



PROJECT MANUAL

Date: 8-23-22

For the Project Titled

INTERIOR RENOVATIONS MONTGOMERY COUNTY CLERK

**LOCATED AT MONTGOMERY COUNTY VETERANS PLAZA
350 PAGEANT LANE, SUITE 502
CLARKSVILLE, TN 37040**

**OWNER:
MONTGOMERY COUNTY GOVERNMENT
1 MILLENNIUM PLAZA, SUITE 205
CLARKSVILLE, TN 37040**

**JIM DURRETT , COUNTY MAYOR - DESIGN PHASE
WES GOLDEN, COUNTY MAYOR - CONSTRUCTION PHASE**



**KELLIE A. JACKSON, COUNTY CLERK - DESIGN PHASE
TERESA S. COTTRELL, COUNTY CLERK - CONSTRUCTION PHASE
CHIEF COUNTY ENGINEER: NICHOLAS B. POWELL, P.E.**

**DESIGNER:
Douglas A. Jones, Architect, NCARB, LEED AP
Montgomery County Engineering Department**

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TABLE OF CONTENTS

BIDDING REQUIREMENTS

Advertisement for Bids
Instructions to Bidders
Bid Form

CONTRACT DOCUMENTS

Contract
Insurance
Certificate of Owner's Attorney
Form of Prime Contractor Non-Collusive Affidavit
Drug-Free Workplace Affidavit
General Indemnity
Title VI Contract Assurance Form
Iran Divestment Act Certification of Non-inclusion
Form of Statement of Bidder's Construction Experience (Only Required If Requested)
Non-Collusive Affidavit of Sub-Contractors
COVID-19 Checklist for Employers and Employees
COVID-19 Affidavit for Construction Work
Notice to Proceed

GENERAL CONDITIONS

Owner's Special Conditions
General Conditions (Marker Page)
Supplemental General Conditions

TECHNICAL SPECIFICATIONS

Division 01 - General Requirements

Section 01 11 00 - Summary of Work
Section 01 23 00 - Alternates
Section 01 25 00 - Substitution Procedures
Section 01 26 00 - Contract Modification Procedures
Section 01 29 00 - Payment Procedures
Section 01 31 00 - Project Management and Coordination
Section 01 32 00 - Construction Progress Documentation
Section 01 33 00 - Submittal Procedures
Section 01 40 00 - Quality Requirements
Section 01 42 00 - References
Section 01 50 00 - Temporary Facilities and Controls
Section 01 60 00 - Product Requirements
Section 01 70 00 - Execution Requirements
Section 01 73 29 - Cutting and Patching
Section 01 77 00 - Closeout Procedures

Refer to Drawings for Divisions 02 – 32

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ADVERTISEMENT FOR BIDS

Sealed bids for the Interior Renovations Montgomery County Clerk located at Suite 502 Veterans Plaza, 350 Pageant Lane, Clarksville, TN will be received by Stephanie P. Morlock, Purchasing Agent, Montgomery County Purchasing at 350 Pageant Lane, Suite 101-E, Clarksville, TN 37040 until **2:00 P.M. on Tuesday, September 27, 2022.**

The Scope of Work for this project includes controlled demolition and renovations of approximately 520 S.F. of the existing License Plate Storage Room 116 at the County Clerks' Office inside Suite 502 at the Veterans Plaza County office complex generally consisting of elements as follows:

Controlled demolition includes but is not limited to: Removal of existing exterior masonry to accommodate new window, partial removal of existing metal stud drywall partitions, complete removal of wood door, & hollow metal frame. Minor demolition to sprinkler, HVAC and electrical systems. Renovations include but are not limited to: Masonry work required to create opening for new window, insulation, sealants, hollow metal frame, aluminum storefront window, metal stud & hat channel framing, drywall, carpet squares, resilient base, suspension system, acoustical ceiling panels, & painting. Minor revisions to existing automatic sprinklers, ductwork for existing HVAC systems, electrical systems, and related work.

In order to bid, qualified bidders shall obtain one (1) copy of the bid document files in PDF format prior to or immediately following the mandatory Pre-Bid Conference. Contractors, sub-contractors, and suppliers may obtain a link to the PDF contract documents by requesting them via email from Montgomery County Engineering engineer@mcgtn.net AND Doug Jones at dajones@mcgtn.net. Upon request, an e-mail response will be sent back within 48 hours with a link to download the project documents.

All Bidders must be licensed Contractors in the State of Tennessee in strict accordance with State regulations. No bid will be opened unless the outside of the sealed envelope containing the bid provides the following information: the Contractor's name, address, and license number; the date of the license expiration; and a quotation of that part of the license classification applicable to the bid.

No Bidder may withdraw his bid for sixty (60) days following the bid opening.

The right to reject any or all bids and to wave technicalities is reserved by the owner.

A **MANDATORY** pre-bid meeting will be held at Montgomery County Civic Hall, 350 Pageant Lane, Clarksville, TN 37040 followed by a site visit, on **Tuesday, September 13, 2022 at 10:00 AM.** For directions to the pre-bid meeting site please call 931-648-5720 or come to the Montgomery County Purchasing Office, 350 Pageant Lane, Suite 101-E, Clarksville, TN and you will be directed to the meeting location which is within walking distance.

*****SPECIAL NOTE*** IF ANY VENDOR IS MORE THAN 15 MINUTES LATE TO THE PRE-BID, THEY WILL NOT BE ALLOWED TO ATTEND THE PRE-BID NOR BID ON THIS PROJECT AS THE GENERAL CONTRACTOR. PRE-BID MEETING WILL BE CLOSED AS OF 10:15 A.M.**

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INSTRUCTIONS TO BIDDERS

1. Receipt and Opening of Bids

Montgomery County Government (hereinafter called the “Owner”), invites bids on the form attached hereto, all blanks of which must be appropriately filled in. Bids will be received by the Owner at the location and time stated in the Advertisement for Bids, and then at said office publicly opened and read aloud. The envelopes containing the bids must be sealed, addressed to Stephanie P. Morlock, Purchasing Agent, Montgomery County Purchasing, 350 Pageant Lane, Suite 101-E, Clarksville, Tennessee 37040, and designated as bid for **Interior Renovations Montgomery County Clerk**.

The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within sixty (60) days after the actual date of the bid opening.

2. Preparation of Bid

All blank spaces for bid prices must be filled in, in ink or typewritten, in both words and figures, and the BID form must be fully completed and executed when submitted.

Each bid must be submitted sealed in the envelope provided at the Pre-Bid Meeting or emailed to mocobids@mcgtn.net ahead of the bid opening time.

If emailed, the electronic bid envelope cover must be completed and included with the bid documents, and the Subject line of the email should state “**Bid for Interior Renovations Montgomery County Clerk**”.

If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in the bid form and noted “**Interior Renovations Montgomery County Clerk - BID INSIDE**”.

THE FOLLOWING FORMS ARE REQUIRED TO BE SIGNED AND SUBMITTED POST BID BY THE APPARENT LOW BIDDER:

Prime Contractor Affidavit of Non-Collusion
Drug Free Workplace Affidavit
General Indemnity
Title VI Contract Assurance Form
Iran Divestment Act Certification of Non-inclusion
COVID-19 Affidavit for Construction Work

3. Subcontracts

The bidder is specifically advised that any person or other party to whom it is proposed to award a subcontract under this contract must be acceptable to the Owner after verification by the state of the current eligibility status.

If work is required for Plumbing, HVAC, Electrical, Masonry or Roofing: provide state contractor license number, expiration date, and applicable classifications for bidder and listed subcontractors except when such subcontractor’s portion of the construction project is less than \$25,000 (Including materials and labor), or in the case of masonry, less than \$100,000. For trades listed, if Bidder will perform that work with Bidder’s own forces, fill in Bidder’s name as subcontractor when required based on the monetary limits listed above. Failure of any bidder to furnish the required information shall void such bid and such bid shall not be considered. Requirements per TCA Code 62-6-119.

4. Bid Modification

N/A

5. Method of Bidding

The Owner invites the following (Lump Sum) bid(s):

- **Interior Renovations Montgomery County Clerk**

6. Qualification of Bidder

The Owner may make such investigations as he deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Conditional bids will not be accepted.

Bidders may be asked to fill out the form furnished for that purpose, a copy of which is included in the Contract Documents, a statement of the Bidder's qualifications, his experience record in constructing the type of improvements embraced in the Contract Documents, and his organization and equipment available for the work contemplated; and, when specifically requested by the Montgomery County Government, a detailed financial statement. The Agency shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform his obligations under the Contract and the Bidder shall furnish the Agency all such information and data for this purpose as it may request. The right is reserved to reject any bid where an investigation of the available evidence or information does not satisfy the Agency that the Bidder is qualified to carry out properly the terms of the Contract.

All bidders must be licensed contractors as required by the Contractor's Licensing Act of 1976, ITCA Title 62, Chapter 6. No bid will be opened unless the sealed envelope contains the license number, the date of the license expiration, and that part of his classification applying to the bid. In the case of joint ventures, this information must be provided by all parties submitting the bid.

The following is excerpted from the Law:

62-620. Notice of Requirements Given in Invitation to Bidders - Penalty. All architects and engineers preparing plans and specifications for work to be contracted in the State, or where the work to be done is located in the State, shall include in their Invitation to Bidders and in their specifications a copy of this Chapter, or such portions thereof as are deemed necessary to convey to the invited Bidder whether he is a resident of this State or not, and whether a license has been issued to him or not, the information that it will be necessary for him to show evidence of a license before his bid is considered. The expiration date, and that part of classification applying to the bid shall appear on the envelope containing the bid, otherwise the bid shall not be opened. Architects, engineers, and awarding authorities, public and private, failing to observe this section of the Chapter shall be penalized in the same manner as any person under 62-621 who accepts a bid from a person who is not licensed in accordance with the provisions of this Chapter. [Acts 1976 (Adj. S), Ch. 822,20.]

7. Bid Security

N/A.

8. Liquidated Damages for Failure to Enter into Contract

The successful bidder, upon bidder's failure or refusal to execute and deliver the contract and bonds required within ten (10) days after bidder has received notice of the acceptance of bidder's bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with bidder's bid.

9. Time of Completion And Liquidated Damages

Bidder must agree to commence work on or before a date to be specified in a written "Notice To Proceed" of the Owner and to fully complete (or to substantially complete for owner occupancy) the project within **90** consecutive calendar days. Bidder must agree also to pay as liquidated damages, the sum of **Three Hundred Dollars (\$300)** for each consecutive calendar day thereafter, as time is of the essence with this project.

10. Condition of Work

Each bidder must be fully informed of the conditions relating to the construction of the project and the employment of labor thereof. Failure to do so shall not relieve a successful bidder of bidder's obligation to furnish all material and labor necessary to carry out the provisions of bidder's contract. Insofar as possible, the contractor, in carrying out the work, must employ such methods as shall not cause any interruption of or interference with the work of any other contractor.

11. Addenda and Interpretation

No interpretation of the meaning of the plans, specifications, or other pre-bid documents will be made to any bidder orally.

Every request for such interpretation should be e-mail to spmorlock@mcgtn.net , engineer@mcgtn.net , and dajones@mcgtn.net and to be given consideration must be received at least four (4) business days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions shall be in the form of written addenda to the specifications which, if issued, shall be e-mailed with return receipt requested to the address provided in the pre-bid meeting to all prospective bidders (at the respective e-mail addresses furnished for such purposes), not later than two (2) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under bidder's bid as submitted. All addenda so issued shall become part of the contract documents.

12. Method of Award - Lowest Qualified Bidder

- A. The contract will be awarded to the responsible bidder submitting the lowest and best interest proposal complying with the conditions of the Invitation for Bids, provided his bid is reasonable and it is in the best interest of Montgomery County Government to accept it. The bidder to whom the award is made will be notified at the earliest practicable date. Montgomery County Government, however, reserves the right to reject any and all bids and to waive any informality in bids received whenever such rejection or waiver is in the best interest of Montgomery County Government.
- B. Montgomery County Government also reserves the right to reject the bid of any bidder who has previously failed to perform properly, or to complete on time, contracts of a similar nature; who is not in a position to perform the contract, or who has habitually and without just cause neglected the payment of bills or otherwise disregarded his obligations to subcontractors, materialmen or employees.
- C. The ability to obtain a performance bond shall not be regarded as the sole test of such bidder's competency or responsibility.

13. Obligation of Bidder

At the time of the opening of bids, each bidder shall be presumed to have inspected the site and to have read and be thoroughly familiar with the plans and contract documents (including all addenda). The failure or omission of any bidder to examine any form, instrument, or document shall in no way relieve any bidder from any obligation with respect to bidder's bid.

14. Execution of Agreement

- A. Subsequent to the award and within ten (10) days after the prescribed forms are presented for signature, the successful bidder shall be furnished, for execution, a contract in the form prepared in such number of counterparts as the Local Authority may require.

15. Power of Attorney

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

16. Notice of Special Conditions

Attention is particularly called to those parts of the contract documents and specifications that deal with the following.

- a. Inspection and testing of materials
- b. Insurance requirements
- c. As-built/Record drawings of record

17. Laws and Regulations

The bidder's attention is directed to the fact that all applicable state laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.

18. Preconstruction Conference

Attention to Bidders is particularly called to the preconstruction conference that will be held with the successful Bidder prior to the issuance of a Notice to Proceed. This conference will cover contract provisions pertaining to Labor Standards and Related Requirements, Equal Employment Opportunity Obligations, work schedule, and any other item related to the Contract.

19. Equal Employment Opportunity Clause and Title VI

TITLE VI

The Government of Montgomery County prohibits discrimination in all of its programs and activities on the basis of race, color or national origin. The agency will comply with all statutes and regulations of Title VI of the Civil Rights Act of 1964. No person should be excluded from participation in or be denied the benefit of or be subjected to discrimination under any program or service provided by or affiliated with Montgomery County on the basis of non-merit reasons.

To file a complaint of discrimination, write or call:

Title VI Coordinator/Diversity Trainer
1 Millennium Plaza
Clarksville, TN 37040
(931) 648-5715

20. Bid Documents:

The Owner will supply electronic bid documents to the contractor for no charge.

BID FORM

PROPOSAL OF:

(Name of Bidder)

(Address of Bidder)

organized and existing under the laws of the State of _____ and doing business as a _____ (insert "a corporation", "a partnership" or "an individual" or otherwise as applicable).

TO THE: MONTGOMERY COUNTY GOVERNMENT
1 Millennium Plaza, Suite 205
Clarksville, TN 37040

In compliance with your Advertisement for Bids, Bidder hereby proposes to furnish all necessary labor, machinery, tools, apparatus, materials, equipment, services and other necessary supplies, in strict accordance with the terms and conditions of plans, specifications and Contract Documents within the number of consecutive calendar days and the prices set forth below for:

Interior Renovations Montgomery County Clerk

By submitting this Bid, Bidder certifies that this Bid has been arrived independently, without consultation, communication or agreement as to any matter relating to this Bid with any other Bidder or with any other competitor.

The Bidder agrees, upon receipt of the Notice of Award accompanied by the Contract and Agreement (C & A) and all required attachments, to cause same to be properly executed and return to Montgomery County within ten (10) days thereafter. Bidder further agrees, upon receipt of the Notice To Proceed, to commence work on the project immediately thereafter and to complete the project within **90** consecutive calendar days after receipt of said Notice To Proceed.

The Bidder Agrees to furnish and construct all lump sum items of work shown on the Contract Documents for the amount of (show amount in both words and figures):

BASE BID: The Bidder agrees to construct the Work of this Project for the amount listed below, **EXCLUDING** the cost of Alternate No. 1 for the Lump Sum of:

_____ and _____/100 Dollar,

\$ _____.

Show dollar amount in both words and figures. In case of discrepancy, the amount in words shall govern.

ADD ALTERNATE BID: The Bidder agrees to add to Base Bid the following amount for performing the Work as outlined in the Alternate listed below:

Alternate Bid No. One (1): The Bidder agrees to provide Window "A" and related demolition & construction as shown on Sheets A1.1 & A2.1 for the Lump Sum of:

_____ and _____/100 Dollars,

\$ _____.

Show dollar amount in both words and figures. In case of discrepancy, the amount in words shall govern.

Terms of Bid

1. In submitting this bid, it is understood that the right is reserved by the Montgomery County Government to reject any and all bids.
2. Security: Not Required.
3. Retainage: Not Required.
4. Attached hereto is an affidavit in proof that the undersigned has not entered into any collusion with any person in respect to this proposal or any other proposal or the submitting of proposals for the Contract for which this proposal is submitted.
5. Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.
6. For Federally funded projects (which will be clearly identified herein if such funds apply to this project), the Bidder represents that he/she is in compliance with the equal opportunity clause prescribed by Executive Orders 10925, 11114, or 11246 and that he/she has filed all required compliance reports with the Secretary of Labor. (The above representation need not be submitted in connection with contracts or subcontracts which are exempt from the clause).
7. The Bidder acknowledges that they have received the following Addendum. The modifications to the Bid Documents noted therein have been considered and all costs thereto are included in the Bid.
 - A. Addendum Number _____ dated _____.
 - B. Addendum Number _____ dated _____.
 - C. Addendum Number _____ dated _____.
8. In submitting this bid, the Bidder agrees to hold open his Bid for 30 days from the date of the bid opening and further agrees to enter into and execute a Contract, if awarded, on the basis of this bid.
9. The Bidder agrees to guarantee the work completed for a period of one (1) year for the date of final acceptance except where a longer period is specifically indicated.
10. The Bidder acknowledges that he has visited and examined the site of the proposed construction and has received and examined documents for the Construction of subject project, including the Drawings, Project Manual and other documents and has included their provisions in his Bid.
11. The Bidder agrees to provide, prior to the contract signing, the following completed forms: Prime Contractor Affidavit of Non-Collusion, Drug Free Workplace Affidavit, General Indemnity Form, Title VI Contract Assurance Form, Iran Divestment Act Certification of Non-inclusion Form, and COVID-19 Affidavit for Construction Work.
12. The Bidder agrees to provide a list of major subcontractors within twenty-four (24) hours after the bid opening time.
13. The Bidder agrees to provide a list of major material manufacturers within twenty-four (24) hours after the bid opening time.
14. The Bidder agrees to provide a statement of qualifications if requested by the Owner or Architect.
15. The Bidder agrees that the Project Manager and Superintendent assigned to this project shall remain on this project throughout the extent of the project barring injury, employment change, or other unforeseen issues, and shall sign a Memo of Agreement with the Owner stating this prior to the contract signing.

NOTE: The penalty for making false statement in offers is prescribed in 18 U.S.C. 1001.

DATE: _____

(NAME OF BIDDER)

TELEPHONE NUMBER: _____

OFFICIAL ADDRESS: _____

BY: _____ (SIGNED)

_____ (PRINT)

TITLE: _____

CONTRACTOR'S LICENSE NUMBER: _____ **EXPIRATION DATE:** _____

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CONTRACT

THIS AGREEMENT made this _____ day of _____ in the year _____ between _____, a corporation/PARTNERSHIP/SOLE-PROPRIETOR/Limited Liability Corporation doing business under the laws of the State of Tennessee, hereinafter called the "Contractor", and MONTGOMERY COUNTY GOVERNMENT, Clarksville, Tennessee, a public body hereinafter called "Montgomery County" or "Owner".

WITNESSETH, that the Contractor and Montgomery County for the consideration stated herein mutually agree as follows:

ARTICLE 1. STATEMENT OF WORK. The Contractor shall furnish all supervision, labor, materials, equipment and services, including all related accessories and specialties for the construction of **Interior Renovations Montgomery County Clerk** all in strict accordance with the Specifications as prepared by the Project Architect, which said Specifications, Drawings, and Addendum(s), if any, are incorporated herein by reference and made a part thereof.

ARTICLE 2. THE CONTRACT PRICE. Montgomery County shall pay the Contractor for the performance of the Contract, in current funds, subject to additions and deductions as provided in the Contract Documents, the sum of:
(Dollar Value in Words _____). (\$ _____).

ARTICLE 3. JURISDICTION AND VENUE. The Architect will serve as an Initial Decision Maker for any disputed claims. In the event of a Contract dispute or litigation arising out of said Contract that is not solved by the Initial Decision Maker, it is understood and agreed that this Contract was executed and performed in Montgomery County, and, as such, it is agreed by both parties that the venue for said litigation, including an action of Declaratory Judgment, will be in Montgomery County. Any Binding Dispute Resolution will be by Litigation.

ARTICLE 4. ATTORNEY FEES. In the event of litigation arising out of said Contract, it is agreed that if the **Contractor** is held liable for damages, or is found to have breached the Contract, that the **Contractor** will pay Montgomery County reasonable attorney's fees and expenses involved in the litigation.

ARTICLE 5. LIQUIDATED DAMAGES. The Contractor shall pay liquidated damages to the Owner at the rate of **Three Hundred Dollars (\$300.00)** per day for each day of each inexcusable delay, as timing is of the essence with this project.

Time being of the essence, the Contractor further agrees to accept the conditions for liquidated damages in the amount set forth in the Contract Documents for each calendar day in excess of the allotted time for Substantial Completion, or any approved extension thereof, the parties agreeing that the amount of damages resulting from delay would be uncertain and difficult to prove, and further agreeing that such liquidated damages set forth in the Owner Contractor Agreement are a reasonable estimate of those damages which could result from a delay.

If, at the end of 30 days following the date of Substantial Completion, unless otherwise stipulated in the certificate of Substantial Completion, the project is not 100% complete, the Liquidated Damages shall accrue until such time that 100% completion is achieved.

ARTICLE 6. PAYMENTS & RETAINAGE. Progress Payments will be made no more frequently than monthly to the contractor based on Applications for Payment that is submitted to the Architect for review and approval. Such payment applications shall be based on the Schedule of Values that is to be provided at the beginning of the project before any work has started. Payment Applications shall be submitted on a preapproved AIA form and shall reflect any modifications that occur to the contract documents during that month of work for items added or

removed from the project. Payment Applications shall also show the percentage of work completed for each line item of the Schedule of Values.

Payment will be mailed to the Contractor within 30 days of the date that the Architect receives an approved Pay Application without errors, omissions, or unapproved work or materials. Contractor shall not make advanced payment to suppliers for material or equipment which have not been delivered and stored at the site, except with the Owner's prior approval. Equipment or Material that is requested as stored material and not yet delivered to the site will require a Certificate of Insurance and photographs of the material to be submitted with the Pay Application before payment will be made. Payments that are due and unpaid under the Contract shall bear interest from the date payment is due at the legal rate prevailing in Montgomery County, Tennessee at the time the payment is due.

Retainage will not be required on this Project.

The Owner reserves the right to withhold payments for accrued and documented Liquidated Damages, or for projected Liquidated Damages, for inexcusable delays in the completion of work.

ARTICLE 7. CONTRACT DOCUMENTS. The Contract shall consist of the following component parts:

- a. Change Orders and other formal modifications made after execution of this agreement.
- b. This Agreement.
- c. Addendums, with those of later date having precedence over those of earlier date.
- d. Special Conditions.
- e. Supplemental General Conditions.
- f. General Conditions.
- g. Division 1 of the Specifications.
- h. Plans & Drawings with enlarged Drawings taking precedence over smaller scaled Drawings.
- i. Technical Specifications.
- j. Other documents specifically enumerated in the Agreement as part of the Contract Documents.

This Instrument, together with the other documents enumerated in this Article 7, which said other documents are as fully a part of the Contract as if hereto attached or herein repeated, form the Contract. In the event that any provision of any component part of this Contract conflicts with any provision of any other component part, the provision of the component part first enumerated in this Article 7 shall govern, except as otherwise specifically stated. The various provisions in Addendum shall be construed in order of preference of the component part of the Contract which each modifies.

Insurance shall be provided by the Contractor as required in the CONTRACTOR AND/OR SUBCONTRACTOR(S) INSURANCE REQUIREMENTS further detailed in the bidding document.

ARTICLE 8. TERMINATION OR SUSPENSION. The Contract may be terminated by the Owner or Contractor as provided in the General Conditions. The Work may be suspended by the Owner as provided in the General Conditions.

IN WITNESS THEREOF, the parties hereto have caused this instrument to be executed in two (2) original counterparts as of the day and year first written above.

SIGNATURE: _____

PRINT: _____

TITLE: _____

DATE: _____

**MONTGOMERY COUNTY
GOVERNMENT
1 Millennium Plaza, Suite 205
Clarksville, Tennessee 37040**

By: _____
Mayor Wes Golden
County Mayor

DATE: _____

CERTIFICATIONS

I, _____ certify that I am the
_____ of the Company named as Contractor herein; that
_____, who signed this Contract on behalf of the
Contractor, was then _____ of said Company; that said Contract was duly signed
for and in behalf of said Company by authority of its governing body, and is within the scope of its Company powers.

PRINCIPAL OWNER(s) _____

MAIN OFFICE ADDRESS (if different) _____

CONTRACTOR AND/OR SUBCONTRACTOR(S)
INSURANCE REQUIREMENTS
FOR MONTGOMERY COUNTY GOVERNMENT (Hereby known as Owner)

Insurance Coverage

In accordance with the Contract, Insurance will be provided by the Contractor and/or Subcontractor with the following minimum coverage. If the Contractor has any Subcontractors on site; any and all Subcontractors will be required to follow these same Insurance Requirements. The Contractor will be responsible for acquiring all Subcontractors documentation to meet these Insurance Requirements. This responsibility will cease upon the completion of the contract. All Insurance policies must be from insurers authorized to conduct business within the state(s) where the project is located. **The insurance companies must also have a Best's Rating of at least "A-" and a financial size of "Class VII" or better in the latest edition of Best's Insurance Reports.**

The Contractor will be required to show evidence of automobile and commercial general liability insurance, workers compensation insurance and professional liability (where applicable), which is acceptable to the Owner. The commercial general liability insurance policies shall name the Montgomery County Government, its agent's representatives, officers, and employees as Additional Insured. Both bodily injury and property damage insurance must be on an occurrence basis and said policies shall provide primary coverage to the full limits of liability stated in the declarations. The Owner insurance shall be in excess only. Upon request of the Owner the Contractor shall submit all insurance policies for review. The certificates of insurance for the Contractor shall reference the project of contract to which they apply.

The Contractor's insurance policies should be endorsed to amend the aggregate limits of liability to apply to this project separately, and naming Montgomery County Government as Additional Insured. To the extent that the Contractor utilizes deductibles or self-insured retentions in conjunction with the insurance coverage required herein, all such deductibles and self-insured retentions shall be for the account and expense of the Contractor.

Any Fees, Fines, and/or Regulatory Costs as a result of the Contractors work, or implied work shall be the sole responsibility of the Contractor.

The Contractor is to provide the above coverage and have the Policy amended or endorsed to the Contractor with the following endorsements:

Each policy shall provide a thirty (30) days written notice of cancellation expiration termination or change of policy to the Owner. The Contractor shall submit evidence of the coverage on standard ACCORD forms with endorsements. Insurances which expire before Contractor's work is accepted by Owner shall be renewed and evidence of such renewal shall be submitted to the Owner prior to the expiration date.

The policies should be endorsed with a Waiver of Subrogation for General Liability to benefit of the Owner.

Other insurance as required by state law.

Within (10) ten days of receipt of this contract, before work under this agreement is begun and prior to being allowed on the jobsite, the Contractor shall furnish certificates of insurance acceptable to the Owner.

The amounts and types of such insurance shall be not less than the following:

A. Workers Compensation and Employer's Liability

Workers Compensation and Employer's Liability	\$500,000	Each Accident
Workers Compensation and Employer's Liability	\$500,000	Disease Policy Limit
Workers Compensation and Employer's Liability	\$500,000	Disease Each Employee

Workers Compensation and Employer's Liability insurance as required by the State of TN for all contractor's employees and those of its subcontractors engaged in work under the contract.

B. General Liability – Occurrence based only

General Liability	\$2,000,000	General Aggregate
General Liability	\$2,000,000	Products Comp/Ops Agg
General Liability	\$1,000,000	Personal & Advertising Inj
General Liability	\$1,000,000	Each Occurrence
General Liability	\$ 50,000	Fire Damage
General Liability	\$ 5,000	Medical Payments

C. Automobile Liability

Automobile Liability on all self-propelled vehicles
Whether owned, non-owned, or hired \$1,000,000 Combine Single Limit BI/PD

D. Pollution Coverage

Pollution Coverage	\$1,000,000	Each Pollution Condition
(If so stated in the contract)	\$2,000,000	General Aggregate

Contractor shall provide third party pollution liability insurance coverage with minimum limits of \$1,000,000 per occurrence and \$2,000,000 aggregate. The insurance shall name the Owner as additional insureds.

Asbestos Coverage	\$1,000,000	Each Occurrence
(If so stated in the contract)		

E. Professional Liability

Professional Liability Insurance	\$1,000,000	Defense Outside the Limits
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If the contract requires professional services, coverage shall be provided with a minimum limit of \$1,000,000 per claim to cover negligent acts errors or omissions arising out of Professional Services under this contract.

F. Property Insurance

Builders Risk. If the contract involves new construction or major renovation, the contractor shall purchase and maintain insurance for property upon the work site in the amount of the full replacement cost thereof. The insurance shall include the interests of the Owner. The Builders Risk policy shall be written on an "all risk" open peril or special cause of loss policy form.

Flood Insurance. It is the responsibility of the Contractor to assess the project location using the latest Federal Emergency Management Agency's flood zone data and to obtain the appropriate flood policies if the work site is located in a flood zone for the duration of the contract.

Within (10) ten days of receipt of this contract and before Subcontractor's work under this agreement is begun and prior to being allowed on the jobsite, the Subcontractor shall furnish certificates of insurance acceptable to the Contractor. This information should be forwarded to the Prime Contractor.

Please direct questions about these requirements to:

Nicholas B. Powell, P.E.
Chief County Engineer
Montgomery County Engineering
1 Millennium Plaza, Suite 401
Clarksville, TN 37040
Office: 931-553-5113
nbpowell@mcgtn.net

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CERTIFICATE OF OWNER'S ATTORNEY
(To be included at the discretion of the County Engineer)

I, the undersigned _____, the duly authorized and acting legal representative for **Montgomery County Government** do hereby certify as follows:

I have examined the attached contract(s) and surety bonds and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements has been duly executed by the proper parties thereto acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions, and provisions thereof.

Signature: _____

Date: _____

FORM OF PRIME CONTRACTOR NON-COLLUSIVE AFFIDAVIT

State of _____

County of _____

_____, being first duly sworn, disposes and says:

That he is _____, (a partner or Officer of the firm of, etc.) the party making the foregoing proposal or bid, that such proposal or bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived or agreed directly or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affidavit or of any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against Montgomery County Government or any person interested in the proposed contract; and that all statement is said proposal or bid are true.

Signature of:

Bidder, if the bidder is an individual;

Partner, if bidder is a partnership;

Officer, if bidder is a corporation.

Subscribed and sworn to before me

this _____

day of _____, 2022

My commission expires:

_____, 2022

DRUG-FREE WORKPLACE AFFIDAVIT

I, _____ of _____ ,
(Printed name) (Company Name)

hereby state that, as an employer, I have adopted a drug-free workplace policy which meets the criteria set forth by the Tennessee Department of Labor and Workforce Development.

Said drug-free workplace program is in compliance with the Tennessee Drug-free Workplace Act, T.C.A. §50-9-101 through 50-9-113 that became effective January 1, 2001.

Signature

Date

STATEMENT

I, _____ of _____ ,
(Printed name) (Company Name)

hereby state that I employ less than five (5) employees and I am not required to submit the Drug-Free Workplace Affidavit.

Signature

Date

GENERAL INDEMNITY

I, _____, hereby agree to indemnify, defend, and hold harmless Montgomery County Government, its appointed or elected officials, employees, and agents and each of them for any and all suits, actions, legal or administrative proceedings, claims, demands, damages, liabilities, attorney fees, costs and expenses of whatsoever kind or nature arising out of my contractor's obligations and operations provided in this contract.

I acknowledge that I have familiarized myself with the subject property and Bid Documents, and I release Montgomery County Government from any and all claims that may result from the activity associated with this contract.

(Applicant's Signature)

(Date)

Title VI Contract Assurance

It is the policy of Montgomery County Government not to discriminate on the basis of race, color, national origin, age, sex, or disability in its hiring and employment practices; or in admission to, access to, or operation of its programs, services, and activities. With regard to all aspects of this contract, Contractor certifies and warrants it will comply with this policy.

Please Print:

Contractor's Name

Street Address

City

State

Zip

Contractor's Phone Number

I, _____, hereby agree to abide by the Title VI Regulations.

Signature

Date

For Title VI compliance, we ask for voluntary disclosure of the following information:

Ownership Type (please check all that apply):

- () African American Owned Business
- () Women Minority Owned Business
- () Female Owned Business
- () Native American Owned Business
- () Hispanic Owned Business
- () Asian Owned Business
- () Disabled Owned Business
- () All Others



MONTGOMERY COUNTY

T E N N E S S E E

P U R C H A S I N G

IRAN DIVESTMENT ACT

Certification of Non-inclusion

NOTICE: Pursuant to the Iran Divestment Act, Tenn. Code Ann. 12-12-106 requires the State of Tennessee Chief Procurement Officer to publish, using creditable information freely available to the public, a list of persons it determines engage in investment activities in Iran, as described in 12-12-105. Inclusion on this list makes a person ineligible to contract with the State of Tennessee; if a person ceases its engagement in investment activities in Iran, it may be removed from the list. A list of entities ineligible to contract in the State of Tennessee Department of General Services or any political subdivision of the State may be found here:

[https://www.tn.gov/assets/entities/generalservices/cpo/attachments/List of persons pursuant to Tenn. Code Ann. 12-12-106, Iran Divestment Act-July.pdf](https://www.tn.gov/assets/entities/generalservices/cpo/attachments/List%20of%20persons%20pursuant%20to%20Tenn.%20Code%20Ann.%2012-12-106,%20Iran%20Divestment%20Act-July.pdf)

By submission of this bid/proposal, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to T.C.A. 12-12-106.

Vendor Name (Printed)	Address
By (Authorized Signature)	Date Executed
<i>Printed Name and Title of Person Signing</i>	

350 PAGEANT LANE SUITE 101E • CLARKSVILLE TENNESSEE 37040

PHONE 931.648.5720 • FAX 931.553.5151

FORM OF STATEMENT OF BIDDER'S CONSTRUCTION EXPERIENCE

STATEMENT OF BIDDER'S CONSTRUCTION EXPERIENCE (GENERAL CONTRACTOR)

****This form is only to be completed at the specific request of Montgomery County Government****

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, add separate sheets of items marked (*).

Name of Bidder _____

Permanent main office address _____

When organized _____

Where incorporated _____

How many years have you been engaged in the contracting business under your present firm name?

* Contracts on hand: _____ (Schedule these, showing gross amount of each contract and the appropriate dates of completion).

* General character of work performed by your company.

Have you ever failed to complete any work awarded to you?

Have you ever defaulted on a contract?

* List the more important structures recently constructed by your company, stating approximate cost for each, and the month and year completed.

* List your major equipment available for this contract.

Credit Available \$ _____

Banking Reference _____

* Experience in construction work similar in importance to this project.

Will you, upon request, fill out a detailed financial statement and/or furnish any other information that may be required by Montgomery County Government? YES / NO

The undersigned hereby authorizes and requests any person, firm or corporation to furnish any information requested by the Montgomery County Government in verification of the recitals comprising this Statement of Bidder's Experience.

Dated at _____ this _____ day of _____, 2022

(Name of Bidder)

BY: _____

TITLE: _____

State of _____

County of _____

_____, being duly sworn disposes and says that he is

_____ of _____
(Name of Organization)

and that the answers to the foregoing questions and all statements therein are true and correct.

Sworn to before me this _____ day of _____, 2022

My commission expires: _____

(Bidder may submit additional information if desired.)

NON-COLLUSIVE AFFIDAVIT OF SUBCONTRACTOR

State of _____

County of _____

_____, being first duly sworn, disposes and says:

That he/she is _____, (a partner or officer of the firm of, etc.) the party hereinafter referred to as the "subcontractor"; that he/she is fully informed respecting the preparation and contents of the subcontractor's Proposal submitted by the subcontractor to _____ the contractor for certain work in connection with the _____.

That such proposal or bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived or agreed directly or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affidavit or of any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against the Montgomery County Government or any person interested in the proposed contract; and that all statements in said proposal or bid are true, and that the price or prices quoted in the attached bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employers, or parties in interest, including this affidavit.

Signature of Subcontractor:

Bidder, if an individual;

Partner, if a partnership;

Officer, if a corporation.

Subscribed and sworn to before me
this _____
day of _____, 2022

My commission expires: _____, 2022

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COVID-19 Checklist for Employers and Employees

Know the Symptoms of COVID-19

- Coughing, fever, shortness of breath, and difficulty breathing.
- Early symptoms may include chills, body aches, sore throat, headache, diarrhea, nausea/vomiting, and runny nose. If you develop a fever and symptoms of respiratory illness, **DO NOT GO TO WORK** and call your health-care provider immediately. Do the same thing if you come into close contact with someone showing these symptoms.

Employer Responsibilities

- Develop a COVID-19 Exposure Action Plan.
- Conduct safety meetings (toolbox talks) by phone if possible. If not, instruct employees to maintain 6-feet between each other. The foreman/supervisor will track attendance verbally rather than having employees sign an attendance sheet.
- Access to the job site and work trailer will be limited to only those necessary for the work.
- All visitors will be pre-screened to ensure they are not exhibiting symptoms.
- Employees, contractors, and visitors will be asked to leave the jobsite and return home if they are showing symptoms.
- Provide hand sanitizer and maintain Safety Data Sheets of all disinfectants used on site.
- Provide protective equipment (PPE) to any employees assigned cleaning/disinfecting tasks.
- Talk with business partners about your response plans. Share best practices with other businesses in your communities (especially those in your supply chain), chambers of commerce, and associations to improve community response efforts.

Employee Responsibilities

- Become familiar with the Exposure Action Plan and follow all elements of the Plan.
- Practice good hygiene: wash hands with soap and water for at least 20 seconds. If these are not available, use alcohol-based hand rub with at least 60% alcohol. Avoid touching your face, eyes, food, etc. with unwashed hands.

Cleaning/Disinfecting Job Sites and Other Protective Measures

- Clean and disinfect frequently used tools and equipment on a regular basis. This includes other elements of the jobsite where possible. Employees should regularly do the same in their assigned work areas.
- Clean shared spaces such as trailers and break/lunchrooms at least once per day.
- Disinfect shared surfaces (door handles, machinery controls, etc.) on a regular basis.
- Avoid sharing tools with co-workers. If not, disinfect before and after each use.
- Arrange for any portable job site toilets be cleaned by the leasing company at least twice per week and disinfected on the inside.
- Trash collected from the jobsite must be changed frequently by someone wearing gloves.

Personal Protective Equipment and Alternate Work Practice Controls

- Provide and wear the proper PPE.
- Keep the dust down by using engineering and work practice controls, specifically through the use of water delivery and dust collection systems.

COVID-19 Toolbox Talk

What is COVID-19?

The novel coronavirus, COVID-19 is one of seven types of known human coronaviruses. COVID-19, like the MERS and SARS coronaviruses, likely evolved from a virus previously found in animals. The remaining known coronaviruses cause a significant percentage of colds in adults and children, and these are not a serious threat for otherwise healthy adults.

Patients with confirmed COVID-19 infection have reportedly had mild to severe respiratory illness with symptoms such as fever, cough, and shortness of breath.

According to the U.S. Department of Health and Human Services/Centers for Disease Control and Prevention (“CDC”), Chinese authorities identified an outbreak caused by a novel—or new—coronavirus. The virus can cause mild to severe respiratory illness. The outbreak began in Wuhan, Hubei Province, China, and has spread to a growing number of other countries—including the United States.

How is COVID-19 Spread?

COVID-19, like other viruses, can spread between people. Infected people can spread COVID-19 through their respiratory secretions, especially when they cough or sneeze. According to the CDC, spread from person-to-person is most likely among close contacts (about 6 feet). Person-to-person spread is thought to occur mainly *via* respiratory droplets produced when an infected person coughs or sneezes, like how influenza and other respiratory pathogens spread. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. It is currently unclear if a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes.

In assessing potential hazards, employers should consider whether their workers may encounter someone infected with COVID-19 in the course of their duties. Employers should also determine if workers could be exposed to environments (e.g., worksites) or materials (e.g., laboratory samples, waste) contaminated with the virus.

Depending on the work setting, employers may also rely on identification of sick individuals who have signs, symptoms, and/or a history of travel to COVID-19-affected areas that indicate potential infection with the virus, in order to help identify exposure risks for workers and implement appropriate control measures.

There is much more to learn about the transmissibility, severity, and other features associated with COVID-19, and investigations are ongoing.

COVID-19 Prevention and Work Practice Controls:

Worker Responsibilities

- Frequently wash your hands with soap and water for at least 20 seconds. When soap and running water are unavailable, use an alcohol-based hand rub with at least 60% alcohol. Always wash hands that are visibly soiled.
- Cover your mouth and nose with a tissue when you cough or sneeze or use the inside of your elbow.
- Avoid touching your eyes, nose, or mouth with unwashed hands.
- Avoid close contact with people who are sick.
- Employees who have symptoms (i.e., fever, cough, or shortness of breath) should notify their supervisor and stay home—DO NOT GO TO WORK.
- Sick employees should follow [CDC-recommended steps](#). Employees should not return to work until the criteria to [discontinue home isolation](#) are met, in consultation with healthcare providers and state and local health departments.

General Job Site / Office Practices

- Clean AND disinfect frequently touched objects and surfaces such as workstations, keyboards, telephones, handrails, and doorknobs. Dirty surfaces can be cleaned with soap and water prior to disinfection. To disinfect, use [products that meet EPA's criteria for use against SARS-CoV-2external icon](#), the cause of COVID-19, and are appropriate for the surface.
- Avoid using other employees' phones, desks, offices, or other work tools and equipment, when possible. If necessary, clean and disinfect them before and after use.
- Clean and disinfect frequently used tools and equipment on a regular basis.
 - This includes other elements of the jobsite where possible.
 - Employees should regularly do the same in their assigned work areas.
- Clean shared spaces such as trailers and break/lunchrooms at least once per day.
- Disinfect shared surfaces (door handles, machinery controls, etc.) on a regular basis.
- Avoid sharing tools with co-workers if it can be avoided. If not, disinfect before and after each use.
- Arrange for any portable job site toilets to be cleaned by the leasing company at least twice per week and disinfected on the inside.
- Any trash collected from the jobsite must be changed frequently by someone wearing gloves.

- In addition to regular PPE for workers engaged in various tasks (fall protection, hard hats, hearing protection), employers will also provide:
 - Gloves: Gloves should be worn at all times while on-site. The type of glove worn should be appropriate to the task. If gloves are not typically required for the task, then any type of glove is acceptable, including latex gloves. Gloves should not be shared if at all possible.
 - Eye protection: Eye protection should be worn at all times while on-site.
- Some employees may be required to wear face coverings, including in those situations where (1) it is mandated by state or local rule, or (2) employees must work in proximity of six (6) feet from other employees. A face covering is a cloth, bandana, or other type of material that covers a person's nose and mouth. The CDC lists five criteria for "cloth face coverings": the face covering should: fit snugly but comfortably against the side of the face; be secured with ties or ear loops; include multiple layers of fabric; allow for breathing without restriction; and be able to be laundered and machine-dried without damage or change to shape. Use of a face covering is not a substitute for other workplace preventative techniques that are outlined in this Plan.

COVID-19 Safety Plan - Compliance Affidavit

The undersigned Contractor certifies the following under the pains and penalties of perjury:

The Contractor hereby acknowledges the County's concerns regarding safety at the Project worksite due to the COVID-19 pandemic. The Contractor agrees that it shall conduct its operations in strict compliance with all applicable regulations, guidelines, and requirements imposed by the Center for Disease Control ("CDC"), Occupational Safety and Health Administration ("OSHA"), and that it will comply with the State of Tennessee - The Tennessee Pledge, as well as Industry Best Practices involving COVID-19 construction safety. All associated Executive Orders issued by the President of the United States or the Governor of Tennessee, as well as Emergency Orders issued by the Mayor of Montgomery County must be considered and adhered to in Contractor operations.

The Contractor understands that it is the Contractor's responsibility to develop, maintain, and follow a written project-specific COVID-19 Safety Plan specifying how it will meet its obligations. The Contractor acknowledges that it is also responsible for consulting with guidance provided by the CDC, OSHA, State of Tennessee, and Industry Best Practices when crafting its COVID-19 Safety Plans.

The Contractor certifies that it has created and implemented a COVID-19 Safety Plan for the site subject to this project that complies with, and will satisfy, all regulations, guidelines, and requirements imposed by the CDC, OSHA, and the State of Tennessee - The Tennessee Pledge that are applicable to the site. Specifically, the Contractor certifies that the COVID-19 Safety Plan for this site achieves each of the Best Practices, or that the plan specifies why a Best Practice is not applicable to the job site. The Contractor also certifies that each Subcontractor, Sub-subcontractor, and other parties that will perform work on the Project worksite will also comply and will satisfy these requirements.

The Contractor agrees that the COVID-19 Safety Plan shall be in place and submitted to the Montgomery County Engineering Department before any work may begin. The Contractor agrees to provide their COVID-19 Safety Plan to all workers on-site. The Contractor understands that the County's acceptance of the Contractor's COVID-19 Safety Plan is not an explicit or implied approval of the measures taken to combat the COVID-19 pandemic by the Contractor.

The Contractor acknowledges and agrees that non-compliance with any of the requirements above, including failure to abide by its own COVID-19 Safety Plan, may result in suspension or termination of work in progress; provided, however that the County reserves the right to allow the Contractor the opportunity to immediately correct or cure violations prior to the County issuing a suspension or termination of work in progress.

The minimum allowable standard for construction crews to work inside an occupied workspace during a time period when local Government Orders require such enforcement for COVID-19 or any Variant will be as outlined below:

- Supervisor/Forman/Superintendent shall ensure that temperature checks have been performed on those who plan to be working on site for the day. No one can have a temperature greater than 100.0 Deg F.
- The employee must answer NO to having ANY of the following symptoms:
 - Fever/Chills
 - Cough
 - Shortness of breath or difficulty breathing
 - Fatigue
 - Muscle/body aches
 - Headache
 - New loss of taste or smell
 - Sore throat
 - Nausea/Vomiting
 - Diarrhea
- Employees must wear an approved mask while working inside the building at all times. Neck gator type masks are not approved due to the thin single layer of material.
- If local Government Orders do not require such measures, then the building occupant may set the minimum standard for what will be required at the pre-construction meeting or at any other time throughout the construction phase if infection rates warrant such requests.

See attached "COVID-19 Checklist for Employers and Employees" and "COVID-19 Toolbox Talk" for additional information and guidance.

Signature of Authorized Representative

Type/Print Name of Construction Company

Type/Print Representative's Name

Date

Type/Print Title and Contact Info

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NOTICE TO PROCEED

To: _____

Date: _____
Project: _____

You are hereby notified to commence WORK in accordance with the Agreement dated _____, 2022, on or before _____, 2022, and you are to complete the WORK within **90** consecutive calendar days thereafter. The date of completion of all WORK is therefore _____, 2023.

Owner **Montgomery County Government**

By _____

Title Chief County Engineer

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledge by:

Signature _____

Print _____

Title _____

Date _____

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SPECIAL CONDITIONS

1 RESPONSIBILITIES OF CONTRACTOR

Except as otherwise specifically stated in the Contract Documents and Technical Specifications, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, heat, power, transportation, superintendence, temporary construction of every nature, charges, levies, fees or other expenses and all other services and facilities of every nature whatsoever necessary for the performance of the Contract and to deliver all improvements embraced in this Contract in every respect within the specified time.

2 POST BID COMMUNICATIONS

- A. All notices, demands, requests, instructions, approvals, proposals and claims must be in writing.
- B. Any notice given or demand made by either party to the Contract shall be sufficiently given if delivered at the office of the other party, or deposited in the United States mail in a sealed, postage-prepaid envelope, or e-mailed with return receipt requested.
- C. All papers required to be delivered to Montgomery County Government shall, unless otherwise specified in writing to the Contractor, be delivered to the Montgomery County Government, Office of Engineering, 1 Millennium Plaza, Suite 401, Clarksville, TN 37040, and any notice to or demand upon Montgomery County or to such other address as Montgomery County may subsequently specify in writing to the Contractor for such purpose.

3 PROJECT SIGN: Not Required.

4 LOCATION OF EXISTING UNDERGROUND FACILITIES

The locations of existing piping and underground utilities such as gas mains, water mains, sanitary sewer lines, electric duct line, etc., are not known. The Contractor shall, by whatever means he deems necessary, determine that no such underground utilities will be in any way disturbed or damaged by his work. The Agency shall assume no responsibility for the location of such underground utilities.

5 PUBLIC UTILITIES AND PUBLIC PROPERTY TO BE CHANGED

In case it is necessary to change or move the property of any owner of a public utility, such owner will, upon proper application by the Contractor, be notified by the Engineer to change or move such property within a specified time, and the contractor shall not interfere with such property until ordered to do so by the Engineer. The right is reserved to the owner of public utilities to enter upon the limits of the Contractor for the purpose of making such repairs or changes of their property that may be made necessary by performance of the contract. The County Government shall have the privilege of entering upon the limits of the Contract for the purpose of repairing or relaying sewer and water lines and appurtenances, repairing culverts or storm drains, and for making other repairs, changes or extensions to any of its property.

6 DISPOSAL

The CONTRACTOR shall exercise care and take all precautions in the removal and handling of the existing building materials designated for demolition. All debris, crates, cartons, etc., resulting from this work shall not be allowed to accumulate and shall be removed from the project site at the end of each workday.

It shall be the CONTRACTOR'S responsibility to comply with all requirements of OSHA, and local authorities.

7 EXCAVATION IN PUBLIC STREETS AND PROJECT LIMITS

N/A.

8 CONTRACT DOCUMENTS AND DRAWINGS

Montgomery County Government will furnish the Contractor, one (1) copy of the Contract Documents, including General and Special Conditions, Technical Specifications and 11 x17 drawings. Additional copies requested by the Contractor will be furnished at cost or may be produced by the contractor from the PDF files provided.

9 MAINTAINING OPERATIONS OF THE FACILITY

The work under this Contract shall be scheduled and conducted in such a manner and sequence as to cause the least practicable disruption of operations of the facility. If any disruption of operations of the facility is anticipated by the Contractor, he shall submit a written statement of anticipated disruptions, stating the nature and the estimated duration of the disruption to the Owner. Said work shall not commence until approval is granted by the Owner.

The Contractor shall provide sufficient signs (warning and other signs) and barricades to properly safeguard the public, and in the event this is not done after direct instructions from the Owner, the Agency shall have the right to provide the necessary item and deduct the expense of same from payment due to the Contractor.

10 WORK SCHEDULE

- A. The CONTRACTOR shall furnish and install all necessary equipment and services for organized work to start no later than seven (7) calendar days after the date of the Notice to Proceed.
- B. The CONTRACTOR shall prepare a monthly progress schedule to be discussed at the monthly progress update meetings. Working hours may be controlled by the contractor, but any work requiring testing services or observation specifically directed by the Montgomery County Engineer's office, shall be completed during normal working hours: Monday through Friday, 7:30 AM to 4:30 PM.

11 STORAGE OF CONTRACTOR'S EQUIPMENT

- A. Sites available for storage of material and equipment, job trailers, etc. shall be designated by, and coordinated with, Montgomery County Engineering Office.
- B. Storage and protection of material and equipment shall be solely the responsibility of the CONTRACTOR. CONTRACTOR to utilize the staging area or space available as indicated in the plans for staging and storage. If a staging area is not specifically identified in the plans, then an area will be selected by the Montgomery County Engineering Office.

12 TERMINATION IN BEST INTEREST OF LOCAL PUBLIC AGENCY

Montgomery County Government may terminate this contract at any time at its sole discretion for any reason it feels is in its best interest by a notice in writing from the Montgomery County Government.

13 SAMPLES

Samples shall be submitted and approved for all materials proposed for use in complying with these Specifications. No work shall proceed until samples of all materials have been submitted and approved.

14 WARRANTY-GUARANTY

- A. The right is reserved by Montgomery County Government to accept or reject any part of the installation which does not successfully meet the requirements as set out in these Specifications. The CONTRACTOR shall and hereby does warranty that all work installed under these Specifications shall be free from defects in workmanship and materials for a period of one (1) year from the date of Final Acceptance. The above parties further agree that they will repair or replace any defective materials or workmanship which becomes defective within the term of the warranty-guaranty.
- B. An additional manufacturer's guarantee shall be required for certain products as listed in the specifications.

15 STANDARDS

Where the Specifications call for a named product, or one that meets or exceeds it in quality, the decision of the Design Team & County as to the acceptability of any product offered by the CONTRACTOR shall be binding.

16 MATERIAL TESTING

There will not be any material testing on this Project.

17 Weather Days

There will not be any extensions for weather on this Project.

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GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

General Work

The General Conditions for the project are those contained in

AIA Document A201 2017 Edition

(Number of pages may vary depending on commercial printing or electronic version)

It is the Owner's preference that this document be used as a marker in bidding documents, and the entire, actual AIA document is included in Contract Documents; however, if the entire, actual AIA document is not included within the contract, then this document incorporates its provisions verbatim by reference, the same as if included bodily herein. The document shall be amended by the Supplementary Conditions that follows.

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SUPPLEMENTARY CONDITIONS

MODIFICATIONS TO AIA DOCUMENT A 201 - 2017 EDITION

The following supplements modify, change, delete from or add to the "General Conditions of the Contract for Construction", AIA Document A 201, 2017 Edition. Where any Article of the General Conditions is modified or any Paragraph, Subparagraph of Clause thereof is modified or deleted by these Supplementary Conditions the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.

Article 1: Contract Documents

Supplement to Article 1.2:

- 1.2.1.1 In case of discrepancies or conflicts between any of the Contractor Documents, the various documents or parts of same shall take precedence in the order listed as follows:
1. Change Orders and other formal modifications made after the execution of the Agreement.
 2. The Agreement.
 3. The Addenda, with those of later date having precedence over those of earlier date.
 4. The Owner's Special Conditions.
 5. The Supplemental General Conditions.
 6. The A.I.A General Conditions.
 7. Division 1 of the Specifications.
 8. Plans & Drawings with enlarged Drawings taking precedence over smaller scaled Drawings.
 9. Technical Specifications.
 10. Other documents specifically enumerated in the Agreement as part of the Contract Documents.

All such discrepancies and/or conflicts shall be submitted in writing to the Architect for clarification before the Contractor submits his bid. This should be done at least four (4) days before bids are opened, so that an addendum may be issued. Should discrepancies and/or conflicts be discovered after the work has started, the Contractor must report the same to the Architect immediately, and no work connected with discrepancies and/or conflicts shall be started; or if started, shall be immediately stopped until the Contractor and the Architect agree on the clarification thereof. In cases of conflicts which are unreported, but must obviously have been observed by the Contractor as he prepared his bid, the more restricting, the more extensive and the more expensive the process or detail shall be assumed to be required.

- 1.2.1.2 Where on any of the drawings a portion of the work is drawn out and the remainder is indicated in outline, the parts drawn out shall apply also to all other like portions of the

work. Where ornament or other detail is indicated by starting only, such detail shall be continued throughout the course or parts in which it occurs and shall also apply to all other similar parts of the work, unless otherwise indicated.

In case of difference between small and large scale drawings, the larger scale drawings shall take precedence.

Supplement to Article 1.7 and 1.8:

Delete Articles 1.7 and 1.8 of the AIA Document A201, 2017 Edition, in their entirety.

Article 2: Owner

Revision to Article 2.3

- 2.3.3 If the employment of the Architect terminates, the Owner may employ a successor to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect.

Article 3: Contractor

Supplement to Article 3.3:

- 3.3.4 Coordination: The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operation of all trades, sub-contractors, or material men engaged upon the work. He shall be prepared to guarantee to each of his sub-contractors the dimensions which they may require for the fitting of their work to all surrounding work and shall do, or cause his agents to do, all cutting, fitting, adjusting and patching necessary to make the several parts of the work come together and to fit the work of other contractors.

Supplement to Article 3.4:

- 3.4.2.1 Substitution requests should be made during the bidding phase as a standard practice for proper review and approval. If a product substitution request was not made during the bidding phase and the Contract has been executed, the Owner and the Architect will consider a formal request for the substitution of products in place of those specified only under the conditions set forth in the General Requirements (Division 1 of the Specifications). An approval to any such substitution request is at the discretion of the Owner and the Architect. By making requests for substitutions, the Contractor:
- .1 represents that he has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified;
 - .2 represents that he will provide the same Warranty for the substitute that he would for that specified;
 - .3 certifies that the cost data presented is complete and includes all related costs, and excludes the Architect's redesign costs, and waives all claims for additional costs related to the substitution which subsequently become apparent; and
 - .4 will coordinate the installation of the accepted substitute, making such changes as may be required for the Work to be complete in all respects.

- 3.4.4 General Contractor shall disclose the existence and extent of financial interests, whether direct or indirect, he has in sub-contractors and material suppliers which he may propose for the project.

Article 4: Administration of the Contract.

Supplement to Article 4.2:

- 4.2.2.1 The Owner is entitled to reimbursement from the Contractor for amounts paid to the Architect for site visits made necessary by the fault of the Contractor or by defects and deficiencies in the Work.
- 4.2.4.1 Notwithstanding anything to the contrary, the Owner has not relinquished its right to communicate directly with the Architect's consultants, Contractor's subcontractors, sub-subcontractors, suppliers, or other parties involved in the project. However, before action is taken on any such communication, the Architect and Contractor shall be notified of such communication. The Owner may communicate directly with the Contractor and Subcontractors and advise the Architect of those communications.
- (Replace in its entirety with the following statement):
- 4.2.6 The Architect and the Owner have authority to reject Work that does not conform to the Contract Documents. Whenever the Architect or Owner considers it necessary or advisable, the Architect or the Owner will have authority to require inspection or testing of the Work in accordance with Sections 13.5.2 and 13.5.3, whether or not such Work is fabricated, installed, or completed. However, neither this authority shall give rise to a duty or responsibility of the Architect or the Owner, nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect or the Owner to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons or entities performing portions of the Work.
- (Replace in its entirety with the following statement):
- 4.2.9 The Architect and the Owner will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; the Architect or Owner shall issue Certificates of Substantial Completion pursuant to Section 9.8; the Architect shall receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and the Architect shall issue a final Certificate for Payment pursuant to section 9.10.

Article 7: Changes in the Work

Supplement to Article 7.3:

- 7.3.4 In the first sentence, delete the words "or if no such amount is set forth in the Agreement, a reasonable amount" and substitute it with " or if no such amount is set forth in the Agreement an allowance in accordance with clauses 7.3.4.6.1 through 7.3.4.6.7 below."
Add the following Subparagraph 7.3.4.6.1 to 7.3.4.6.7:
- 7.3.4.6 In Subparagraph 7.3.4: The allowance for the combined overhead and profit included in the total cost to the Owner shall be based on the following schedule:
- .1 For the Contractor, for Work performed by the Contractor's own forces, 15 percent of the cost.

- .2 For the Contractor, for Work performed by the Contractor's Sub-contractor, 5 percent of the amount due the Subcontractor.
- .3 For each Subcontractor or Sub-subcontractor's own forces, 15 percent of the cost.
- .4 For each Subcontractor, for Work performed by the Subcontractor's Sub-subcontractors, 5 percent of the amount due the Sub-subcontractor.
- .5 Cost to which overhead and profit is to apply shall be determined in accordance with Subparagraph 7.3.4.
- .6 In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, materials and Subcontracts on the Company's Letterhead. Labor and materials shall be itemized in the manner prescribed above. Where major cost items are Subcontracts, they shall be itemized also. In no case will a change involving over \$1,000.00 be approved without such itemization.

Article 8: Time

Supplement to Article 8.3

- 8.3.1.1 Any requests for extensions of time due to adverse weather must be accompanied by complete weather reports from the National Weather Bureau indicating precipitation and temperature reading for the job area and time in question. See Special Conditions for the allotted number of weather days that have been built into the contract time.

Article 9: Payments and Completion

Supplement to Article 9.2

- 9.2.1 Schedule of Values shall be provided on AIA form that will be used for Application for Payments in section 9.3. Schedule shall be broken into major divisions as a minimum and shall be further separated into labor and materials for all major categories. Architect or Owner may request additional breakouts after review of the Contractor's schedule to best suit the review of monthly pay applications and approvals.
- 9.2.2 Schedule of Values shall be the Contractor's best estimate of the cost to complete each Division or line item of work. Architect and Owner may utilize the Schedule of Values to substantiate the cost of work for elements that may be affected by Change Orders or Construction Change Directives in coordination with unit prices if so required in the Contract.

Supplement to Article 9.5

Add the following clause.

- 9.5.5 Any work required by the Architect including excessive site visitation which shall be required by damages to the work, faulty work or neglect, or delay of Contract completion shall be paid to the Architect by the Owner at the Architect's current hourly rates including reimbursable expenses and costs of consultants. Such payments made

by the Owner and attributable to damage or delay of Contract shall be deducted from any amounts owing to the Contractor. The Architect shall advise the Contractor in writing of the occurrence of such charges to the work within seven (7) days of the occurrence of such charges.

Supplement to Article 9.6:

Add the following to this paragraph:

- 9.6.2 Starting with the second Application for Payment, the Contractor shall verify, in writing to the Owner and Architect, that he has paid all subcontractors and major material suppliers those respective amounts drawn on the previous payments for their respective areas.

Supplement to Article 9.6:

N/A – Retainage Not Required.

Supplement to Article 9.8:

- 9.8.3.1 The Architect, Sub-consultants, and Owner will perform no more than two (2) inspections to determine whether the Work or a designated portion thereof has attained Substantial Completion in accordance with the Contract Documents. The Owner is entitled to reimbursement from the Contractor for amounts paid to the Architects or Sub-Consultants for additional inspections.

- 9.8.5 Add the following sentence to the end of the paragraph:

The payment shall be sufficient to increase the total payments to 98 percent of the Contract Sum, less such amounts as the Architect shall determine for incomplete Work and unsettled Claims.

Supplement to Article 9.10

- 9.10.1.1 The Architect, Sub-consultants, and Owner will perform no more than two (2) inspections to determine whether the Work or a designated portion thereof has attained Final Completion in accordance with the Contract Documents. The Owner is entitled to reimbursement from the Contractor for amounts paid to the Architects or Sub-Consultants for additional inspections.

Supplement to Article 9.10.3

- 9.10.3.1 Final payment will not be approved until all required Record Drawings/As-Built Drawings, Operating Manuals, Guarantees, Equipment Warranties, and Bonds have been delivered to the Architect and Owner for review & filing.

Article 10: Protection of Persons and Property

Supplement to Article 10.2

- 10.2.4.1 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary, the Contractor shall give the Owner reasonable advance notice.

Add the following clauses:

10.2.7.1 Construction Loads:

Structures are designed to support loads of completed work. No provision has been included for unusual stresses or loads imposed by construction operations or equipment. If Contractor desires to place loads in excess of design loads on part of structure, he shall prepare and submit, drawings and stress calculations prepared by a registered professional structural engineer of new work indicated and substantiating the proposed method for supporting materials, scaffolding, machines, and similar heavy or vibrating pieces.

10.2.7.2 The cost of engineering checking and additional inspection, if required of the Architect or his Consultants, and additional labor and materials required to support loads other than those encompassed in the original design shall be included in the Lump Sum Price bid in proposal for entire work. Do not load structures in excess of design loads prior to submission and approval of necessary drawings and calculations.

10.2.9 Existing Utility Lines:

10.2.9.1 The Contractor shall carefully examine the premises for any visible utility lines, including appurtenances of same, which are not indicated on the drawings, but which, in their present locations and positions, will interfere in any way with any of the work called for on the drawings, and/or specifications. The Contractor shall arrange and pay for, without added cost to the Owner, the removal or rerouting of such lines. Rerouting of lines shall be done so as not to interfere with the work and shall be subject to the Architect's approval.

10.2.9.2 In general, the work outlined in this paragraph shall be done by the trade in whose jurisdiction it falls, but each trade shall cooperate fully so that the work involved shall proceed in an orderly manner.

10.2.9.3 In doing all work under this Contract, the Contractor shall carefully protect all existing lines, which are to be maintained temporarily in service or which are not to be changed, from any damage or dislocation and shall make good, at his own expense, any damage done to such lines.

10.2.9.4 In doing work under this Contract, it is possible that the Contractor may encounter unknown underground utility lines. Such lines may be lines which have been or will be abandoned, inactive lines which may be desired to be preserved for possible future use or active lines which must be preserved and either relocated or replaced.

10.2.9.5 Should the Contractor encounter any such unknown lines, he shall at once notify the Architect and Owner's Engineer, who will examine all such lines to determine whether they have been, or may be abandoned or shall be preserved. The Contractor shall assist the Owner's Engineer by making tests or otherwise, as the Architect/Engineer deems necessary, in determining the character of the lines and in the case of lines to be preserved, how best to care for them.

10.2.9.6 If the lines are found to have been, or may be abandoned, the Contractor shall remove same to the extent necessary without extra cost to the Owner.

10.2.9.7 If it is found desirable or necessary to preserve the lines, they shall be capped off, relocated or otherwise cared for as directed by the Architects. In general, they shall be

done by the trade having jurisdiction, but all Contractors shall fully cooperate in such work.

Article 11: Contractor's Insurance and Bonds

Supplement to Article 11.1.1

- 11.1.1.1 Insurance requirements shall match those listed in the document labeled "Contractor and/or Subcontractor(s) Insurance Requirement for Montgomery County Government.

Supplement to Article 11.1.2

- 11.1.2.1 The Contractor shall deliver the required bonds to the Owner prior to the Pre-Construction meeting & prior to signing the agreement.
- 11.1.2.2 The Contractor shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.

Supplement to Article 11.2: Delete the following Articles of the AIA A201 2017 Edition in their entirety:

Delete Articles 11.2.1, 11.2.2, and 11.2.3.

Supplement to Article 11.3: Delete the following Articles of the AIA A201 2017 Edition in their entirety:

Delete Articles 11.3.1 and 11.3.2

Supplement to Article 12:

- 12.2.2.4 Upon request by the Owner and prior to the expiration of one year from the date of Substantial Completion, the Architect will conduct and the Contractor shall attend a meeting with the Owner to review the facility operations and performance.

Article 15: Claims and Disputes

Delete the following Articles of the AIA A201 2017 Edition in their entirety:

Delete Articles 15.2.6, 15.2.6.1, 15.3.1, 15.3.2, 15.3.3, 15.3.4, 15.4.1, 15.4.1.1, 15.4.2, 15.4.3, 15.4.4.1, 15.4.4.2, & 15.4.4.3

SECTION 01 11 00 - SUMMARY OF WORK

PART 1 – GENERAL

1.1 WORK COVERED BY THE CONTRACT DOCUMENTS

- A. Project identification: Adult Probation Office
 - 1. Project Location: 350 Pageant Lane, Suite 502 Clarksville, TN 37043
 - 2. Owner: The County of Montgomery in the State of Tennessee.
- B. Architect Identification: The Contract Documents, dated August 23, 2022, were prepared for the Project by Douglas A. Jones, Architect, Montgomery County Engineering, 1 Millennium Plaza, Suite 401, Clarksville, Tennessee 37040.
- C. Briefly, and without force upon the Contract the work is generally as follows:
 - 1. The Scope of Work for this project includes controlled demolition and renovations of approximately 520 S.F. of the existing License Plate Storage Room 116 at the County Clerks' Office inside Suite 502 at the Veterans Plaza County office complex generally consisting of elements as follows:
 - a. Controlled demolition includes but is not limited to: Removal of existing exterior masonry to accommodate new window, partial removal of existing metal stud drywall partitions, complete removal of wood door, & hollow metal frame. Minor demolition to sprinkler, HVAC and electrical systems.
 - b. Renovations include but are not limited to: Masonry work required to create opening for new window, insulation, sealants, hollow metal frame, aluminum storefront window, metal stud & hat channel framing, drywall, carpet squares, resilient base, suspension system, acoustical ceiling panels, & painting. Minor revisions to existing automatic sprinklers, ductwork for existing HVAC systems, electrical systems, and related work

1.2 CONTRACT

- A. The Project will be constructed under a general construction contract.
 - 1. The form of contract shall be the form bound previously in this project manual in Division 0 "Bidding Requirements", where the Basis of Payment is a fixed lump sum.

1.3 WORK SEQUENCE

- A. The Contractor is responsible for the sequencing of the work to maintain safety and the structural integrity of the buildings.

1.4 USE OF PREMISES

- A. The Contractor shall limit his use of the premises to the work indicated.
 - 1. Working Hours shall be limited to the Owners normal hours of operation.
 - 2. Activities requiring access after normal business hours shall be coordinated on an as needed basis

- B. The Contractor shall determine, with the owner's approval, the best location for project staging prior to commencement of work.

1.5 COORDINATION WITH OCCUPANTS

- A. Full Owner Occupancy: Owner will occupy the premises during entire construction period.
 - 1. The project construction area within the building will be closed during construction activities.
 - 2. The remainder of the Clerk's office shall be open to the staff & public during normal business hours.
 - 3. Existing areas that overlap with areas to be constructed shall be coordinated with the owner to provide access to these existing areas as needed.
- B. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated

1.6 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify Architect not less than two days in advance of proposed utility interruptions.
 - 2. Obtain Architect's written permission before proceeding with utility interruptions.
- C. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.
 - 1. Notify Architect not less than two days in advance of proposed disruptive operations.
 - 2. Obtain Architect's written permission before proceeding with disruptive operations.
- D. Nonsmoking Facility: Smoking is not permitted inside buildings or within 25 feet on an entrance on the Project site.
- E. Controlled Substances: Use of controlled substances on Project site is not permitted.
- F. Employee Identification: Provide identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.
- G. Employee Screening: Comply with Owner's requirements for background screening of Contractor personnel working on Project site. Personnel entering the building may be required to sign-in & sign-out.
- H. Employee Health Screening: Contractor personnel entering the building shall be required to complete daily COVID-19 screening requirements. Contractor shall submit a Compliance Affidavit stating they will comply with the requirements of creating a written COVID -19 Safety Plan & and will conduct daily screening of all employees and subcontractor personnel that will be inside the building.

1.7 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the 33 – Division format and CSI/CSC's "MasterFormat" numbering system.
 - 1. Section Identification: The Specifications use section numbers and titles to help cross-referencing in the Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete. Consult the table of contents at the beginning of the Project Manual to determine numbers and names of sections in the Contract Documents.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
 - 2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
 - a. The words "shall", "shall be", or shall comply with", depending on the context, are implied where a colon (:) is used within a sentence or phrase.
- C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard and scheduled on Drawings.
 - 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this ProjectManual.

END OF SECTION 01 11 00

SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.3 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated revisions to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION

3.1 SCHEDULE OF ALTERNATES

Add Alternate No. 1

Alternate No.1 Includes an add cost amount for the addition of the "Window A" portion of the work. This Add will result in the following:

- A. Controlled demolition of existing exterior brick & cmu wall, re-installation of salvaged & clean brick masonry, installation of new cmu masonry & bond beam to create the rough window opening.
- B. Mandatory Sequencing: Work related to the masonry opening shall be completed prior to other work. Lock on existing door 116 shall be reversed to maintain access control of the building during masonry work. Opening shall be secured at the end of each day's work.
- C. Installation of aluminum storefront framing & tempered insulated glass to match existing windows.
- D. Installation drywall head, jamb, & sill returns.
- E. Installation of interior & exterior sealant.
- F. Partial exterior painting of disturbed area of existing painted brick.

END OF SECTION 01 23 00

SECTION 01 25 00 – SUBSTITUTION PROCEDURES

PART 1 – GENERAL

RELATED DOCUMENTS

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

SUMMARY

Section includes administrative and procedural requirements for substitutions.

DEFINITIONS

Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

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.

Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

ACTION SUBMITTALS

Substitution Requests: Submit an electronic copy each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

Substitution Request Form: Use CSI Form 13.1A.

Documentation: Show compliance with requirements for substitutions and the following, as applicable:

Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.

Coordination information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.

Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.

Product Data, including drawings and descriptions of products and fabrication and installation procedures.

Samples, where applicable or requested.

Certificates and qualification data, where applicable or requested.

List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.

Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.

Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.

Cost information, including a proposal of change, if any, in the Contract Sum.

Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.

Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven (7) days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within fifteen (15) days of receipt of request, or seven (7) days of receipt of additional information or documentation, whichever is later.

Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.

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

QUALITY ASSURANCE

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

PROCEDURES

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

PART 2 - PRODUCTS

SUBSTITUTIONS

Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than fifteen (15) days prior to time required for preparation and review of related submittals.

Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

Requested substitution is consistent with the Contract Documents and will produce indicated results.

Substitution request is fully documented and properly submitted.

Requested substitution will not adversely affect Contractor's construction schedule.

Requested substitution has received necessary approvals of authorities having jurisdiction.

Requested substitution is compatible with other portions of the Work.

Requested substitution has been coordinated with other portions of the Work.

Requested substitution provides specified warranty.

If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

Substitutions for Convenience: Architect will consider requests for substitution if received within 60 days after commencement of the Work. Requests received after that time may be considered or rejected at discretion of Architect.

Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.

Requested substitution does not require extensive revisions to the Contract Documents.

Requested substitution is consistent with the Contract Documents and will produce indicated results.

Substitution request is fully documented and properly submitted.

Requested substitution will not adversely affect Contractor's construction schedule.

Requested substitution has received necessary approvals of authorities having jurisdiction.

Requested substitution is compatible with other portions of the Work.

Requested substitution has been coordinated with other portions of the Work.

Requested substitution provides specified warranty.

If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 25 00

SECTION 01 26 00 – CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Sections include the following:
 - 1. Division 1 Section "Allowances" for procedural requirements for handling and processing allowances.
 - 2. Division 1 Section "Unit Prices" for administrative requirements for using unit prices.
 - 3. Division 1 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.

1.2 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

1.3 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Proposal Requests issued by Architect are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
 - 2. Within time specified in Proposal Request after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change to the Architect.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total

- amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 4. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 5. Comply with requirements in Division 1 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.
- C. Proposal Request Form: Use AIA Document G709 for Proposal Requests.

1.4 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

1.5 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 26 00

SECTION 01 29 00 – PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Sections include the following:
 - 1. Division 1 Section "Allowances" for procedural requirements governing handling and processing of allowances.
 - 2. Division 1 Section "Unit Prices" for administrative requirements governing use of unit prices.
 - 3. Division 1 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
 - 4. Division 1 Section "Construction Progress Documentation" for administrative requirements governing preparation and submittal of Contractor's Construction Schedule and Submittals Schedule.

1.2 DEFINITIONS

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.3 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with Continuation Sheets.
 - b. Submittals Schedule.
 - 2. Submit the Schedule of Values to Architect at earliest possible date but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
 - 3. Sub-schedules: Where the Work is separated into phases requiring separately phased payments, provide sub-schedules showing values correlated with each phase of payment.
- B. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section.
 - 1. Identification: Include the following Project identification on the Schedule of Values:
 - a. Project name and location.
 - b. Name of Architect.
 - c. Architect's project number.
 - d. Contractor's name and address.
 - e. Date of submittal.

2. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:
 - a. Related Specification Section or Division.
 - b. Description of the Work.
 - c. Name of subcontractor.
 - d. Name of manufacturer or fabricator.
 - e. Name of supplier.
 - f. Change Orders (numbers) that affect value.
 - g. Dollar value of the following, as a percentage of the Contract Sum to the nearest one-hundredth percent, adjusted to total 100 percent.
 - 1) Labor.
 - 2) Materials.
3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide several line items for principal subcontract amounts, where appropriate.
4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site. Include evidence of insurance or bonded warehousing if required.
6. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
7. Allowances: Provide a separate line item in the Schedule of Values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
8. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.
9. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.4 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.
 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction Work covered by each Application for Payment is the period indicated in the Agreement.

- C. Payment Application Forms: Use AIA Document G702 and AIA Document G703 Continuation Sheets as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
 - 1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.
 - 2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- E. Transmittal: Submit 1 signed and notarized PDF copy of each Application for Payment to Architect by a method ensuring receipt. Include waivers of lien and similar attachments if required.
 - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- F. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
- G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's liens from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.
 - 1. Submit partial waivers on each item for amount requested, before deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit final or full waivers.
 - 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - 4. Waiver Delays: Submit each Application for Payment with Contractor's waiver of mechanic's lien for construction period covered by the application.
 - a. Submit final Application for Payment with or preceded by final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
 - 5. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 - 1. List of subcontractors.
 - 2. Schedule of Values.
 - 3. Contractor's Construction Schedule (preliminary if not final).
 - 4. Products list.
 - 5. Schedule of unit prices.
 - 6. Submittals Schedule (preliminary if not final).
 - 7. List of Contractor's staff assignments.
 - 8. List of Contractor's principal consultants.
 - 9. Copies of building permits.
 - 10. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.

11. Initial progress report.
 12. Report of preconstruction conference.
 13. Certificates of insurance and insurance policies.
 14. Performance and payment bonds.
 15. Data needed to acquire Owner's insurance.
 16. Initial settlement survey and damage report if required.
- I. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 3. Updated final statement, accounting for final changes to the Contract Sum.
 4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
 5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
 6. AIA Document G707, "Consent of Surety to Final Payment."
 7. Evidence that claims have been settled.
 8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
 9. Final, liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 29 00

SECTION 01 31 00 – PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General project coordination procedures.
 - 2. Coordination Drawings.
 - 3. Administrative and supervisory personnel.
 - 4. Project meetings.
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility will be assigned to a specific contractor.
- C. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Coordination of Multiple Contracts" for a description of the division of Work among separate contracts and responsibility for coordination activities not in this Section.
 - 2. Division 1 Section "Construction Progress Documentation" for preparing and submitting the Contractor's Construction Schedule.
 - 3. Division 1 Section "Execution Requirements" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
 - 4. Division 1 Section "Closeout Procedures" for coordinating Contract closeout.

1.2 COORDINATION

- A. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Each contractor shall coordinate its operations with operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. If necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

1. Preparation of Contractor's Construction Schedule.
2. Preparation of the Schedule of Values.
3. Installation and removal of temporary facilities and controls.
4. Delivery and processing of submittals.
5. Progress meetings.
6. Preinstallation conferences.
7. Project closeout activities.

1.3 SUBMITTALS

- A. Coordination Drawings: Prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.
1. Indicate relationship of components shown on separate Shop Drawings.
 2. Indicate required installation sequences.
- B. Staff Names: Within 10 days prior to starting construction operations, submit a list of principal staff assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.
1. Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone.

1.4 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

- A. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.
1. Include special personnel required for coordination of operations with other contractors.

1.5 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and
 2. Architect of scheduled meeting dates and times.
 3. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 4. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within 3 days of the meeting.
- B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 10 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
1. Attendees: Authorized representatives of Owner, Owner's Prime Contractor, Architect, and their consultants; Contractor and its superintendent; major subcontractors;

manufacturers; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.

2. Agenda: Discuss items of significance that could affect progress, including the following:

- a. Tentative construction schedule.
- b. Phasing.
- c. Critical work sequencing.
- d. Designation of responsible personnel.
- e. Procedures for processing field decisions and Change Orders.
- f. Procedures for processing Applications for Payment.
- g. Distribution of the Contract Documents.
- h. Submittal procedures.
- i. Preparation of Record Documents.
- j. Use of the premises.
- k. Responsibility for temporary facilities and controls.
- l. Parking availability.
- m. Office, work, and storage areas.
- n. Equipment deliveries and priorities.
- o. First aid.
- p. Security.
- q. Progress cleaning.
- r. Working hours.

C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.

1. Attendees: 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 Architect of scheduled meeting dates.

2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:

- a. Contract Documents.
- b. Options.
- c. Related Change Orders.
- d. Purchases.
- e. Deliveries.
- f. Submittals.
- g. Review of mockups.
- h. Possible conflicts.
- i. Compatibility problems.
- j. Time schedules.
- k. Weather limitations.
- l. Manufacturer's written recommendations.
- m. Warranty requirements.
- n. Compatibility of materials.
- o. Acceptability of substrates.
- p. Temporary facilities and controls.
- q. Space and access limitations.
- r. Regulations of authorities having jurisdiction.
- s. Testing and inspecting requirements.
- t. Required performance results.
- u. Protection of construction and personnel.

3. Record significant conference discussions, agreements, and disagreements.

4. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: Conduct progress meetings at monthly intervals as a standard and increase frequency to bi-monthly as needed to aid in coordination or to bring schedules back on track.
1. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction 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.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Hazards and risks.
 - 10) Progress cleaning.
 - 11) Quality and work standards.
 - 12) Change Orders.
 - 13) Documentation of information for payment requests.
 3. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.
 - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.
- E. Coordination Meetings: Conduct Project coordination meetings at weekly intervals as needed to facilitate work progress. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
1. Attendees: In addition to representatives of Owner, Owner's Prime Contractor and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 2. Agenda: Review and correct or approve minutes of the previous coordination meeting.

Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

- a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to Combined Contractor's Construction 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.
 - b. Schedule Updating: Revise Combined Contractor's Construction Schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
 - c. Review present and future needs of each contractor present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Hazards and risks.
 - 10) Progress cleaning.
 - 11) Quality and work standards.
 - 12) Change Orders.
3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 31 00

SECTION 01 32 00 – CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Preliminary Construction Schedule.
 - 2. Contractor's Construction Schedule.
 - 3. Submittals Schedule.
- B. Related Sections include the following:
 - 1. Division 1 Section "Payment Procedures" for submitting the Schedule of Values.
 - 2. Division 1 Section "Submittal Procedures" for submitting schedules and reports.
 - 3. Division 1 Section "Quality Requirements" for submitting a schedule of tests and inspections.
 - 4. Division 1 Section "Closeout Procedures" for submitting photographic negatives as Project Record Documents at Project closeout.

1.2 SUBMITTALS

- A. Qualification Data: For firms and persons specified in "Quality Assurance" Article and in-house scheduling personnel to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- B. Submittals Schedule: Submit an electronic copy of the schedule and submittal log to record the status of the submittals made to the Designer. Arrange the following information in a tabular format:
 - 1. Scheduled date for first submittal.
 - 2. Specification Section number and title.
 - 3. Submittal category (action or informational).
 - 4. Name of subcontractor.
 - 5. Description of the Work covered.
 - 6. Scheduled date for Architect's [and Construction Manager's] final release or approval.
- C. Preliminary Construction Schedule: Submit an electronic copy of the schedule.
- D. Contractor's Construction Schedule: Submit an electronic PDF copy of the initial schedule. The use of color images and line work can be incorporated to better depict benchmarks and other elements of the schedule. The image and text should be large enough to show entire schedule for the entire construction period on a sheet no larger than 11x17. The schedule can be broken into multiple sheets for more detailed and lengthy projects that cannot efficiently be portrayed on one sheet.
 - 1. Include type of schedule (Initial or Updated) and the date of the original or revision on the top of each schedule that is submitted.

1.3 QUALITY ASSURANCE

- A. Scheduling Consultant Qualifications: An experienced specialist in CPM scheduling and reporting.
- B. Prescheduling Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination." Review methods and procedures related to the Preliminary Construction Schedule and Contractor's Construction Schedule, including, but not limited to, the following:
 - 1. Review software limitations and content and format for reports.
 - 2. Verify availability of qualified personnel needed to develop and update schedule.
 - 3. Discuss constraints, including phasing, work stages, area separations, interim milestones and partial Owner occupancy.
 - 4. Review delivery dates for Owner-furnished products.
 - 5. Review schedule for work of Owner's separate contracts.
 - 6. Review time required for review of submittals and resubmittals.
 - 7. Review requirements for tests and inspections by independent testing and inspecting agencies.
 - 8. Review time required for completion and startup procedures.
 - 9. Review and finalize list of construction activities to be included in schedule.
 - 10. Review submittal requirements and procedures.
 - 11. Review procedures for updating schedule.

1.4 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
 - 1. Secure time commitments for performing critical elements of the Work from parties involved.
 - 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.
 - 3. It is the Contractor's responsibility to coordinate material lead times with the work schedule. A project time extension will not be allowed for material lead time conflicts that could have been avoided with early coordination.
 - 4. The Contractor shall coordinate work between trades such that conflicts do not arise between trades. Owner will not be responsible for additional costs for uncoordinated work efforts that lead to conflicts or perceived scope gaps and schedule conflicts.

PART 2 - PRODUCTS

2.1 SUBMITTALS SCHEDULE

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by specification number. Notate long lead items and approximate dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.
 - 1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.
 - 2. Initial Submittal: Submit concurrently with preliminary bar-chart schedule. Include

submittals required during the first 60 days of construction. List those required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.

- a. At Contractor's option, show submittals on the Preliminary Construction Schedule. A separate tabulated form will still be required.
3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's Construction Schedule.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Procedures: Comply with procedures contained in AGC's "Construction Planning & Scheduling."
- B. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Substantial Completion.
 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
 2. If specifically stated in the Contract, 30 days will be planned and scheduled after substantial completion for the Architect and Owner to inspect the site and for the Contractor to complete punch list items. Substantial completion work should not be scheduled for this 30 day time period and all punch list work should be finished within this 30 day period unless other agreements are accommodated.
- C. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
 1. Activity Duration: Define activities so no activity is longer than 30 days, unless specifically allowed by Architect.
 2. Procurement Activities: Include procurement process activities for long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 3. Submittal Review Time: Include review and resubmittal times indicated in Division 1 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with Submittals Schedule.
 4. Startup and Testing Time: Include not less than 14 days for startup and testing prior to substantial completion.
 5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
- D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion.

2.3 CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Submit preliminary horizontal bar-chart-type construction schedule within seven days of date established for commencement of the Work.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule two days before each regularly scheduled progress meeting.
 - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 - 3. As the Work progresses, indicate Actual Completion percentage for each activity.

END OF SECTION 01 32 00

SECTION 01 33 00 – SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other miscellaneous submittals.
- B. Related Sections include the following:
 - 1. Division 1 Section "Payment Procedures" for submitting Applications for Payment.
 - 2. Division 1 Section "Project Management and Coordination" for submitting Coordination Drawings.
 - 3. Division 1 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule and the Submittals Schedule and construction photographs.
 - 4. Division 1 Section "Photographic Documentation" for submitting periodic construction photographs.
 - 5. Division 1 Section "Quality Requirements" for submitting test and inspection reports and Delegated-Design Submittals and for erecting mockups.
 - 6. Division 1 Section "Closeout Procedures" for submitting warranties Project Record Documents and operation and maintenance manuals.
 - 7. Division 1 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
 - 8. Division 1 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information that requires Architect's responsive action.
- B. Informational Submittals: Written information that does not require Architect's approval. Submittals may be rejected for not complying with requirements.

1.3 SUBMITTAL PROCEDURES

- A. General: Electronic copies of CAD Drawings of the floor plans and site plan will be provided by Architect for Contractor's use as background layers in preparing submittals, after signing of a waiver form by the submitting party, which indemnifies the Architect from any latent errors contained in the processing of CAD files or errors that might otherwise have been detected by procedures that independently developed the information containing the embedded error.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 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 parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

- C. Submittals Schedule: Comply with requirements in Division 1 Section "Construction Progress Documentation" for list of submittals and time requirements for scheduled performance of related construction activities.
- D. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal.
1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 2. Concurrent Review: Where concurrent review of submittals by Architect's consultants, Owner, or other parties is required, allow 21 days for initial review of each submittal.
 3. Direct Transmittal to Consultant: Where the Contract Documents indicate that submittals may be transmitted directly to Architect's consultants, provide duplicate copy of transmittal to Architect. Submittal will be returned to Architect before being returned to Contractor.
 4. If intermediate submittal is necessary, process it in same manner as initial submittal.
 5. Allow 15 days for processing each resubmittal.
 6. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing.
- E. Identification: Place a permanent label or title block on each submittal for identification.
1. Indicate name of firm or entity that prepared each submittal on label or title block.
 2. Provide a space approximately 4 by 5 inches on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
 3. Include the following information on label for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name and address of Contractor.
 - e. Name and address of subcontractor.
 - f. Name and address of supplier.
 - g. Name of manufacturer.
 - h. Unique identifier, including revision number.
 - i. Number and title of appropriate Specification Section.
 - j. Drawing number and detail references, as appropriate.
 - k. Other necessary identification.
- F. Deviations: Highlight, encircle, or otherwise identify deviations from the Contract Documents on submittals.
- G. Additional Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions of the Contract Documents, initial submittal may serve as final submittal.
1. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Architect.
 2. Additional copies submitted for maintenance manuals will not be marked with action taken and will be returned.
- H. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will return submittals, without review received from sources other than Contractor.

1. On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements of the Contract Documents, including minor variations and limitations. Include the same label information as the related submittal.
2. Include Contractor's certification stating that information submitted complies with requirements of the Contract Documents.
3. Transmittal Form: Use Contractor's standard form.
4. Transmittal Form: Provide locations on form for the following information:
 - a. Project name.
 - b. Date.
 - c. Destination (To:).
 - d. Source (From:).
 - e. Names of subcontractor, manufacturer, and supplier.
 - f. Category and type of submittal.
 - g. Submittal purpose and description.
 - h. Submittal and transmittal distribution record.
 - i. Remarks.
 - j. Signature of transmitter.
- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- J. Use for Construction: Use only final submittals with mark indicating action taken by Architect in connection with construction.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
 1. Number of Copies: 1 PDF copy of each submittal, unless otherwise indicated. Architect will return one PDF markup/approval. Retain returned copy and save as a Project Record Document.
 2. Number of Copies: Submit copies of each submittal, as follows, unless otherwise indicated:
 - a. Initial Submittal: Submit a preliminary single hard copy of each submittal where selection of options, color, pattern, texture, or similar characteristics is required. Architect will return submittal with options selected.
 - b. Final Submittal: Submit two (2) hard copies and one (1) digital copy when required for operation and maintenance manuals. Architect will save digital copy and then submit to owner.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
 2. Mark each copy of each submittal to show which products and options are applicable.
 3. Include the following information, as applicable:

- a. Manufacturer's written recommendations.
 - b. Manufacturer's product specifications.
 - c. Manufacturer's installation instructions.
 - d. Standard color charts.
 - e. Manufacturer's catalog cuts.
 - f. Wiring diagrams showing factory-installed wiring.
 - g. Printed performance curves.
 - h. Operational range diagrams.
 - i. Mill reports.
 - j. Standard product operating and maintenance manuals.
 - k. Compliance with recognized trade association standards.
 - l. Compliance with recognized testing agency standards.
 - m. Application of testing agency labels and seals.
 - n. Notation of coordination requirements.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
- 1. Preparation: Include the following information, as applicable:
 - a. Dimensions.
 - b. Identification of products.
 - c. Fabrication and installation drawings.
 - d. Roughing-in and setting diagrams.
 - e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
 - f. Shopwork manufacturing instructions.
 - g. Templates and patterns.
 - h. Schedules.
 - i. Design calculations.
 - j. Compliance with specified standards.
 - k. Notation of coordination requirements.
 - l. Notation of dimensions established by field measurement.
 - 2. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
 - 3. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 30 by 40 inches.
 - 4. Number of Copies: Submit copies of each submittal, as follows:
 - a. Initial Submittal: Submit one PDF file. CAD file may be requested as well.
 - b. Final Submittal: Submit two (2) hard copies and one (1) digital copy when required for operation and maintenance manuals. Architect will save digital copy and then submit to owner.
- D. Coordination Drawings: Comply with requirements in Division 1 Section "Project Management and Coordination."
- E. Samples: Prepare physical units of materials or products, including the following:
- 1. Comply with requirements in Division 1 Section "Quality Requirements" for mockups.
 - 2. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - 3. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from the same material to be used for the Work, cured and finished in manner specified, and physically identical with the product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or

containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.

4. Preparation: Mount, display, or package Samples in manner specified to facilitate review of qualities indicated. Prepare Samples to match Architect's sample where so indicated. Attach label on unexposed side that includes the following:
 - a. Generic description of Sample.
 - b. Product name or name of manufacturer.
 - c. Sample source.
 5. Additional Information: On an attached separate sheet, prepared on Contractor's letterhead, provide the following:
 - a. Size limitations.
 - b. Compliance with recognized standards.
 - c. Availability.
 - d. Delivery time.
 6. 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 final submittal and actual component as delivered and installed.
 - a. If variation in color, pattern, texture, or other characteristic is inherent in the product represented by a Sample, submit at least three (3) sets of paired units that show approximate limits of the variations.
 - b. Refer to individual Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation, and similar construction characteristics.
 7. Number of Samples for Initial Selection: Submit one (1) full set of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
 8. Number of Samples for Verification: Submit three sets of Samples. Architect will retain two Sample sets; remainder will be returned.
 - a. Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 9. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
- F. Product Schedule or List: Prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
1. Type of product. Include unique identifier for each product.
 2. Number and name of room or space.

- 3. Location within room or space.
- G. Delegated-Design Submittal: Comply with requirements in Division 1 Section "Quality Requirements."
- H. Contractor's Construction Schedule: Comply with requirements in Division 1 Section "Construction Progress Documentation" for Construction Manager's action.
- I. Submittals Schedule: Comply with requirements in Division 1 Section "Construction Progress Documentation."
- J. Application for Payment: Comply with requirements in Division 1 Section "Payment Procedures."
- K. Schedule of Values: Comply with requirements in Division 1 Section "Payment Procedures."
- L. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Name, address, and telephone number of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.

2.2 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by other Specification Sections.
 - 1. Number of Copies: Submit one (1) PDF copy of each submittal, unless otherwise indicated. Architect will not return comments unless necessary.
 - 2. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - 3. Test and Inspection Reports: Comply with requirements in Division 1 Section "Quality Requirements."
- B. Contractor's Construction Schedule: Comply with requirements in Division 1 Section "Construction Progress Documentation."
- C. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- D. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements.
- E. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- F. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements and, where required, is authorized for this specific Project.
- G. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements. Include evidence of manufacturing experience where required.

- H. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements.
- I. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements.
- J. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements.
- K. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- L. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements.
- M. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- N. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
 - 1. Name of evaluation organization.
 - 2. Date of evaluation.
 - 3. Time period when report is in effect.
 - 4. Product and manufacturers' names.
 - 5. Description of product.
 - 6. Test procedures and results.
 - 7. Limitations of use.
- O. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements in Division 1 Section "Closeout Procedures".
- P. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.
- Q. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:
 - 1. Preparation of substrates.
 - 2. Required substrate tolerances.
 - 3. Sequence of installation or erection.

4. Required installation tolerances.
 5. Required adjustments.
 6. Recommendations for cleaning and protection.
- R. Manufacturer's Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:
1. Name, address, and telephone number of factory-authorized service representative making report.
 2. Statement on condition of substrates and their acceptability for installation of product.
 3. Statement that products at Project site comply with requirements.
 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 6. Statement whether conditions, products, and installation will affect warranty.
 7. Other required items indicated in individual Specification Sections.
- S. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.
- T. Construction Photographs: Comply with requirements in Division 1 Section "Construction Progress Documentation."
- U. Material Safety Data Sheets: Submit information directly to Owner. If submitted to Architect, Architect will not review this information but will return it with no action taken.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Review each submittal and check for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
- C. Informational Submittals: Architect will review each submittal and will not return it, or will reject and return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Submittals not required by the Contract Documents will not be reviewed and may be discarded.

END OF SECTION 01 33 00

SECTION 01 40 00 – QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's quality-control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
- C. Related Sections include the following:
 - 1. Division 1 Section "Construction Progress Documentation" for developing a schedule of required tests and inspections.
 - 2. Division 1 Section "Cutting and Patching" for repair and restoration of construction disturbed by testing and inspecting activities.
 - 3. Divisions 2 through 16 Sections for specific test and inspection requirements.

1.2 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and ensure that proposed construction complies with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that completed construction complies with requirements. Services do not include contract enforcement activities performed by Architect.
- C. Mockups: Full-size, physical example assemblies to illustrate finishes and materials. Mockups are used to verify selections made under Sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Mockups establish the standard by which the Work will be judged.
- D. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.

1.3 DELEGATED DESIGN

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.

1.4 REGULATORY REQUIREMENTS

- A. Copies of Regulations: Obtain copies of the following regulations and retain at Project site to be available for reference by parties who have a reasonable need:

1.5 SUBMITTALS

- A. Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional, indicating that the products and systems are in compliance with performance and design criteria indicated. Include list of codes, loads, and other factors used in performing these services.
- C. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
 1. Specification Section number and title.
 2. Description of test and inspection.
 3. Identification of applicable standards.
 4. Identification of test and inspection methods.
 5. Number of tests and inspections required.
 6. Time schedule or time span for tests and inspections.
 7. Entity responsible for performing tests and inspections.
 8. Requirements for obtaining samples.
 9. Unique characteristics of each quality-control service.
- D. Reports: Prepare and submit certified written reports that include the following:
 1. Date of issue.
 2. Project title and number.
 3. Name, address, and telephone number of testing agency.
 4. Dates and locations of samples and tests or inspections.
 5. Names of individuals making tests and inspections.
 6. Description of the Work and test and inspection method.
 7. Identification of product and Specification Section.
 8. Complete test or inspection data.
 9. Test and inspection results and an interpretation of test results.
 10. Ambient conditions at time of sample taking and testing and inspecting.
 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 12. Name and signature of laboratory inspector.
 13. Recommendations on retesting and re-inspecting.
- E. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.6 QUALITY ASSURANCE

- A. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- B. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- C. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- D. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.
- F. Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirement for specialists shall not supersede building codes and similar regulations governing the Work, nor interfere with local trade-union jurisdictional settlements and similar conventions.
- G. Testing Agency Qualifications: An agency with the experience and capability to conduct testing and inspecting indicated, as documented by ASTM E 548, and that specializes in types of tests and inspections to be performed.
- H. Preconstruction Testing: Testing agency shall perform preconstruction testing for compliance with specified requirements for performance and test methods.
 - 1. Contractor responsibilities include the following:
 - a. Provide test specimens and assemblies representative of proposed materials and construction. Provide sizes and configurations of assemblies to adequately demonstrate capability of product to comply with performance requirements.
 - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. Fabricate and install test assemblies using installers who will perform the same tasks for Project.
 - d. When testing is complete, remove assemblies; do not reuse materials on Project.
 - 2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
- I. Mockups: Before installing portions of the Work requiring mockups, build mockups for each

form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:

1. Build mockups in location and of size indicated or, if not indicated, as directed by Architect.
2. Notify Architect seven (7) days in advance of dates and times when mockups will be constructed.
3. Demonstrate the proposed range of aesthetic effects and workmanship.
4. Obtain Architect's approval of mockups before starting work, fabrication, or construction.
5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
6. Demolish and remove mockups when directed, unless otherwise indicated.

1.7 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of the types of testing and inspecting they are engaged to perform.
 2. Payment for these services will be made by the Owner.
 3. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.
- B. Contractor Responsibilities: Unless otherwise indicated, provide quality-control services specified and required by authorities having jurisdiction.
1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ the same entity engaged by Owner, unless agreed to in writing by Owner.
 2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
 3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Special Tests and Inspections: Owner will engage a testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner.
1. Testing agency will notify Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 2. Testing agency will submit a certified written report of each test, inspection, and similar quality-control service to Architect with copy to Contractor and to authorities having jurisdiction.
 3. Testing agency will submit a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
 4. Testing agency will interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.

5. Testing agency will retest and re-inspect corrected work.
- D. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing.
- E. Retesting/Re-inspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and re-inspecting, for construction that revised or replaced Work that failed to comply with requirements established by the Contract Documents.
- F. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 2. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 3. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 4. Do not release, revoke, alter, or increase requirements of the Contract Documents or approve or accept any portion of the Work.
 5. Do not perform any duties of Contractor.
- G. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 1. Access to the Work.
 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 4. Facilities for storage and field-curing of test samples.
 5. Delivery of samples to testing agencies.
 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 7. Security and protection for samples and for testing and inspecting equipment at Project site.
- H. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- I. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents. Submit schedule within 30 days of date established for commencement of the Work.
 1. Distribution: Distribute schedule to Owner, Architect, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 ACCEPTABLE TESTING AGENCIES

- A. Submit list of firms acceptable to perform designated tests and inspections for Architect's and Owner's approval prior to testing.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Sections of these Specifications. Restore patched areas and extend restoration into adjoining areas in a manner that eliminates evidence of patching.
 - 2. Comply with the Contract Document requirements for Division 1 Section "Cutting and Patching."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01 40 00

SECTION 01 42 00 – REFERENCES

PART 1 - GENERAL

1.1 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "approved," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Installer": Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
- J. "Experienced": When used with an entity, "experienced" means having successfully completed a minimum of **five** previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.
 - 1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespeople of the corresponding generic name.
- K. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.
- L. "Portable Document Format (PDF)": An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

1.2 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.
- C. Conflicting Requirements: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.
 - 1. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.
- D. Copies of Standards: Each entity engaged in construction on Project must be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
 - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source and make them available on request.
- E. Abbreviations and Acronyms for Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. Names, telephone numbers, and Web site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 42 00

SECTION 01 50 00 – TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection facilities.
- B. Temporary utilities include, but are not limited to, the following:
 - 1. Sewers and drainage.
 - 2. Water service and distribution.
 - 3. Sanitary facilities, including toilets, wash facilities, and drinking-water facilities.
 - 4. Heating and cooling facilities.
 - 5. Ventilation.
 - 6. Electric power service.
 - 7. Lighting.
 - 8. Telephone service.
- C. Support facilities include, but are not limited to, the following:
 - 1. Waste disposal facilities.
 - 2. Lifts and hoists.
 - 3. Construction aids and miscellaneous services and facilities.
- D. Security and protection facilities include, but are not limited to, the following:
 - 1. Security enclosure and lockup.
 - 2. Barricades, warning signs, and lights.
 - 3. Temporary enclosures.
 - 4. Temporary partitions.
 - 5. Fire protection.

1.2 DEFINITIONS

- A. Permanent Enclosure: As determined by Architect, permanent or temporary roofing is complete, insulated, and weathertight; exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures.

1.3 USE CHARGES

- A. General: Cost or use charges for temporary facilities are not chargeable to Owner or Architect and shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, the following:
 - 1. Owner's construction forces.
 - 2. Architect.
 - 3. Testing agencies.
 - 4. Personnel of authorities having jurisdiction.
- B. Water and Sewer Service from Existing System: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and

extensions of services as required for construction operations.

- C. Electric Power Service from Existing System: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- D. If these utility services are not adequate for the Contractor's construction needs, the Contractor shall arrange for temporary utilities at his own expense.

1.4 QUALITY ASSURANCE

- A. Standards: Comply with ANSI A10.6, NECA's "Temporary Electrical Facilities," and NFPA 241.
 - 1. Trade Jurisdictions: Assigned responsibilities for installation and operation of temporary utilities are not intended to interfere with trade regulations and union jurisdictions.
 - 2. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.5 PROJECT CONDITIONS

- A. Temporary Utilities: At earliest feasible time, when acceptable to Owner, change over from use of temporary service to use of permanent service.
 - 1. Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.
- B. Conditions of Use: The following conditions apply to use of temporary services and facilities by all parties engaged in the Work:
 - 1. Keep temporary services and facilities clean and neat.
 - 2. Relocate temporary services and facilities as required by progress of the Work.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Provide new materials. Undamaged, previously used materials in serviceable condition may be used if approved by Architect. Provide materials suitable for use intended.
- B. Lumber and Plywood: Comply with requirements in Division 6 Section Miscellaneous Carpentry."
- C. Dust-Control Adhesive-Surface Walk-off Mats: Provide mats minimum 36 by 60 inches.
- D. Tarpaulins: Fire-resistive labeled with flame-spread rating of 15 or less.
- E. Water: Potable.

2.2 EQUIPMENT

- A. General: Provide equipment suitable for use intended.
 - 1. Field Offices: Not Required.
- B. Fire Extinguishers: Hand carried, portable, UL rated. Provide class and extinguishing agent as indicated or a combination of extinguishers of NFPA-recommended classes for exposures.
 - 1. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.
- C. Electrical Outlets: Properly configured, NEMA-polarized outlets to prevent insertion of 110- to 120-V plugs into higher-voltage outlets; equipped with ground-fault circuit interrupters, reset button, and pilot light.
- D. Power Distribution System Circuits: Where permitted and overhead and exposed for surveillance, wiring circuits, not exceeding 125-V ac, 20-A rating, and lighting circuits may be nonmetallic sheathed cable.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve 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.

3.2 TEMPORARY UTILITY INSTALLATION

- A. Sanitary Facilities: Owner's Existing Public Toilets located in the adjacent hallway are available for Contractor's use.
- B. Heating and Cooling: Existing Equipment shall remain in use. Contractor shall make provisions to filter dust from construction activities to keep it from entering the system.
- C. Electric Distribution: Provide receptacle outlets adequate for connection of power tools and equipment.
 - 1. Provide waterproof connectors to connect separate lengths of electrical power cords if single lengths will not reach areas where construction activities are in progress. Do not exceed safe length-voltage ratio.
 - 2. Provide warning signs at power outlets other than 110 to 120 V.
- D. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations and traffic conditions.
 - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.
- E. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes, and odors from entering occupied areas.

1. Prior to commencing work, isolate the HVAC system in area where work is to be performed.
 - a. Disconnect supply and return ductwork in work area from HVAC systems servicing occupied areas.
 - b. Maintain negative air pressure within work area using HEPA-equipped air-filtration units, starting with commencement of temporary partition construction, and continuing until removal of temporary partitions is complete.
 2. Maintain dust partitions during the Work. Use vacuum collection attachments on dust producing equipment. Isolate limited work within occupied areas using portable dust containment devices.
 3. Perform daily construction cleanup and final cleanup using approved, HEPA-filter equipped vacuum equipment.
- F. Telephone Service: Provide a portable cellular telephone for superintendent's use in making and receiving telephone call.

3.3 SUPPORT FACILITIES INSTALLATION

- A. Project Identification and Temporary Signs: Not Required.
- B. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Containerize and clearly label hazardous, dangerous, or unsanitary waste materials separately from other waste. Temporary waste-collection containers located on existing asphalt shall have wood blocking or plywood underneath to protect the surface. Damage to existing asphalt shall be repaired at Contractor's expense to the satisfaction of the Owner.
 1. If required by authorities having jurisdiction, provide separate containers, clearly labeled, for each type of waste material to be deposited.
- C. Field Office: Not Required. If one is wanted a space in the outer parking area will be provided.
- D. Lifts and Hoists: Provide facilities for hoisting materials and personnel.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
- B. Barricades, Warning Signs, and Lights: Comply with standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and public of possible hazard. Where appropriate and needed, provide lighting, including flashing red or amber lights.
 1. For safety barriers, sidewalk bridges, and similar uses, provide minimum 5/8-inch- thick exterior plywood.
- C. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
 1. Where heating or cooling is needed and permanent enclosure is not complete, provide insulated temporary enclosures. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.
 2. Vertical Openings: Close openings of 25 sq. ft. or less with plywood or similar materials.
 3. Horizontal Openings: Close openings in floor or roof decks and horizontal surfaces with load-bearing, wood-framed construction.
 4. Install tarpaulins securely using fire-retardant-treated wood framing and other materials.

- D. Temporary Fire Protection: Until fire-protection needs are supplied by permanent facilities, install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
1. Provide fire extinguishers, installed on walls on mounting brackets, visible and accessible from space being served, with sign mounted above.
 - a. Other Locations: Class ABC dry-chemical extinguishers or a combination of extinguishers of NFPA-recommended classes for exposures.
 - b. Locate fire extinguishers where convenient and effective for their intended purpose; provide not less than one extinguisher on each floor.
 2. Store combustible materials in containers in fire-safe locations.
 3. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire-protection facilities, stairways, and other access routes for firefighting. Prohibit smoking in hazardous fire-exposure areas.
 4. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition.
 5. Permanent Fire Protection: At earliest feasible date in each area of Project, complete installation of permanent fire-protection facility, including connected services, and place into operation and use. Instruct key personnel on use of facilities.
 6. Develop and supervise an overall fire-prevention and first-aid fire-protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage caused by freezing temperatures and similar elements.
1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
 2. Prevent water-filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.
- C. Temporary Facility Changeover: Except for using permanent fire protection as soon as available, do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been 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 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 the property of Contractor. Owner reserves right to take possession of Project identification signs.
 2. At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements in Division 1 Section "Closeout Procedures."

END OF SECTION 01 50 00

SECTION 01 60 00 – PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following administrative and procedural requirements: selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
- B. Related Sections include the following:
 - 1. Division 1 Section "Allowances" for products selected under an allowance.
 - 2. Division 1 Section "References" for applicable industry standards for products specified.
 - 3. Division 1 Section "Closeout Procedures" for submitting warranties for contract closeout.
 - 4. Divisions 2 through 33 Sections for specific requirements for warranties on products and installations specified to be warranted.

1.2 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation, shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
- C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.
- D. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
- E. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.

1.3 SUBMITTALS

- A. Product List: Submit a list, in tabular form, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.
1. Coordinate product list with Contractor's Construction Schedule and the Submittals Schedule.
 2. Form: Tabulate information for each product under the following column headings:
 - a. Specification Section number and title.
 - b. Generic name used in the Contract Documents.
 - c. Proprietary name, model number, and similar designations.
 - d. Manufacturer's name and address.
 - e. Supplier's name and address.
 - f. Installer's name and address.
 - g. Projected delivery date or time span of delivery period.
 - h. Identification of items that require early submittal approval for scheduled delivery date.
 3. Initial Submittal: Within 30 days after date of commencement of the Work, submit an electronic copy of initial product list. Include a written explanation for omissions of data and for variations from Contract requirements.
 - a. At Contractor's option, initial submittal may be limited to product selections and designations that must be established early in Contract period.
 4. Completed List: Within 60 days after date of commencement of the Work, submit an electronic copy of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.
 5. Architect's Action: Architect will respond in writing to Contractor within 15 days of receipt of completed product list. Architect's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Architect's response, or lack of response, does not constitute a waiver of requirement that products comply with the Contract Documents.
- B. Substitution Requests: Submit an electronic copy of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
1. Substitution Request Form: Use CSI Form 13.1A.
 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified material or product cannot be provided.
 - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
 - g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - h. Research/evaluation reports evidencing compliance with building code in effect for

- Project, from a model code organization acceptable to authorities having jurisdiction.
 - i. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
 - j. Cost information, including a proposal of change, if any, in the Contract Sum.
 - k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
 - l. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- 3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.
 - a. Form of Acceptance: Change Order.
 - b. Use product specified if Architect cannot make a decision on use of a proposed substitution within time allocated.
- C. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 1 Section "Submittal Procedures." Show compliance with requirements.

1.4 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.
 - 1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
 - 2. If a dispute arises between contractors over concurrently selectable but incompatible products, Architect will determine which products shall be used.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
 - 1. Schedule delivery to minimize long-term storage at Project 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 Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
 - 5. Store products to allow for inspection and measurement of quantity or counting of units.
 - 6. Store materials in a manner that will not endanger Project structure.

7. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
8. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
9. Protect stored products from damage.

1.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 2. Specified Form: Forms are included with the Specifications. Prepare a written document using appropriate form properly executed.
 3. Refer to Divisions 2 through 33 Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Division 1 Section "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT OPTIONS

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged, and unless otherwise indicated, that are new at time of installation.
 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 4. Where products are accompanied by the term "as selected," Architect will make selection.
 5. Where products are accompanied by the term "match sample," sample to be matched is Architect's.
 6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
 7. Or Equal: Where products are specified by name and accompanied by the term "or equal" or "or approved equal" or "or approved," comply with provisions in "Comparable Products" Article to obtain approval for use of an unnamed product.
- B. Product Selection Procedures: Procedures for product selection include the following:
 1. Product: Where Specification paragraphs or subparagraphs titled "Product" name a single product and manufacturer, provide the product named.
 - a. Substitutions may be considered, unless otherwise indicated.

2. Manufacturer/Source: Where Specification paragraphs or subparagraphs titled "Manufacturer" or "Source" name single manufacturers or sources, provide a product by the manufacturer or from the source named that complies with requirements.
 - a. Substitutions may be considered, unless otherwise indicated.
3. Products: Where Specification paragraphs or subparagraphs titled "Products" introduce a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
 - a. Substitutions may be considered, unless otherwise indicated.
4. Manufacturers: Where Specification paragraphs or subparagraphs titled "Manufacturers" introduce a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
 - a. Substitutions may be considered, unless otherwise indicated.
5. Available Products: Where Specification paragraphs or subparagraphs titled "Available Products" introduce a list of names of both products and manufacturers, provide one of the products listed or another product that complies with requirements. Comply with provisions in "Comparable Products" Article to obtain approval for use of an unnamed product.
6. Available Manufacturers: Where Specification paragraphs or subparagraphs titled "Available Manufacturers" introduce a list of manufacturers' names, provide a product by one of the manufacturers listed or another manufacturer that complies with requirements. Comply with provisions in "Comparable Products" Article to obtain approval for use of an unnamed product.
7. Product Options: Where Specification paragraphs titled "Product Options" indicate that size, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide either the specific product or system indicated or a comparable product or system by another manufacturer. Comply with provisions in "Product Substitutions" Article.
8. Basis-of-Design Products: Where Specification paragraphs or subparagraphs titled "Basis-of-Design Product" are included and also introduce or refer to a list of manufacturers' names, provide either the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in "Comparable Products" Article to obtain approval for use of an unnamed product.
 - a. Substitutions may be considered, unless otherwise indicated.
9. Visual Matching Specification: Where Specifications require matching an established Sample, select a product (and manufacturer) that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches satisfactorily.
 - a. If no product available within specified category matches satisfactorily and complies with other specified requirements, comply with provisions of the Contract Documents on "substitutions" for selection of a matching product.
10. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product (and manufacturer) that complies with other specified requirements.
 - a. Standard Range: Where Specifications include the phrase "standard range of

colors, patterns, textures" or similar phrase, Architect will select color, pattern, or texture from manufacturer's product line that does not include premium items.

- b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, or texture from manufacturer's product line that includes both standard and premium items.

- 11. Allowances: Refer to individual Specification Sections and "Allowance" provisions in Division 1 for allowances that control product selection and for procedures required for processing such selections.

2.2 PRODUCT SUBSTITUTIONS

- A. Timing: Architect will consider requests for substitution if received within 60 days after commencement of the Work. Requests received after that time may be considered or rejected at discretion of Architect.
- B. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
 - 1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
 - 2. Requested substitution does not require extensive revisions to the Contract Documents.
 - 3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - 4. Substitution request is fully documented and properly submitted.
 - 5. Requested substitution will not adversely affect Contractor's Construction Schedule.
 - 6. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - 7. Requested substitution is compatible with other portions of the Work.
 - 8. Requested substitution has been coordinated with other portions of the Work.
 - 9. Requested substitution provides specified warranty.
 - 10. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

2.3 COMPARABLE PRODUCTS

- A. Where products or manufacturers are specified by name, submit the following, in addition to other required submittals, to obtain approval of an unnamed product:
 - 1. Evidence that the proposed product does not require extensive revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 - 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 - 3. Evidence that proposed product provides specified warranty.
 - 4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
 - 5. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 60 00

SECTION 01 70 00 – EXECUTION REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction layout.
 - 2. Field engineering and surveying.
 - 3. General installation of products.
 - 4. Coordination of Owner-installed products.
 - 5. Progress cleaning.
 - 6. Starting and adjusting.
 - 7. Protection of installed construction.
 - 8. Correction of the Work.
- B. Related Sections include the following:
 - 1. Division 1 Section "Project Management and Coordination" for procedures for coordinating field engineering with other construction activities.
 - 2. Division 1 Section "Submittal Procedures" for submitting surveys.
 - 3. Division 1 Section "Cutting and Patching" for procedural requirements for cutting and patching necessary for the installation or performance of other components of the Work.
 - 4. Division 1 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

1.2 SUBMITTALS

- A. Qualification Data: For professional engineer to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- B. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.
 - 1. Before construction, verify the location and points of connection of utility services.

- B. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning site work, investigate and verify the existence and location of underground utilities and other construction affecting the Work.
1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; and underground electrical services.
 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- C. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
1. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
 - a. Description of the Work.
 - b. List of detrimental conditions, including substrates.
 - c. List of unacceptable installation tolerances.
 - d. Recommended corrections.
 2. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
 3. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
 4. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
 5. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Existing Utility Information: Furnish information to local utility and Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
1. Notify Architect not less than two days in advance of proposed utility interruptions.
 2. Do not proceed with utility interruptions without Architect's and Owner's written permission.
- C. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- D. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- E. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for

clarification of the Contract Documents, submit a request for information to Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents. Submit requests on CSI Form 13.2A, "Request for Interpretation."

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.
- B. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.
- C. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.
- D. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect.

3.4 FIELD ENGINEERING

- A. Identification: Owner will identify existing benchmarks, control points, and property corners.
- B. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
 - 1. Do not change or relocate existing benchmarks or control points without prior written approval of Architect. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to Architect before proceeding.
 - 2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.
- C. Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
 - 1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
 - 2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
 - 3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.

3.5 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

1. Make vertical work plumb and make horizontal work level.
 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 3. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.
 4. Maintain minimum headroom clearance of 8 feet in spaces without a suspended ceiling.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
 2. Allow for building movement, including thermal expansion and contraction.
- G. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- H. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.6 OWNER-INSTALLED PRODUCTS

- A. Site Access: Provide access to Project site for Owner's construction forces.
- B. Coordination: Coordinate construction and operations of the Work with work performed by Owner's construction forces.
1. Construction Schedule: Inform Owner of Contractor's preferred construction schedule for Owner's portion of the Work. Adjust construction schedule based on a mutually agreeable timetable. Notify Owner if changes to schedule are required due to differences in actual construction progress.
 2. Pre-installation Conferences: Include Owner's construction forces at pre-installation conferences covering portions of the Work that are to receive Owner's work. Attend pre-installation conferences conducted by Owner's construction forces if portions of the Work depend on Owner's construction.

3.7 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F.

3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 1. Remove liquid spills promptly.
 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Cutting and Patching: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.
 1. Thoroughly clean piping, conduit, and similar features before applying paint or other finishing materials. Restore damaged pipe covering to its original condition.
- H. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- I. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- J. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- K. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.8 STARTING AND ADJUSTING

- A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Manufacturer's Field Service: If a factory-authorized service representative is required to inspect

field-assembled components and equipment installation, comply with qualification requirements in Division 1 Section "Quality Requirements."

3.9 PROTECTION OF INSTALLED CONSTRUCTION

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

3.10 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 1 Section "Cutting and Patching."
 - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 01 70 00

SECTION 01 73 29 – CUTTING AND PATCHING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.
- B. Related Sections include the following:
 - 1. Division 1 Section "Selective Demolition" for demolition of selected portions of the building for alterations.
 - 2. Division 7 Section "Through-Penetration Firestop Systems" for patching fire-rated construction – If applicable.
 - 3. Divisions 2 through 33 Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work – if applicable.
 - a. Requirements in this Section apply to mechanical and electrical installations. Refer to Divisions 23 and 26 Sections for other requirements and limitations applicable to cutting and patching mechanical and electrical installations – if applicable.

1.2 DEFINITIONS

- A. Cutting: Removal of existing construction necessary to permit installation or performance of other Work.
- B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.

1.3 SUBMITTALS

- A. Cutting and Patching Proposal: Submit a proposal describing procedures at least 10 days before the time cutting and patching will be performed, requesting approval to proceed. Include the following information:
 - 1. Extent: Describe cutting and patching, show how they will be performed, and indicate why they cannot be avoided.
 - 2. Changes to Existing Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building's appearance and other significant visual elements.
 - 3. Products: List products to be used and firms or entities that will perform the Work.
 - 4. Dates: Indicate when cutting and patching will be performed.
 - 5. Utilities: List utilities that cutting and patching procedures will disturb or affect. List utilities that will be relocated and those that will be temporarily out of service. Indicate how long service will be disrupted.
 - 6. Structural Elements: Where cutting and patching involve adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure.
 - 7. Architect's Approval: Obtain approval of cutting and patching proposal before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work.

1.4 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- B. Operational Elements: Do not cut and patch the following operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
 - 1. Primary operational systems and equipment.
 - 2. Air or smoke barriers.
 - 3. Fire-protection systems.
 - 4. Control systems.
 - 5. Communication systems.
 - 6. Conveying systems.
 - 7. Electrical wiring systems.
 - 8. Operating systems of special construction in Division 13 Sections.
- C. Miscellaneous Elements: Do not cut and patch the following elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
 - 1. Water, moisture, or vapor barriers.
 - 2. Membranes and flashings.
 - 3. Equipment supports.
 - 4. Piping, ductwork, vessels, and equipment.
 - 5. Noise- and vibration-control elements and systems.
- D. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
 - 1. If possible, retain original Installer or fabricator to cut and patch exposed Work listed below. If it is impossible to engage original Installer or fabricator, engage another recognized, experienced, and specialized firm.
 - a. Processed concrete finishes.
 - b. Stonework and stone masonry.
 - c. Ornamental metal.
 - d. Matched-veneer woodwork.
 - e. Preformed metal panels.
 - f. Roofing.
 - g. Firestopping.
 - h. Stucco and ornamental plaster.
 - i. Terrazzo.
 - j. Finished wood flooring.
 - k. Fluid-applied flooring.
 - l. Wall covering.
 - m. HVAC enclosures, cabinets, or covers.
- E. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

1.5 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections of these Specifications.
- B. Existing Materials: Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of existing materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
 - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

3.3 PERFORMANCE

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - 1. Cut existing construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Cutting: Cut existing construction by sawing, drilling, breaking, chipping, grinding, and similar

operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.

1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 2. Existing Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 4. Excavating and Backfilling: Comply with requirements in applicable Division 31-33 Sections where required by cutting and patching operations.
 5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 6. Proceed with patching after construction operations requiring cutting are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections of these Specifications.
1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
 - a. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
 4. Ceilings: Patch, repair, or rehang existing ceilings as necessary to provide an even-plane surface of uniform appearance.
 5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.

END OF SECTION 01 73 29

SECTION 01 77 00 CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Project Record Documents.
 - 3. Operation and maintenance manuals.
 - 4. Warranties.
 - 5. Instruction of Owner's personnel.
 - 6. Final cleaning.
- B. Related Sections include the following:
 - 1. Division 1 Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.
 - 2. Division 1 Section "Construction Progress Documentation" for submitting Final Completion construction photographs and negatives.
 - 3. Division 1 Section "Execution Requirements" for progress cleaning of Project site.
 - 4. Divisions 2 through 33 Sections for specific closeout and special cleaning requirements for products of those Sections.

1.2 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, damage or settlement surveys, and similar final record information.
 - 6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
 - 7. Complete startup testing of systems.
 - 8. Submit test/adjust/balance records.
 - 9. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - 10. Complete final cleaning requirements, including touchup painting.
 - 11. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for Final Completion.
 - 3. Substantial Completion will not be granted until all previous items have been delivered and completed.

1.3 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
 - 1. Submit a final Application for Payment according to Division 1 Section "Payment Procedures."
 - 2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - 4. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected. If work fails either a Substantial Completion or a close-out inspection, and a subsequent inspection is requested and conducted based on Contractor assertion of the same stage of completion, Owner will compensate Designer for performing such Re-inspection as additional services, and deduct the amount of such compensation from the Contract sum by appropriate modifications.

1.4 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit electronic copies of all lists. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1.5 PROJECT RECORD DOCUMENTS

- A. General: Do not use Project Record Documents for construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.

- B. Record Drawings: Maintain and submit one set of blue- or black-line white prints of Contract Drawings and Shop Drawings.
1. Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
 - a. Give particular attention to information on concealed elements that cannot be readily identified and recorded later.
 - b. Accurately record information in an understandable drawing technique using various colors or line styles to differentiate buried lines or modified components.
 - c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
 - d. Mark Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. Where Shop Drawings are marked, show cross-reference on Contract Drawings.
 2. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
 3. Mark important additional information that was either shown schematically or omitted from original Drawings.
 4. Note Construction Change Directive numbers, Change Order numbers, alternate numbers, and similar identification where applicable.
 5. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location. Organize into manageable sets; bind each set with durable paper cover sheets. Include identification on cover sheets.
- C. Record Specifications: Submit one copy of Project's Specifications, including addenda and contract modifications. Mark copy to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 3. Note related Change Orders, Record Drawings, and Product Data, where applicable.
- D. Record Product Data: Submit one copy of each Product Data submittal. Mark one set to indicate the actual product installation where installation varies substantially from that indicated in Product Data.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 3. Note related Change Orders, Record Drawings, and Record Specifications, where applicable.
- E. Miscellaneous Record Submittals: Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

1.6 OPERATION AND MAINTENANCE MANUALS

- A. Assemble a complete set of operation and maintenance data indicating the operation and maintenance of each system, subsystem, and piece of equipment not part of a system. Include operation and maintenance data required in individual Specification Sections and as follows:
1. Operation Data:
 - a. Emergency instructions and procedures.
 - b. System, subsystem, and equipment descriptions, including operating standards.
 - c. Operating procedures, including startup, shutdown, seasonal, and weekend operations.
 - d. Description of controls and sequence of operations.
 - e. Piping diagrams.
 2. Maintenance Data:
 - a. Manufacturer's information, including list of spare parts.
 - b. Name, address, and telephone number of Installer or supplier.
 - c. Maintenance procedures.
 - d. Maintenance and service schedules for preventive and routine maintenance.
 - e. Maintenance record forms.
 - f. Sources of spare parts and maintenance materials.
 - g. Copies of maintenance service agreements.
 - h. Copies of warranties and bonds.
- B. Organize two (2) operation and maintenance manuals into suitable sets of manageable size. Bind and index data in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, with pocket inside the covers to receive folded oversized sheets. Identify each binder on front and spine with the printed title "OPERATION AND MAINTENANCE MANUAL," Project name, and subject matter of contents. In addition to the required paper copies, provide owner with electronic PDF submittal of complete O&M delivery.

1.7 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. On advice of Owner's legal counsel, revise paragraph below to suit Project. Sometimes, extended warranties may be necessary.
- C. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark 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 Installer.

3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- D. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 DEMONSTRATION AND TRAINING

- A. Instruction: Instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
1. Provide instructors experienced in operation and maintenance procedures.
 2. Provide instruction at mutually agreed-on times. For equipment that requires seasonal operation, provide similar instruction at the start of each season.
 3. Schedule training with Owner with at least seven days' advance notice.
 4. Coordinate instructors, including providing notification of dates, times, length of instruction, and course content.
- B. Program Structure: Develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections. For each training module, develop a learning objective and teaching outline. Include instruction for the following:
1. System design and operational philosophy.
 2. Review of documentation.
 3. Operations.
 4. Adjustments.
 5. Troubleshooting.
 6. Maintenance.
 7. Repair.
- C. Equipment Start-up:
1. Conduct demonstration and instruction as soon as practicable upon installations, and prior to substantial completion inspection. Substantial Completion shall not be certified, nor shall Owner be required to assume responsibility for operating, maintaining, or insuring system, prior to complete demonstration and instruction.
 2. Demonstrate operation of newly provided equipment and systems to Owner and to Owner's representatives, using the operating and maintenance data as the basis of instruction.
 3. Make lists of persons witnessing equipment and systems demonstration, and persons receiving operating instructions. Send these lists to Owner for Inclusion into the Operations and Maintenance Data Binders if such binders have already been provided

- to the Owner.
4. Provide two copies to the Owner of a video on a DVD disk or other approved media device for each training session.

3.2 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits. If sand or fine landscaping materials have covered any concrete or paved surfaces, use a vacuum truck or pressure washer to remove debris not removed by sweeping.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Clean exposed exterior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - f. Clean transparent materials, including mirrors and glass in doors and windows, to a polished condition. Remove putty and other substances which are noticeable as vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.
 - g. Vacuum carpet surfaces.
 - h. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - i. Replace parts subject to unusual operating conditions.
 - j. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters to comply with requirements for new fixtures.
 - k. Remove labels which are not required as permanent labels.
 - l. Wipe surfaces of mechanical and electrical equipment clean. Remove excess lubrication and other substances. Clean plumbing fixtures to a sanitary condition.
 - m. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION 01 77 00