for storage and curing of test samples, and delivery of samples to testing laboratories.
 - d. Providing the agency with a preliminary design mix proposed for use for materials mixes that require control by the testing agency.
 - e. Security and protection of samples and test equipment at the Project site.
 - C. Duties of the Testing Agency: The independent testing agency engaged to perform inspections, sampling and testing of materials and construction specified in individual Specification Sections shall cooperate with the Architect and Contractor in performance of its duties and shall provide qualified personnel to perform required inspections and tests.
 1. The agency shall notify the Owner's Representative promptly of irregularities or deficiencies observed in the Work during performance of its services.
 2. 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.
 3. The agency shall not perform any duties of the Contractor.
 - D. Coordination: The Contractor and each agency engaged to perform inspections, tests and similar services shall coordinate the sequence of activities to accommodate required services with a minimum of delay. In addition, the Contractor and each agency shall coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.
 1. The Contractor is responsible for scheduling times for inspections, tests, taking samples and similar activities.
 - E. Contractor is responsible for scheduling and coordinating all inspections by local authorities including but not limited to the Building Department, the Fire Marshal, Engineering and Land-Use (Planning and Zoning).
- 1.4 SUBMITTALS
- A. The independent testing agency shall submit a certified written report of each inspection, test or similar service, to the Architect and the Owner's Representative, in duplicate.
 1. Report Data: Written reports of each inspection, test or similar service shall include, but not be limited to:
 - a. Date of issue.

- b. Project title and number.
- c. Name, address and telephone number of testing agency.
- d. Dates and locations of samples and tests or inspections.
- e. Names of individuals making the inspection or test.
- f. Designation of the Work and test method.
- g. Identification of product and Specification Section.
- h. Complete inspection or test data.
- i. Test results and an interpretations of test results.
- j. Ambient conditions at the time of sample taking and testing.
- k. Comments or professional opinion as to whether inspected or tested Work complies with Contract Document requirements.
- l. Name and signature of laboratory inspector.
- m. Recommendations on retesting.

1.5 **QUALITY ASSURANCE**

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step, in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Qualification for Service Agencies: Engage inspection and testing service agencies, including independent testing laboratories, which are prequalified as complying with "Recommended Requirements for Independent Laboratory Qualification" by the American Council of Independent Laboratories, and which specialize in the types of inspections and tests to be performed.
 - 1. Each independent inspection and testing agency engaged on the Project shall be authorized by authorities having jurisdiction to operate in the State in which the Project is located.

1.6 **REFERENCES**

- A. Conform to reference standard by date of issue current on date of Contract Documents where no date is specified with standard.
- B. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.

1.7 **MOCK-UPS**

- A. Perform tests under provisions identified in the respective product specification sections.
- B. Assemble and erect specified items with specified attachments an anchorage devices, flashings, seals, and finishes.
- C. Accepted mock-up shall be a comparison standard for the remaining work.
- D. Where mock-up has been accepted by Architect/Engineer, remove mock-up and clear area only when directed to do so.

E. Provide mock-ups as specified within other specification sections.

PART 2 PRODUCTS

2.1 NOT USED

PART 3 EXECUTION

3.1 REPAIR AND PROTECTION

- A. General: Upon completion of inspection, testing, sample taking and similar services, repair damaged construction and restore substrates and finishes to eliminate deficiencies, including deficiencies in visual qualities of exposed finishes. Comply with Contract Document requirements for "Cutting and Patching".
- B. Protect construction exposed by or for quality control service activities and protect repaired construction.
- C. Repair and protection is the Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.

END OF SECTION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies requirements for temporary services and facilities, including:
1. Job Site Safety
 2. Temporary Utilities
 3. Construction Aids
 4. Barriers and Enclosures
 5. Security and Protection
 6. Access Roads and Parking
 7. Temporary Controls
 8. Traffic Control
 9. Project Identification and Signs

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

1.3 SUBMITTALS

- A. Temporary Utilities: Submit reports of tests, inspections, meter readings and similar procedures performed on temporary utilities.
- B. Implementation and Termination Schedule: Submit a schedule indicating implementation and termination of each temporary utility within 15 days of the date established for commencement of the Work.

1.4 QUALITY ASSURANCE

- A. Regulations: Comply with current industry standards and applicable laws and regulations if authorities having jurisdiction, including but not limited to:
1. Building Code requirements.
 2. Health and safety regulations.
 3. Utility company regulations.
 4. Police, Fire Department and Rescue Squad rules.
 5. Environmental protection regulations.
 6. Owner provided rules and regulations.
- B. Standards: Comply with NFPA Code 241, "Building Construction and Demolition Operations", ANSI-A10 Series standards for "Safety Requirements for Construction and Demolition", and NECA Electrical Design Library "Temporary Electrical Facilities."
1. Refer to "Guidelines for Bid Conditions for Temporary Job Utilities and Services", prepared jointly by AGC and ASC, for industry recommendations.

2. Inspections: Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.

1.5 PROJECT CONDITIONS

- A. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload facilities or permit them to interfere with progress. Do not allow hazardous dangerous or unsanitary conditions, or public nuisances to develop or persist on the site.

PART 2 PRODUCTS

2.1 MATERIALS

- A. General: Provide new materials; if acceptable to the Architect, undamaged previously used materials in serviceable condition may be used. Provide materials suitable for the use intended.
- B. Tarpaulins: Provide waterproof, fire-resistant, UL labeled tarpaulins with flame-spread rating of 15 or less. For temporary enclosures provide translucent nylon reinforced laminated polyethylene or polyvinyl chloride fire retardant tarpaulins.
- C. Water: Provide potable water approved by local health authorities.
- D. Refer to Section 01 73 29 – Cutting and Patching for more information.

2.2 EQUIPMENT

- A. General: Provide new equipment suitable for use intended; if acceptable to the Architect, undamaged previously used equipment in serviceable condition may be used.
 1. The Contractor will not be allowed to use any of the Owners' shop facilities, equipment, tools or materials unless specifically mentioned in the specifications.
- B. Electrical Outlets: Provide properly configured NEMA polarized outlets to prevent insertion of 110-120 volt plugs into higher voltage outlets. Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button and pilot light, for connection of power tools and equipment.
- C. Electrical Power Cords: Provide grounded extension cords; use "hard-service" cords where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords, if single lengths will not reach areas where construction activities are in progress.
- D. Lamps and Light Fixtures: Provide general service incandescent lamps of wattage required for adequate illumination. Provide guard cages or tempered glass enclosures, where exposed to breakage. Provide exterior fixtures where those fixtures are exposed to moisture.
- E. First Aid Supplies: Comply with governing regulations.
- F. Fire Extinguishers: Provide hand-carried, portable, UL-rated, class "ABC" dry chemical extinguishers, or a combination of extinguishers of NFPA recommended classes for the exposures.
 1. Comply with NFPA 10 and 241 for classification, extinguishing agent and size required by location and class of fire exposure.

PART 3 EXECUTION

3.1 GENERAL

- A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.
- B. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.
- C. Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Owner's Representative and shall be built with labor and materials furnished by the Contractor without expense to the Owner. The temporary buildings and utilities shall remain the property of the Contractor at its expense upon completion of the work.

3.2 JOB SITE SAFETY

- A. Caution shall be exercised by the Contractor at all times for the protection of persons and property and all safety regulations and other provisions of applicable Federal, State and local laws, Building and Construction codes, including the requirements of the Occupational Safety and Health Administration, shall be observed.
- B. The drawings do not include standards or guidelines for construction safety. The Contractor shall be responsible for the adequacy and safety of all construction methods and the safe prosecution of the Work, including but not limited to forms, false-work, scaffolding, protective barricades, protective rails and warning lights. It is expressly stipulated that any examination and/or approval by the Architect and/or their consultants of the contractor's plans for such items as well as for any other items needed for the prosecution of the work will cover only general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Contractor shall assume full and complete responsibility for safe prosecution of the Work at all times and for obtaining satisfactory results.
- C. Design, engineering, construction, maintenance, repair, and inspection of all temporary work is the sole responsibility of the Contractor. Any review or comments made by the Owner, the Owner's Representative, the Architect and/or their consultants in regards to temporary work shall not be construed of as acceptance or design of such work.
- D. During the course of the performance of the Work, if any operation, practice, or condition is deemed by the Architect and/or their consultants to be unsafe, the Contractor, whether notified verbally or in writing, shall take such corrective action immediately as appropriate.
- E. Nothing in the foregoing paragraphs shall be construed as relieving the Contractor from full responsibility of safe prosecution of the Work at all times. In the event the Owner, the Architect and/or their consultants are held by court of administrative body to be liable for personal injuries or damages to property arising from deficiencies in the job-site safety, the Contractor shall promptly indemnify and hold them harmless.

3.3 TEMPORARY UTILITIES

- A. General: Electricity and water are available in moderate quantities, when on or adjacent to the premises, for the use of the Contractor without cost. The Owner reserves the right

to require the Contractor to install meters and, if obvious and excessive use is observed, to pay for these utilities.

1. Connect to existing service, provide branch wiring and distribution boxes located to provide power and lighting by construction-grade extension cords. Owner will pay cost of energy used. Take measures to conserve energy. Provide lighting for construction operations. At the termination of construction, return the facilities to their original condition.
- B. Temporary Fire Protection: Install and maintain temporary fire protection facilities of the types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 10 "Standard for Portable Fire Extinguishers," and NFPA 241 "Standard for Safeguarding Construction, Alterations and Demolition Operations".
1. The Contractor, during construction, shall be responsible for loss or damage by fire to the work until Acceptance of the Work. Any fire used for working purposes shall be extinguished when not in use. Bitumen or tar shall be melted on the ground only. No flammable material shall be stored in the structure in excess of amounts allowed by the authorities. The Contractor shall assign a responsible employee to be in charge of fire protection measures.
 2. Locate fire extinguishers where convenient and effective for their intended purpose, but not less than one extinguisher.
 3. Store combustible materials in containers in fire-safe locations.
 4. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire protection facilities, stairways and other access routes for fighting fires. Smoking is prohibited on site, however, prohibit smoking in hazardous fire exposure areas.
 5. Provide supervision of welding operations, combustion type temporary heating units, and similar sources of fire ignition.
 6. No gasoline shall be stored in or close to any building at any time.

3.4 TEMPORARY CONSTRUCTION

A. Not Used

3.5 CONSTRUCTION AIDS

- A. The General Contractor shall furnish tools, apparatus and appliances, hoists and/or cranes and power for same, scaffolding, runways, ladders, temporary supports and bracing and similar work or material necessary to ensure convenience and safety in the execution of the Contract Documents except where this is otherwise specified in any Technical Specification Section. All such items shall meet the approval of the Authority having jurisdiction but responsibility for design, strength, and safety shall remain with the General Contractor. All such items shall comply with Federal OSHA regulations and applicable codes, statutes, rules and regulations, including compliance with the requirements of the current edition of the "Manual of Accident Prevention in Construction" published by the A.G.C. (Associated General Contractors of America) and the standards of the Connecticut Department of Labor (DOL).
- B. Staging/laydown areas, exterior, and interior, required for the execution of the Contract Documents, shall be furnished, erected, relocated if necessary, and removed by the general Contractor. Staging/laydown shall be maintained in a safe condition without charge to the Owner and for the use of all trades as needed.

3.6 BARRIERS AND ENCLOSURES

- A. Temporary Enclosures: Provide temporary enclosure for protection of construction in progress and completed, from exposure, foul weather, other construction operations and similar activities.
 - 1. Where heat is needed and the permanent building enclosure is not complete, provide temporary enclosures where there is no other provision for containment of heat. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.
 - 2. Install tarpaulins securely, with incombustible wood framing and other materials. Close openings of 25 square feet or less with plywood or similar materials.
 - 3. Close openings through floor or roof decks and horizontal surfaces with load-bearing wood-framed construction.
 - 4. Where temporary wood or plywood enclosure exceeds 100 square feet in area, use UL-labeled fire-retardant treated material for framing and main sheathing.
- B. Barricades, Warning Signs and Lights: Comply with standards and code requirements for erection of structurally adequate barricades. Paint with appropriate colors, graphics and warning signs to inform personnel and the public of the hazard being protected against. Where appropriate and needed provide lighting, including flashing red or amber lights.

3.7 SECURITY AND PROTECTION

- A. Except for use of permanent fire protection as soon as available, do not change over from use of temporary security and protection facilities to permanent facilities until Substantial Completion, or longer as requested by the Architect.
- B. Permanent Fire Protection: At the earliest feasible date in each area of the Project, complete installation of the permanent fire protection facility, including connected services, and place into operation and use. Instruct key personnel on use of facilities.
- C. Security Enclosure and Lockup: Install substantial temporary enclosure of partially completed areas of construction. Provide locking entrances to prevent unauthorized entrance, vandalism, theft and similar violations of security.
 - 1. Storage: Where materials and equipment must be stored, and are of value or attractive for theft, provide a secure lockup. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.
- D. Protect buildings, equipment, furnishings, grounds, and plantings from damage. Any damage shall be repaired or otherwise made good at no expense to the Owner.
- E. Provide protective coverings and barricades to prevent damage. The General Contractor shall be held responsible for, and must make good at his own expense, any water, or other type of damage due to improper coverings. Protect the public and building personnel from injury.

3.8 ACCESS ROADS AND PARKING

- A. The Contractor shall use only established roadways and parking areas. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the

Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

- B. Contractor's Parking: Contractors shall be allowed to park on-site in areas to be determined by the Owner.

3.9 TEMPORARY CONTROLS

- A. Collection and Disposal of Waste: Collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than 7 days during normal weather or 3 days when the temperature is expected to rise above 80 deg F (27 deg C). Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material in a lawful manner.
1. All removed materials that are salvageable are the property of the Contractor unless otherwise noted in the specifications.
 2. All debris resulting from the performance of this contract will be the property of the Contractor and will be completely removed from the campus and disposed of in a legal manner.
 3. Chutes and dumpster type containers designed to keep dust and spillage to a minimum will be used by the Contractor. Dumpsters will be completely covered with a waterproof covering at all times when not in use.
- B. Environmental Protection: Provide protection, operate temporary facilities and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable effects might result.
- C. Nuisance Dust Control: The following provisions shall apply during demolition or construction phases of work:
1. It is the intent of this specification to ensure that nuisance dusts resulting from demolition or construction activities do not impact occupied areas of the building. The Contractor shall take all measures necessary to accomplish this goal. These measures will include as minimum polyethylene sheeting or wet methods of fugitive dust control.
 2. The Contractor shall submit a plan prior to commencement of work that will detail all methods of dust control. This plan shall be approved by the Owner's Representative prior to commencement of work. Upon approval, this plan shall be distributed to the Owner's Representative and the Architect.
 3. Failure to comply shall result in immediate stoppage of work until effective dust control measures are employed.
- D. Noise Control: The Contractor shall make every effort to minimize noise disruption to occupants of buildings and adjacent buildings. Restrict use of noise making tools and equipment to hours that will minimize complaints from persons or firms near the site. No noise generating work that interferes with classroom operation shall be tolerated. No noise generating work shall be allowed during exam periods where the noise will impact classroom functions. Examples of noise generating work include, but are not limited to sawing, drilling and hammering and/or jackhammering.

1. Avoid use of tools and equipment, which produce harmful noise. No gasoline-powered equipment shall be used during times that the buildings are occupied. No gasoline-powered equipment may be used in the interior of buildings at any time.

3.10 PROJECT IDENTIFICATION AND SIGNS

- A. Project Identification Signs: Provided and installed by the Contractor.
- B. Temporary Signs: Prepare signs to provide directional information to construction personnel and visitors. Install signs where indicated to inform the public and persons seeking entrance to the Project. Support on posts or framing of preservative treated wood or steel. Do not permit installation of unauthorized signs.
- C. Other Signs: Any other signage shall be submitted to the Owner's Representative for approval.

3.11 FIELD OFFICES AND SHEDS

- A. A field office will not be required for the project.

3.12 OPERATION, TERMINATION AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended uses to minimize waste and abuse.
- B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage by freezing temperatures and similar elements.
 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation and similar facilities on a 24-hour day basis where required to achieve indicated results and to avoid possibility of damage.
 2. Protection: Prevent water filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.
- C. Termination and Removal: Unless the Owner's Representative requests that it be maintained longer, remove each temporary facility when the need has ended, or when replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with the temporary facility. Repair damaged Work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.
 1. Materials and facilities that constitute temporary facilities are property of the Contractor. The Owner reserves the right to take possession of Project identification signs.
 2. At Substantial Completion, clean and renovate permanent facilities that have been used during the construction period, including but not limited to:
 - a. Replace significantly worn parts and parts that have been subject to unusual operating conditions.
 - b. Restore all existing facilities and grounds used during construction to specified or to original condition.

END OF SECTION

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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements governing the Contractor's selection of products for use in the Project, including:
 - 1. Product list schedules.
 - 2. Product selection.
 - 3. Product delivery, storage and handling.

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.
- B. Substitution requests and procedures are included in Section 01 25 00 – Substitution Procedures.
- C. The Contractor's Construction Schedule and the Schedule of Submittals are included under Section 01 33 00 – Submittal Procedures.

1.3 DEFINITIONS

- A. Definitions used in this Article 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. Such terms are self-explanatory and have well recognized meanings in the construction industry.
- B. Products: 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 terms of similar intent.
 - 1. "Named Products" are items identified by manufacturer's product name, including make or model designation, indicated in the manufacturer's published product literature, that is current as of the date of the Contract Documents.
 - 2. "Foreign Products", as distinguished from "domestic products," are items substantially manufactured (50 percent or more of value) outside of the United States and its possessions; or produced or supplied by entities substantially owned (more than 50 percent) by persons who are not citizens of nor living within the United States and its possessions.
- C. Materials: Products that are substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the Work.
- D. Equipment: A product with operational parts, whether motorized or manually operated, that requires service connections such as wiring or piping.
- E. Substitutions: Requests for changes in products, materials, equipment, and methods of construction required by Contract Documents proposed by the Contractor are considered requests for substitutions.
 - 1. Any substitutions shall be in accordance with Section 01 25 00.

1.4 SUBMITTALS

- A. Product List Schedule: Prepare a schedule showing products specified in a tabular form acceptable to the Architect and Owner's Representative. Include generic names of products required. Include the manufacturer's name and proprietary product names for each item listed.
1. Coordinate the product list schedule with the Contractor's Construction Schedule and the Schedule of Submittals.
 2. Form: Prepare the product-listing schedule with information on each item tabulated under the following column headings:
 - a. Related Specification Section number.
 - b. Generic name used in Contract Documents.
 - c. Proprietary name, model number and similar designations.
 - d. Manufacturer's name.
 - e. Installer's name and address.
 - f. Identification of product as one of the following:
 - 1)Product as specified
 - 2)Proposed Substitution
 - 3)Proposed Equal
 3. Submit completed schedule within 30 days after Contract award or at the Preconstruction Meeting, whichever occurs first. Provide a written explanation for omissions of data, and for known variations from Contract requirements.
- B. Substitution Requests shall be made in accordance with Section 01 25 00 – Substitution Procedures and the Invitation to Bid.

1.5 QUALITY ASSURANCE

- A. Source Limitations: Provide products of the same kind, from a single source.
1. When specified products are available only from sources that do not or cannot produce a quantity adequate to complete project requirements in a timely manner, consult with the Architect for a determination of the most important product qualities before proceeding. Qualities may include attributes relating to visual appearance, strength, durability, or compatibility. When a determination has been made, select products from sources that produce products that possess these qualities, to the fullest extent possible.
- B. Compatibility of Options: When the Contractor is given the option of selecting between two or more products for use on the Project, the product selected shall be compatible with products previously selected, even if previously selected products were also options.
- C. Foreign Product Limitations: Except under one or more of the following conditions, provide domestic products, not foreign products, for inclusion in the Work:
1. No available domestic product complies with the Contract Documents.

2. Domestic products that comply with Contract Document are only available at prices or terms that are substantially higher than foreign products that also comply with the Contract Documents.
- D. Nameplates: Except for required labels and operating data, do not attach or imprint manufacturers' or producer's nameplates or trademarks on exposed surfaces of products which will be exposed to view in occupied spaces or on the exterior.
 1. Labels: Locate required product labels and stamps on a concealed surface or, where required for observation after installation, on an accessible surface that is not conspicuous.
 2. Equipment Nameplates: Provide a permanent nameplate on each item of service-connected or power-operated equipment. Locate on an easily accessible surface, which is inconspicuous in occupied spaces. The nameplate shall contain the following information and other essential operating data:
 - a. Name of product and manufacturer.
 - b. Model and serial number.
 - c. Capacity.
 - d. Ratings.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store and handle products in accordance with the manufacturer's recommendations, using means and methods that will prevent damage, deterioration and loss, including theft.
 1. Schedule delivery to minimize long-term storage at the site and to prevent overcrowding of construction spaces.
 2. Coordinate delivery with installation time to ensure 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 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.
 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 weathertight enclosure, with ventilation adequate to prevent condensation. Maintain temperature and humidity within range required by manufacturer's instructions.
- B. All deliveries of material, equipment, etc., shall be made to the Contractor and accepted only by him and only during working hours. Owner's personnel will not receive or accept any material or equipment, etc., at any time.

- C. Contractor shall restrict use of delivery and other construction related trucks on local roads.

PART 2 PRODUCTS

2.1 PRODUCT SELECTION

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, unused at the time of installation.
 - 1. Provide products complete with all accessories, trim, and finish, safety guards and other devices and details needed for a complete installation and for the intended use and effect.
- B. Product Selection Procedures: Product selection is governed by the Contract Documents and governing regulations, not by previous Project experience. Procedures governing product selection include the following:
 - 1. Proprietary Specification Requirements: Where only a single product or manufacturer is named, provide the product indicated. No substitutions will be permitted.
 - 2. Semi-proprietary Specification Requirements: Where three or more products or manufacturers are named, provide one of the products indicated. No substitutions will be permitted.
 - a. Where products or manufacturers are specified by name, accompanied by the term "or equal," or "or approved equal" comply with the provisions concerning "substitutions" to obtain approval for use of an unnamed product.
 - 3. Non-Proprietary Specifications: When the Specifications list products or manufacturers that are available and may be incorporated in the Work, but do not restrict the Contractor to use of these products only, the Contractor may propose any available product that complies with Contract requirements. Comply with provisions concerning "substitutions" to obtain approval for use of an unnamed product.
 - 4. Descriptive Specification Requirements: Where Specifications describe a product or assembly, listing exact characteristics required, with or without use of a brand or trade name, provide a product or assembly that provides the characteristics and otherwise complies with Contract requirements.
 - 5. Performance Specification 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. General overall performance of a product is implied where the product is specified for a specific application.
 - a. Manufacturer's recommendations may be contained in published product literature, or by the manufacturer's certification of performance.
 - 6. Compliance with Standards, Codes and Regulations: Where the Specifications only require compliance with an imposed code, standard or regulation, select a product that complies with the standards, codes or regulations specified.
 - 7. Visual Matching: Where Specifications require matching an established Sample, the Architect's decision will be final on whether a proposed product matches satisfactorily.

- a. Where no product available within the specified category matches satisfactorily and also complies with other specified requirements, comply with provisions concerning "substitutions" for selection of a matching product in another product category, or for noncompliance with specified requirements.
 8. 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 Architect will select the color, pattern and texture from the product line selected.
 9. Allowances: Refer to individual Specification Sections and provisions in Section 01 21 00 – Allowances for allowances that control product selection and for procedures required for processing such selections.
- C. The Contractor's submittal and Architect's acceptance of Shop Drawings, Product Data or Samples that relate to construction activities not complying with the Contract Documents does not constitute an acceptable or valid request for substitution, nor does it constitute approval.

PART 3 EXECUTION

3.1 INSTALLATION OF PRODUCTS

- A. Comply with manufacturer's instructions and recommendations for installation of products in the applications indicated. Anchor each product securely in place, accurately located and aligned with other Work.
- B. Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

END OF SECTION

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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Requirements and limitations for cutting and patching of Work.
- B. Products and installation for patching and extending Work.
- C. Transition and adjustments.
- D. Repair of damaged surfaces, finishes, and cleaning.

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.
- B. Section 01 74 13 – Progress Cleaning.
- C. Section 02 41 19 – Selective Demolition for Remodeling.

1.3 GENERAL

- A. It is the responsibility of the Contractor to provide chases, channels or openings where needed to complete the work.
- B. The Contractor shall install sleeves, inserts, and hangers furnished by the trades.
- C. After installing work into openings, channels, and/or chases, the Contractor shall close same. If finishes are to be restored, the new work shall match the original and shall be done by the trade customarily responsible for the particular kind of work. If access is required to concealed work for maintenance or inspection, an appropriate access panel shall be installed as a part of the work.

1.4 SUBMITTALS

- A. Submit written request in advance of cutting or alteration which affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather exposed or moisture resistant element.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Owner or separate contractor.
- B. Include in request:
 - 1. Identification of Project.
 - 2. Location and description of affected Work and date and time work will be executed
 - 3. Necessity for cutting or alteration.
 - 4. Description of proposed Work and Products to be used.
 - 5. Alternatives to cutting and patching.
 - 6. Effect on work of Owner or separate contractor.
 - 7. Written permission of affected separate contractor.

PART 2 PRODUCTS

2.1 NEW MATERIALS

- A. As specified in product sections or match existing Products and work for patching and extending work.
- B. Provide appropriate access panels, approved by the Architect, in work where new concealed work must be accessed for periodic inspection or maintenance after construction.
- C. Submit shop drawings and product data for any new materials required for cutting and patching for review by the Architect.

2.2 EXISTING PRODUCTS

- A. Determine type and quality by inspecting and testing Products where necessary, referring to existing Work as a standard. Patching materials shall match exact.

PART 3 EXECUTION

3.1 PREPARATION

- A. Verify that areas are ready for installation of new Work; beginning of restoration Work means acceptance of existing conditions.
- B. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.
- C. Remove unsuitable material not marked for salvage, such as rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.
- D. Remove debris and abandoned items from area and from concealed spaces.
- E. Prepare surface and remove surface finishes to provide for proper installation of new work and finishes.
- F. Close openings in exterior surfaces to protect existing work and salvage items from weather and extremes of temperature and humidity. Insulate ductwork and piping to prevent condensation in exposed areas.

3.2 PROCEDURES

- A. Execute cutting, fitting, and patching to complete Work, and to fit parts together, to integrate with other Work, to uncover Work, to install or correct ill-timed Work, to remove and replace defective and non-conforming Work, to remove samples of installed Work for testing and to provide openings in elements of Work for penetrations of mechanical and electrical Work.
- B. Execute work by methods to avoid damage to other Work, and which will provide proper surfaces to receive patching and finishing.
- C. Cut masonry and concrete materials using masonry saw or core drill.
- D. Restore Work with new Products in accordance with requirements of Contract Documents or to match adjacent products.

- E. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- F. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- G. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections. Where a change of plane of 1/4 inch or more occurs, request instructions from Architect.
- H. Where new Work abuts or aligns with existing, provide a smooth and even transition. Patch Work to match existing adjacent Work in texture and appearance. When finish cannot be matched, refinish entire surface to nearest intersections.
- I. When finished surfaces are cut so that a smooth transition with new Work is not possible, terminate existing surface along a straight line at a natural line of division and submit recommendation to Architect for review.
- J. Identify any hazardous substance or condition exposed during the Work to the Owner for decision or remedy.

END OF SECTION

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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Cleaning requirements during construction operations.
- B. Final cleaning prior to turning the project over to the Owner.

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

1.3 QUALITY ASSURANCE

- A. Coordinate with Section 01 77 00 – Close out Procedures.
- B. Contractor shall provide progress cleaning that minimizes sources of food, water, and harborage available to pests.

PART 2 PRODUCTS

2.1 MATERIALS AND EQUIPMENT

- A. Utilize non-toxic, sustainable cleaning materials and methods.
- B. Dilute any chemical concentrates with appropriate dilution systems to minimize chemical use and content wherever possible.
- C. Minimize the use of janitorial paper products; recycle all materials and trash as appropriate.
- D. Use janitorial equipment that reduces building contaminants and minimizes environmental impact.
 - 1. Vacuum cleaners shall be certified by the Carpet and Rug Institute “Green Label” Testing Program for vacuum cleaners and shall operate with a sound level of less than 70dBA.
 - 2. Carpet extraction equipment used for restorative deep cleaning shall be certified by the Carpet and Rug Institute’s “Seal of Approval” Testing Program for deep-cleaning extractors.
 - 3. Powered floor maintenance equipment, including electric and battery-powered floor buffers and burnishers, shall be equipped with vacuums, guards and/or other devices for capturing fine particulates and operate with a sound level of less than 70dBA.
 - 4. Propane-powered floor equipment shall have high-efficiency, low-emissions engines with catalytic converters and mufflers that meet the California Air Resources Board (CARB) or Environmental Protection Agency (EPA) standards for the specific engine size and shall operate with a sound level of less than 90dBA.
 - 5. Automated scrubbing machines shall be equipped with variable-speed feed pumps and on-board chemical metering to optimize the use of cleaning fluids. Alternatively, the scrubbing machines may use tap water only with no added cleaning products.

6. Battery-powered equipment shall be equipped with environmentally preferable gel batteries.
 7. Powered equipment shall be ergonomically designed to minimize vibration, noise and user fatigue.
 8. Equipment shall be designed with safeguards, such as rollers or rubber bumpers, to reduce potential damage to building surfaces.
- E. Use natural cleaning materials where feasible. Natural cleaning materials include:
1. Abrasive cleaners: substitute 1/2 lemon dipped in borax.
 2. Ammonia: substitute vinegar, salt and water mixture, or baking soda and water.
 3. Disinfectants: substitute 1/2 cup borax in gallon water.
 4. Drain cleaners: substitute 1/4 cup baking soda and 1/4 cup vinegar in boiling water.

PART 3 EXECUTION

3.1 BASIC PROCEDURES

- A. Maintain areas under the General Contractor's control free of waste materials, debris, and rubbish. Maintain in a clean and orderly condition on a DAILY basis.
- B. Remove debris and rubbish from pipe chases, plenums, crawl spaces, and other closed or remote spaces before closing the space.
- C. Periodically clean areas before start of surface finishing and continue cleaning on an as-needed basis.
- D. The General Contractor shall control cleaning operations so that dust and other particulates will not adhere to wet or newly-coated surfaces.
- E. Remove waste materials, debris, and rubbish from site daily and dispose of legally off-site. No scrap/debris shall remain inside the building or anywhere on site upon final acceptance of the project.

3.2 FINAL CLEANING

- A. Execute final cleaning prior to final project assessment and in accordance with ASTM E1971.
- B. Refer to Section 01 77 00 – 3.2 for Final Cleaning requirements.

END OF SECTION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements for project closeout, including but not limited to:
 - 1. Inspection procedures.
 - 2. Project record document submittal.
 - 3. Operating and maintenance manual submittal.
 - 4. Submittal of warranties.
 - 5. Final cleaning.
- B. Additional closeout requirements for specific construction activities are included in the appropriate Specification Sections.

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

1.3 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for certification of Substantial Completion, complete the following. (List any exceptions in the request.)
 - 1. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete. Include supporting documentation for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the Contract Sum.
 - a. If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the Work is not complete.
 - 2. Advise Owner of pending insurance change-over requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications and similar documents.
 - 4. Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities; include occupancy permits, operating certificates and similar releases.
 - 5. Submit record drawings, maintenance manuals, final project photographs, damage or settlement survey, property survey, and similar final record information.
 - 6. Deliver tools, spare parts, extra stock, and similar items.
 - 7. Make final change-over of permanent locks and transmit keys to the Owner. Advise the Owner's personnel of change-over in security provisions.
 - 8. Complete start-up testing of systems, and instruction of the Owner's operating and maintenance personnel. Discontinue or change over and remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.

9. Complete final clean up requirements, including touch-up painting. Touch-up and otherwise repair and restore marred exposed finishes.
- B. Inspection Procedures: On receipt of a request for inspection, the Architect will either proceed with inspection or advise the Contractor of unfilled requirements. The Architect will prepare the Certificate of Substantial Completion following inspection, or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.
 1. The Architect will repeat inspection when requested and assured that the Work has been substantially completed.
 2. Results of the completed inspection will form the basis of requirements for final acceptance.

1.4 FINAL ACCEPTANCE

- A. Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. (List exceptions in the request.)
 1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
 2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
 3. Submit a certified copy of the Architect's final inspection list of items to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance, and the list has been endorsed and dated by the Architect.
 4. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Substantial Completion, or when the Owner took possession of and responsibility for corresponding elements of the Work.
 5. Submit consent of surety to final payment.
 6. Submit a final liquidated damages settlement statement.
 7. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Certifications: The Contractor at completion of construction shall provide to the Owner a "Certificate of Substantial Completion" (AIA G704), bearing original signatures of an officer of the company stating: "This is to CERTIFY that in my professional opinion the complete structure/renovations described above is in substantial compliance with the approved construction documents. Minor deviations and special stipulations are noted below (if any)".

1.5 RECORD DOCUMENT SUBMITTALS

- A. General: Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for the Architect's reference during normal working hours.
- B. Record Drawings: Maintain a clean, undamaged set of blue or black line white-prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark whichever drawing 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.

1. Mark record sets with red erasable pencil; use other colors to distinguish between variations in separate categories of the Work.
 2. Mark new information that is important to the Owner, but was not shown on Contract Drawings or Shop Drawings.
 3. Note related Change Order numbers where applicable.
 4. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set.
 5. Upon completion of the Work, submit record sets to the Architect for transfer of data to the original drawings.
- C. Record Specifications: Maintain one complete copy of the Project Manual, including addenda, and one copy of other written construction documents such as Change Orders and modifications issued in printed form during construction. Mark these documents to show substantial variations in actual Work performed in comparison with the text of the Specifications and modifications. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation. Note related record drawing information and Product Data.
1. Upon completion of the Work, submit record Specifications to the Owner's Representative for the Owner's records.
- D. Record Product Data: Maintain one copy of each Product Data submittal. 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. Give particular attention to concealed products and portions of the Work which cannot otherwise be readily discerned later by direct observation. Note related Change Orders and mark-up of record drawings and Specifications.
1. Upon completion of mark-up, submit complete set of record Product Data to the Owner's Representative for the Owner's records.
- E. Record Sample Submitted: Immediately prior to the date or dates of Substantial Completion, the Contractor will meet at the site with the Architect and the Owner's personnel to determine which of the submitted Samples that have been maintained during progress of the Work are to be transmitted to the Owner for record purposes. Comply with delivery to the Owner's Sample storage area.
- F. Miscellaneous Record Submittals: Refer to other Specification Sections for requirements of miscellaneous record-keeping and submittals in connection with actual performance of the Work. Immediately prior to the date or dates of Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Architect for the Owner's records.

1.6 OPERATION AND MAINTENANCE MANUALS

- A. Submit three separately bound sets of manuals to the Architect/Engineer for approval prior to acceptance by the Owner. Organize operating and maintenance data for all major mechanical and electric equipment into suitable sets of manageable size. These shall be

typewritten or photocopied, 8-1/2" x 11" sheets describing the equipment and detailing the operation, including function of individual parts and proper sequencing. Manufacturers' bulletins or catalogues will be acceptable but shall be amplified as required to provide full instruction. Manufacturers' specific operating and servicing manuals are acceptable, provided they fully cover the requirements and any additional data is appended. Bind properly indexed data in individual heavy-duty 2-inch, 3-ring vinyl-covered binders, with pocket folders for folded sheet information. Mark appropriate identification on front and spine of each binder. Include the following types of information where applicable:

1. Installed model, size, rating, operation and other applicable information shall be clearly identified.
 2. Location of equipment in the building.
 3. Emergency instructions.
 4. Repair and spare parts list.
 5. Copies of warranties.
 6. Complete wiring and control diagrams.
 7. Valve identification, including assigned tag numbers in the valve directory.
 8. Recommended "turn around" cycles.
 9. Inspection procedures.
 10. Service and repair schedules.
 11. Shop Drawings and Product Data.
 12. Fixture lamping schedule.
- B. In addition, the Contractor shall furnish and install enclosed in clear plastic with eyelet for fastening, two sets of operating instruction, with necessary diagrams which shall be hung adjacent to each item of equipment or at the operating station to which the instructions apply.

PART 2 PRODUCTS

2.1 NOT USED

PART 3 EXECUTION

3.1 CLOSE-OUT PROCEDURES

- A. Operating and Maintenance Instructions: Arrange for each installer of equipment that requires regular maintenance to meet with the Owner's personnel to provide instruction in proper operation and maintenance. Provide experienced personnel for as long a period as necessary as determined by the Owner. If installers are not experienced in procedures, provide instruction by manufacturer's representatives. Include a detailed review of the following items:
1. Operation and Maintenance manuals.

2. Record documents.
 3. Spare parts and materials.
 4. Tools.
 5. Lubricants.
 6. Fuels.
 7. Identification systems.
 8. Control sequences.
 9. Hazards.
 10. Cleaning.
 11. Warranties and bonds.
 12. Maintenance agreements and similar continuing commitments.
- B. As part of instruction for operating equipment, demonstrate the following procedures:
1. Start-up.
 2. Shutdown.
 3. Emergency operations.
 4. Noise and vibration adjustments.
 5. Safety procedures.
 6. Economy and efficiency adjustments.
 7. Effective energy utilization.

3.2 FINAL CLEANING

- A. General: General cleaning during construction is required by the General Conditions and included in Section 01 50 00, Construction Facilities and Temporary Controls.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Comply with manufacturer's instructions. Final cleaning shall employ sustainable and green cleaning methods as outlined in Section 01 74 13 Progress Cleaning.
- C. Complete the following cleaning operations within the Work Area before requesting inspection for Certification of Substantial Completion:
1. Remove labels that are not permanent labels.
 2. Clean exposed hard-surfaced finishes to a dust-free condition, free of stains, films, fingerprints and similar foreign substances. Restore reflective surfaces to their original reflective condition. Leave concrete slabs broom clean.
 3. Clean and polish glazed surfaces.
 4. Clean and polish finish hardware.
 5. 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.

6. Clean roofs, gutters and downspouts.
 7. Clean the site, including landscape development areas, of rubbish, litter and other foreign substances. Sweep paved areas broom clean; remove stains, spills and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth even-textured surface.
- D. Removal of Protection: Remove temporary protection and facilities installed for protection of the Work during construction.
- E. Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner.
1. Where extra materials of value remaining after completion of associated Work have become the Owner's property, arrange for disposition of these materials as directed.

END OF SECTION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturers standard warranties on products and special warranties.
 - 1. Refer to the General Conditions for terms of the Contractor's special warranty of workmanship and materials.
 - 2. General closeout requirements are included in Section 01 77 00 – Closeout Procedures.
 - 3. Specific requirements for warranties for the Work and products and installations that are specified to be warranted are included in the individual Specification Sections.
- B. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

1.2 RELATED SECTIONS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 01 Specification Sections apply to this Section.

1.3 DEFINITIONS

- A. Standard Product Warranties: Preprinted written warranties published by individual manufacturers for particular products specifically endorsed by the manufacturer to the Owner.
- B. Special Warranties: Written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

1.4 WARRANTY REQUIREMENTS

- A. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
- 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 equitable 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 Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- D. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise

available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.

1. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
- E. The Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.

1.5 SUBMITTALS

- A. Submit written warranties to the Architect prior to the date certified for Substantial Completion. If the Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.
1. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Architect within fifteen days of completion of that designated portion of the Work.
- B. When a special warranty is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner through the Architect for approval prior to final execution.
1. Refer to individual Specification Sections for specific content requirements, and particular requirements for submittal of special warranties.
- C. Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8 1/2" by 11" paper.
1. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address and telephone number of the installer.
 2. Identify each binder on the front and the spine with the typed or printed title "WARRANTIES AND BONDS", the Project title or name, and the name of the Contractor.
 3. When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

1.6 FORM OF GUARANTEE WARRANTIES

- A. The General Contractor will furnish to the Owner the foregoing documents in the following manner:
1. Address to: **Town of East Granby, 9 Center Street, East Granby, CT. Attn: Ray Carlson**
 2. All guarantees/warranties shall reference the project name and number as indicated in the Contract Documents.

3. All required guarantees/warranties will be by the respective company made out to **Town of East Granby, 9 Center Street, East Granby, CT.**
 4. All guarantees/warranties supplied by subcontractors or manufacturers shall be countersigned by the General Contractor.
- B. All work shall be covered by a minimum one (1) year guarantee as set forth in the General Conditions. Longer duration guaranties/warranties shall be as described in the specific technical sections of this Specification. The Contractor shall visit the project site at 11 months into the guarantee period to determine the scope of any required guarantee work. The Contractor shall contact the Owner's Representative prior to this visit so that the Owner's Representative may attend.

PART 2 PRODUCTS

2.1 NOT USED

PART 3 EXECUTION

3.1 NOT USED

PART 4 SCHEDULE OF WARRANTIES

4.1 SCHEDULE

- A. Provide warranties and bonds on products and installations as specified in the Technical Specification Sections:

END OF SECTION

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