

Project Manual

PALATINE PUBLIC LIBRARY HEAT EXCHANGER REPAIR

700 N. North Court Palatine, IL 60067

Engberg Anderson Project No. 162592

February 20, 2019



HEAT EXCHANGER REPAIR

SEAL

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SECTION 001113 – ADVERTISEMENT FOR BIDS HEAT EXCHANGER REPAIR

1.1 NOTICE

A. Public notice is hereby given that The Board of Library Trustees of The Palatine Public Library District, Palatine, Illinois, hereafter referred to as the Owner, hereby advertising for Bids for the replacement of the building heat exchanger of the Palatine Public Library ("Library"), 700 N. North Court, Palatine, IL 60067, hereafter referred to as the Project.

1.2 **PROJECT DESCRIPTION**

A. The project consists of repairing the heat exchanger system in the lower level mechanical room. Work will include (but not limited to) replacement of the internal tube network and gaskets.

1.3 DOCUMENTS

- A. All Bids shall be based on Drawings and Project manuals prepared by Engberg Anderson, Inc. and dated February 20, 2019 and any addenda supplied prior to bid opening.
- B. Bid documents will be available from February 22, 2019 through March 11, 2019. The only source for documents is BHFX Plan Room and the link is http://www.bhfxplanroom.com.

1.4 PRE-BID CONFERENCE AND SITE VISITS

A. A **Mandatory** Pre-Bid site visit and walk-through conference will be conducted at the Library on March 1, 2019 at 9:00 a.m. CDT.

All prospective Bidders are encouraged to visit the site to acquaint themselves with local conditions, access, scope of work, etc. It shall be the responsibility of the Bidders to make any and all investigations necessary to become thoroughly informed of what is required and specified in the Bid. No plea of ignorance by the Bidders of conditions that exist or may hereafter exist as a result of failure or omission on the part of the Bidder to make the necessary examinations and investigations will be accepted as a basis for varying the requirements of the Owner of the compensation to the Bidder.

Each Bidder submitting a Bid is responsible for examining the complete Bid Package and all Addenda, and is also responsible for informing itself of all conditions that might in any way affect the cost or the performance of any Work. Failure to do so will be at the sole risk of the Bidder, and no relief will be given for errors or omissions by the Bidder. It is the Bidder's responsibility to attend the mandatory prebid site inspection, and to completely inspect premises prior to submitting Bids to determine all requirements associated with the Work. Failure to do so will in no way relieve the successful Bidder from the necessity of providing, without additional costs to the Owner, all necessary services that may be required to carry out the terms of the resulting contract. The Bidder must visit the site of the proposed Work and fully inform himself as to the facilities involved, the difficulty and restrictions concerning the performance of the contract. No additional compensation will be authorized for a Bidder's failure to be fully informed of the existing conditions. If awarded the contract, the Bidder will not be allowed any extra compensation by reason of any matter or thing concerning which such Bidder should have fully informed himself, because of his failure to have so informed himself prior to the bidding. The submission of a Bid shall be construed as conclusive evidence that the Bidder has made such examination as is required in this section and that the Bidder is conversant with local facilities and difficulties, the requirements of the Bid Package documents,

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and of pertinent, local, state and federal laws and codes, prevailing local labor and material markets, and has made due allowance in its Bid for all contingencies.

Before any award is made of the contract to the contractor, the contractor may be required to, upon request of the Owner, furnish information concerning his performance record in his capacity to complete the Work in an efficient and timely manner.

1.5 BID PROCESS, DEADLINE AND OPENING

- A. Sealed Bids must be received at the office of the Librarian-Director, Palatine Public Library District, 700 N. North Court, Palatine, IL 60067 by Personal Delivery, Commercial Delivery or U.S. Mail. It is suggested that respondents allow a minimum of four (4) days for delivery through U.S. mail. Overnight courier is acceptable provided timely receipt of Bids. The Bidder assumes responsibility for late delivery of the mail. Bids received via facsimile or e-mail will not be accepted.
- A. Bids will be received up to March 11, 2019, 2:00 p.m. Central Daylight Time. Any bids received after that time shall be rejected unopened. It is the sole responsibility of the Bidder to see that his Bid is received in the proper time.
- B. Bids will be opened publicly immediately following the bid due date in the Library Meeting Room.

1.6 FORM OF BID

- A. All bids must be placed in a sealed envelope, clearly labeled on the lower left hand corner with the words "SEALED BID PALATINE LIBRARY HEAT EXCHANGER"
- B. Bidders must provide two (2) copies of the bid form.
- C. Bidders must provide a cashier's check or a bid bond in the amount of 10% of the gross amount of the total bid, including all alternates, with their bid form.
- D. Certifications:
 - 1. The Bidder shall certify compliance with Illinois statutes governing
 - a. Prevailing wage,
 - b. Tax Exemptions,
 - c. Drug Free Work Place,
 - d. Equal Opportunity Employment, and
 - e. Sexual Harassment.
 - 2. The Bidder shall also certify that the Bidder is not barred from bidding on the Project, or entering into this Contract as a result of a violation of either Section 33E-3 or 33E-4 of the Illinois Criminal Code of 1961, or any similar offense of "bid rigging" or "bid rotating" of any state of the United States.
- E. No bid can be withdrawn or modified after the time set for receipt of bids and pending consideration of the action upon same by the Owner. In no event will action upon bids be deferred beyond 60 days from the time set for receipt of bids.
- F. The ability of the apparent low bidder(s) to successfully execute the Work in accordance with the contract documents and on time will be considered by the Owner in making an award. The bid shall be let to the lowest responsive, responsible bidder as determined by Owner.
 - The Owner reserves the right to reject any and all bids or parts thereof and to waive any technicalities or irregularities in the bidding and to disregard all nonconforming or conditional bids or counter-proposals and to hold the bid proposals for ninety (60) days from the opening date set forth above. Bidder agrees to accept a notice of award, if

selected, based on the terms of this bid in the event that a notification of award is received on or before expiration of the 60-day time period. The Owner reserves the right to cancel the bid at any time, without liability for any loss, damage, cost or expense incurred or suffered by any Bidder as a result of that cancellation. Each Bidder is solely responsible for the risk and cost of preparing and submitting a bid.

1.7 AUTHORITY

Published upon order of the Board of Trustees of the Palatine Public Library District, Palatine, Illinois.

END OF SECTION

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SECTION 002113 - INSTRUCTIONS TO BIDDERS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes.
 - 1. Bidding Contact Information
 - 2. Receipt and Opening of Bids
 - 3. Definitions
 - 4. Bidders Representations
 - 5. Bidding Documents
 - 6. Interpretation of Bid Documents and Addenda
 - 7. Substitutions
 - 8. Pre-Bid Conference
 - 9. Bidding Procedures
 - 10. Alternate Bids
 - 11. Consideration of Bids
 - 12. Post-Bid Information
 - 13. Receipt and Opening of Bids
 - 14. Consideration of Bids
 - 15. Post-Bid Information
 - a. Performance Bond and Payment Bond

1.2 DEFINITIONS

- A. The Bid Documents include the following:
 - 1. Bid Requirements:
 - a. Advertisement to Bid, as published by the Board of Library Trustees of the Palatine Public Library District, Palatine, Illinois, and included for convenience as and hereafter referenced as Section 00 11 13
 - b. The Bid Form, Section 00 41 13
 - c. Certificates of Insurance, Section 00 73 16 Insurance Requirements
 - 2. Proposed Contract Documents:
 - a. Section 00 52 13 Form of Agreement between Owner and Contractor, AIA A105.
 - b. Section 00 73 13 Performance & Payment Bond Requirements.
 - c. Section 00 73 16 Insurance Requirements.
 - d. Section 00 73 43 Prevailing Wage Rate Determination.
 - e. Drawings
 - f. Project Manual
 - g. Addenda issued prior to the execution of the Contract
- B. General definitions set forth in the General Conditions of the Contract for Construction, AIA A105, are applicable to the Bid Documents.
- C. Other definitions

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 - 1. Addenda are written or graphic instruments used by the Architect prior to the execution of the Contract which modify of interpret the Bid Documents by addition, deletion, clarification, or correction.
 - 2. A Bid is a complete and properly signed proposal to the Work for the sums stipulated therein, submitted in accordance with the Bid Documents.
 - 3. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bid Documents as the base, to which Work may be added or from which work may be deleted for sums stated in Alternate Bids.
 - 4. An Alternate Bid is an amount stated in the Bid to be added or deleted from the sum of the Base Bid if the corresponding Work, as described in the Bidding Documents, is made part of the project.
 - 5. A Bidder is a person or entity who submits a Bid.
 - 6. A Unit Price is an amount stated in the Bid as a price per unit of measure for materials, equipment, or services or portion of the Work as described in the Bid Documents.

1.3 BIDDING CONTACT INFORMATION

- A. Questions relating to the Bid Documents should be addressed to:
 - 1. Shaun Kelly
 - 2. Engberg Anderson, inc
 - 3. 5600 N. River Road, Suite 800
 - 4. Rosemont, IL 60018
 - 5. 847-704-1300 Voice
 - 6. shaunk@engberganderson.com E-mail

1.4 BIDDING DOCUMENTS

- A. Bid Documents are available in accordance with the Advertisement for Bids, Section 00 11 13.
- B. Bid Documents will be issued directly to sub-bidders.
- C. Bidders shall use complete sets of Bid Documents in preparing Bids.
- D. The Bid Documents are available for the sole purpose of obtaining Bids on the Work. The Owner and Architect do not confer license or grant permission for any other use of the Bid Documents.

1.5 PRE-BID CONFERENCE

A. See Section 00 11 13 for Date, Time and Location of Pre-Bid Conference.

1.6 INTERPRETATION OF BID DOCUMENTS

- A. Bidders shall promptly notify the Architect of any ambiguity, inconsistency, or error, which they may discover upon examination of the Bid Documents, site, or local conditions.
- B. Bidders requiring clarification or interpretation of the Bid Documents shall make a request to the Architect no later than 5 calendar days prior to the date on which bids are due.
 - 1. All requests shall be in written form transmitted by email.
 - 2. All responses shall be in a written format, available for all bidders and published with the final Addenda.
- C. No oral interpretation of the Bid Documents will be made.
- D. Clarification to all Bidders shall be by Addendum, issued no later than 3 calendar days prior to the date on which bids are due.
- E. In the even that conflicts exist within the bid documents, Bidders shall include in their bid the item(s) of higher value and/or quantity or the most restrictive method on installation. The Architect shall provide final interpretation and directions after Contract award.

F. Receipt of Addenda: It is the responsibility of all bidders to verify any addenda identified on the website before submitting their bid. It shall be conclusively presumed that all bids submitted are based on the final version of the Bid and Contract Documents which shall include all addenda.

1.7 SUBSTITUTIONS PRIOR TO BIDDING

- A. Materials, products, and equipment described in the Bid Documents establish a standard of required function, dimension, appearance, and quality to be met by any proposed substitution.
- B. Request for Substitution shall be submitted to the Architect no later than 10 calendar days prior to the date on which bids are due.
- C. Approvals, if granted, shall appear in the Addendum issued no later than 7 calendar days prior to the date on which bids are due.
- D. Request for Substitutions shall include the following:
 - 1. Name of material or equipment originally specified.
 - 2. Description of proposed substitution including:
 - a. Drawings.
 - b. Performance or test data.
 - c. Other relevant data.
 - 3. Description of changes in other materials or equipment or other portions of the Work, including that of other contracts, made necessary by the incorporation of the substitution.
- E. Burden of proof of merit of the proposed substitution is on the proposer.
- F. The Architect's decision of approval or disapproval is final.

1.8 BIDDING PROCEDURES

- A. Bids shall be submitted on forms identical to that included in the Bid Documents, Section 00 41 13.
 - 1. All copies of the Bid, Bid Security, and any other documents required shall be submitted in a sealed opaque envelope.
 - a. Within the bid submittal envelope, the Contractor may include a separate sealed envelope labelled, "TRADE SECRETS PROPRIETARY CONFIDENTIAL INFORMATION" and place within it any bid components that meet this criteria.
 - b. The Bid Form may not be included as a Trade Secret.
 - 2. The envelope shall be identified with the Bidder's name, address, and Name of the Project being bid.
 - 3. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.
- B. All blanks on the form shall be filled in by typewriter or printed manually in ink.
- C. Where indicated, sums shall be expressed in both words and figures. In the case of discrepancy between the two, the amount written in words shall govern.
- D. Alterations and erasures must be initialed by the signatory of the Bid.
- E. Alternate Bids
 - 1. All requested Alternates shall be bid. If no change in the Base Bid sum is required, enter "No Change".
 - 2. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at the Owner's option.

- 3. Indicate in the space provided on the Bid Form the change to the amount bid for base bid construction for the following alternate bids.
- 4. Schedule of Alternates:
 - a. See Section 01 23 00 Alternates.
- F. No stipulations or qualification shall be allowed.
- G. Each copy of the Bid Form shall include the legal name of the Bidder and a statement that the Bidder is a sole proprietor, partnership, corporation, or other legal entity.
- H. Each copy shall be signed by the person(s) legally authorized to bind the Bidder to a contract.
- I. A bid by a corporation shall give the State of Incorporation and have the corporate seal affixed.
- J. A Bid submitted by an agent shall have a current Power of Attorney attached certifying the agent's authority to bind the Bidder.
- K. Bid Modification or Withdrawal:
 - 1. A Bid may not be modified or withdrawn or canceled by the Bidder following the time and date designated for the Bid Opening.
 - 2. Prior to the time and date designated for the Bid Opening, the Bidder may modify or withdraw the Bid by:
 - a. Written notice over the signature of the Bidder.
 - b. Telegraph or fax if confirmed in writing over the signature of the Bidder and postmarked and mailed on or before the time set for receipt of Bids.
 - 3. Modification shall be worded so to not to reveal the amount of the original Bid.
 - 4. Withdrawn Bids may be resubmitted up to the time and due date designated for receipt of Bids.
 - 5. Bid Security shall be at least five (5) percent of the amount of the Bid as modified or resubmitted.
- L. Bid prices are to include the delivery of all materials including plant, equipment, supplies, tools, scaffolding, transportation, insurances, bonds, warranties, and all other items and facilities, and the performance of all labor and services necessary for the proper completion of the work, except as may be otherwise provided in the Contract Documents.
- M. The bidder shall show that they have adequate laborers and materials to successfully complete the work and within the time required. The bidder shall not have been debarred or determined ineligible for public contracts by any governmental agency.

1.9 BID SECURITY

- A. Each Bid shall be accompanied by a Bid Security (a Bid Bond or Certified Check) pledging that the bidder will enter into a Contract with the Owner on the terms stated in the Bid Documents, and provide Performance Bonds covering faithful completion of the Contract and payment of all obligations arising there under. Should the Bidder fail to comply with the provisions of this paragraph within ten (10) days of notice of award, the amount of the Bid Security shall be forfeited to the Owner as liquidated damages, not as a penalty.
 - 1. Bid Security shall be at least ten (10) percent of the amount of the Bid as modified or resubmitted.
 - a. Bid Bonds shall be on the form described in Section 00 21 13 Instructions to Bidders the bid documents.
 - 2. Cashiers or Certified checks shall be drawn on a bank or a bank chartered under the laws of the State of Illinois, the United States and shall be payable to the Owner.
- B. The Owner reserves the right to retain the Bid Security of Bidders to whom an award is being considered until either:

- 1. The contract has been executed and bonds have been furnished, or
- 2. The specified time for holding bids has elapsed so that bids may be withdrawn, or
- 3. All Bids have been rejected.

1.10 BID ATTACHMENTS

A. List of Subcontractors and Suppliers:

1.11 BIDDERS REPRESENTATIONS - GENERAL

- A. In submitting a Bid, the Bidder acknowledges and confirms that:
 - 1. The Bidder has read and understands all the Bid Documents to the extent that the Documents relate to the Work for which the Bid is submitted and that the Bid is made in accordance therewith.
 - 2. The Bidder has become familiar with the site and local conditions under which the Work is to be performed and has correlated the Bidder's observations with the requirements of the Bid Documents.
 - 3. The Bid is based on the materials, equipment, and systems required by the Bid Documents without exception.
 - 4. The Bid shall remain open for sixty (60) days after the date of Bid opening.

1.12 BIDDERS REPRESENTATIONS - ILLINOIS

- A. In submitting a Bid, the Bidder acknowledges and confirms that:
- The Bidder and each of its Subcontractors shall pay prevailing wages as established by the B. Illinois Department of Labor for each craft or type of work needed to execute the contract in accordance with 820 ILCS 130/.01 et seq. The Bidder shall prominently post the current schedule of prevailing wages at the Contract site and shall notify immediately in writing all of its Subcontractors, of all changes in the schedule of prevailing wages. Any increases in costs to the Bidder due to changes in the prevailing rate of wage during the terms of any contract shall be at the expense of the Bidder and not at the expense of the Owner. The change order shall be computed using the prevailing wage rates applicable at the time the change order work is scheduled to be performed. The Bidder shall be solely responsible to maintain accurate records as required by the prevailing wage statute and shall be solely liable for paying the difference between prevailing wages and any wages actually received by laborers, workmen and/or mechanics engaged in the Work and in every way defend and indemnify the Owner against any claims arising under or related to the payment of wages in accordance with the Prevailing Wage Act. The Illinois Department of Labor publishes the prevailing wage rates on its website at http://www.state.il.us/agency/idol/rates/rates.HTM. The Department revises the prevailing wage rates and the Bidder and any of its subcontractors have an obligation to check the Department's web site for revisions to prevailing wage rates. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor's website.
- C. Tax Exempt Status: The Bidder acknowledges that the Owner is exempt from the State of Illinois Retailer's Occupation Tax, Service Occupation Tax (both state & local) the Use Tax and the Service Use Tax. To that end, bids shall not include sales tax. The successful bidder shall coordinate with the owner the delivery of the appropriate certifications and Tax Exemption Identification Number following award of contract.
- D. All bidders acknowledge that the Project is being partially funded through the Live and Learn Grant Project from the State of Illinois. Bidders shall therefore comply with all terms and conditions of such grant, including the business enterprise of minority-owned businesses, female-owned businesses, and businesses with disabilities outlines in the Businesses for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. In the event a bidder is unable to comply with such requirements, the bidder must include sufficient information

showing that the bidder has exercised reasonable efforts to do so. The Bidder shall comply with the Illinois Drug Free Workplace Act as contained in the Illinois Compiled Statutes Ch. 30, Sec. 580/1 et seq."

- E. The Bidder certifies that they operate a drug-free environment and that drugs are not allowed in the workplace or satellite locations as well as the project site in accordance with the Drug Free Workplace Act.
- F. The Bidder certifies that it has a written Sexual Harassment Policy in place in full compliance with all applicable state and local laws and policies.
- G. The Bidder certifies that it is not currently delinquent in the payment of any tax administered by or owed to the Illinois Department of Revenue or otherwise in default upon any such tax as defined by the Illinois Compiled Statutes, or if it is:
 - 1. It is contesting its liability for the tax or the amount of tax in accordance with procedures established by the appropriate Revenue Act; or
 - 2. It has entered into an agreement with the Department of Revenue for payment of all taxes due and is currently in compliance with that agreement.
- H. The Bidder certifies that it is not barred from bidding on the Project, or entering into this Contract as a result of a violation of either Section 33E-3 or 33E-4 of the Illinois Criminal Code of 1961, or any similar offense of "bid rigging" or "bid rotating" of any state of the United States.
- I. The Bidder shall comply with the Illinois Drug Free Workplace Act as contained in the Illinois Compiled Statutes Ch. 30, Sec. 580/1 et seq.
- J. Bidder agrees that if awarded the bid, the bidder will maintain, without charge to the Owner, all records and documents for projects of the Owner in compliance with the Freedom of Information Act, 5 ILCS 140/1 et seq. In addition, bidder will produce records which are responsive to a request received by the Owner under the Freedom of Information Act so that the Owner may provide records to those requesting them within the time frames required.
- K. The Bidder shall indemnify and hold harmless the Owner and its officers, officials, employees, volunteers and agents from and against all claims, damages, losses and expenses, including but not limited to legal fees (attorneys' and paralegals' fees and court costs), arising out of or resulting from the performance of the Bidder's work on the Project, provided that any such claim, damage, loss or expense (i) is attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property, including the loss of use therefrom, and (ii) is caused in whole or in part by any wrongful or negligent act or omission of the Bidder, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, except to the extent it is solely caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this Paragraph. The Bidder shall similarly protect, indemnify and hold and save harmless the Owner, its officers, officials, employees, volunteers and agents against and from any and all claims, costs, causes, actions and expenses including but not limited to legal fees, incurred by reason of the Bidder's breach of any of its obligations under, or the Owner's default of, any provision of the Contract. The indemnification obligations under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor or any subcontractor under Workers' Compensation or Disability Benefit Acts or Employee Benefit Acts.

1.13 RECEIPT AND OPENING OF BIDS

- A. Bidder assumes all responsibility for timely delivery at the location specified in Section 00 0010
 Advertisement for Bids.
 - 1. Any modifications to the time and or place of bid receipt shall be by written addendum only.

- 2. Bids received after the designated time shall be returned unopened.
- 3. Oral, telephonic, telegraphic, or faxed Bids are invalid and will not receive consideration.
- B. Properly identified Bids received on time will be opened publicly and read aloud.
- C. An abstract of the Bids will be made available within a reasonable time.

1.14 CONSIDERATION OF BIDS

- A. It is the intent of the Owner to award a Contract to the lowest responsible Bidder provided:
 - 1. The Bid has been submitted in accordance with the Bid Documents
 - 2. The Bid does not exceed the funds available.
 - 3. Although price is a major consideration, product quality, references, service, delivery time and past experience, if applicable, will also be considered. No Bid will be considered unless the Bidder shall furnish evidence satisfactory to the Owner that it has the necessary facilities, abilities, experience, equipment, and financial and physical resources available to fulfill the conditions of the contract and execute the Work should the contract be awarded to him. Bid Documents which are not responsive to the requirements herein may not be considered by the Owner for an award of the contract.
 - 4. In determining the responsibility of any Bidder, the Owner may take into account other factors in addition to financial responsibility, such as past records of its or other entities transactions with the Bidder, experience, ability to work cooperatively with the Owner and its staff, adequacy of equipment, ability to complete performance within necessary time limits, and other pertinent considerations such as, but not limited to, reliability, reputation, competency, skill, efficiency, facilities and resources. The Bid will be awarded in the Owner's best interests based on these and other legally-allowable considerations. The Owner and its representatives and agents may make any investigations deemed necessary to determine the ability of the Bidder to perform the Work. The Bidder shall furnish any information and data requested by the Owner for this purpose.
- B. The Owner shall have the right to:
 - 1. Reject any or all Bids.
 - 2. Reject any Bid not accompanied by a Bid Security or any data required by the Bid Form.
 - 3. Reject a Bid which is in any way irregular, partial, or incomplete.
 - 4. Waive informalities or irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's own best interests.
 - 5. Accept Alternates in any order or combination and to determine the low Bidder on the basis of the sum of the Base Bid and accepted Alternates.

1.15 POST-BID INFORMATION

- A. Performance Bonds
 - 1. If awarded the Contract, the Bidder shall substantially complete all Work and perform such Work so that all other trades whose Work is dependent upon the completion of this contractor's Work are able to complete their portions of the project as shown in the Project Schedule. All means required by the Contractor to maintain the schedule for their Bid Category (Contract) shall be included in their Bid.
 - 2. Performance Bond:
 - a. The Bidder shall, upon notice of award, furnish within ten (10) days Bonds covering the faithful performance of the Contract and payment of all obligations arising there under.
 - b. The amount of the Bond shall be one hundred percent (100%) of the total contract sum as stipulated in Section 00 0600 Bonds & Certificates.

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- B. The successful Bidder shall obtain, at its own expense, all permits and licenses which may be required to complete the contract.List of Subcontractors and Suppliers:
 - 1. The Bidder shall, as part of the Bid, provide a list of subcontractors and sources of major products as evidence as to the reliability and responsibility of the parties subcontracted to furnish and perform the Work.
 - 2. If the Architect, after due investigation, has reasonable objection to a proposed subcontractor or supplier, the Architect shall notify the Bidder in writing within 3 days of receipt of bids. If the Architect or Owner has reasonable objection, the Bidder may, at the Bidder's option:
 - a. Withdraw the Bid, or
 - b. Submit an acceptable substitute, in which case the Bidder may submit an adjusted Base Bid or Alternate Bid price occasioned by the substitution. The Owner may:
 - 1) accept the revised price, or
 - 2) disqualify the Bidder.
 - c. In the event of a withdrawal or disqualification, the Bid Security will be returned to the Bidder.

END OF SECTION 002113

SECTION 004113 – BID FORM - STIPULATED SUM-SINGLE PRIME CONTRACT

PART 1 - GENERAL

1.1 OWNER RECEIPT OF BIDS

- A. All Proposals MUST be submitted on this form with original signatures for consideration.
 - 1. Complete individual bid sections as formatted below.
 - 2. All bids shall be based on complete compliance with the Bid Documents.
 - 3. Submit Bid in accordance with the provisions of Section 00 01 00 Instructions to Bidders.
 - 4. Facsimiles will not be accepted.

1.2 BIDDER

This Bid is submitted to the Owner by:

(An Individual) (A Partnership) (A Corporation) (A Joint-Venture) (cross out inapplicable)

of

Street Address	City	State Zip Code	Telephone No.

for the construction of an expanded and renovated library and hereby agree to execute a Contract, furnish satisfactory Bonds and Certificates, and complete the referenced project in strict accordance with the Contract Documents. The undersigned Bidder agrees, if this Bid is accepted, to enter into an Agreement with the Owner in the form identified in the Contract Documents to complete the Work as specified or indicated in the Bid Documents for the Contract Price and within the Contract Time indicated in this Bid. The Bid reflects the Owner's status as a Tax Exempt Agency.

1.3 BIDDERS REPRESENTATIONS

- A. Non-Collusion:
 - 1. In submitting this Bid, Bidder represents, as more fully set forth in the Agreement, that: this Bid is genuine and not made in the interest or on behalf of any undisclosed person, firm or corporation, and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm or a corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.
 - 2. In submitting this Bid, Bidder certifies, and in the case of a Joint Bid each party thereto certifies as to his own organization, that in connection with the bid:
 - a. The prices in the Bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other Bidder or with any competitor.
 - b. Unless otherwise required by law, the prices which have been quoted in the Bid have not knowingly been disclosed by the Bidder, prior to opening, directly, or indirectly to any other Bidder or to any competitor.
 - c. No attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a Bid for the purpose of restricting competition.
- B. The Bidder and each of its Subcontractors shall pay prevailing wages as established by the Illinois Department of Labor for each craft or type of work needed to execute the contract in accordance with 820 ILCS 130/.01 et seq. The Bidder shall prominently post the current schedule of prevailing wages at the Contract site and shall notify immediately in writing all of its Subcontractors, of all changes in the schedule of prevailing wages. Any increases in costs to the Bidder due to changes in the prevailing rate of wage during the terms of any contract shall be at the expense of the Bidder and not at the expense of the Owner. The change order shall be computed using the prevailing wage rates applicable at the time the change order work is scheduled to be performed. The Bidder shall be solely responsible to maintain accurate records as required by the prevailing wage statute and shall be solely liable for paying the difference between prevailing wages and any wages actually received by laborers, workmen and/or mechanics engaged in the Work and in every way defend and indemnify the Owner against any claims arising under or related to the payment of wages in accordance with the Prevailing The Illinois Department of Labor publishes the prevailing wage rates on its Wage Act. website at http://www.state.il.us/agency/idol/rates/rates.HTM. The Department revises the prevailing wage rates and the Bidder and any of its subcontractors have an obligation to check the Department's web site for revisions to prevailing wage rates. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor's website.
- C. Tax Exempt Status: In submitting this Bid, Bidder acknowledges that the Owner is exempt from the State of Illinois Retailer's Occupation Tax, Service Occupation Tax (both state & local) the Use Tax and the Service Use Tax. To that end, bids shall not include sales tax. The successful bidder shall coordinate with the owner the delivery of the appropriate certifications and Tax Exemption Identification Number following award of contract.
- D. In submitting this Bid, Bidder certifies that they operate a drug-free environment and that drugs are not allowed in the workplace or satellite locations as well as the project site in accordance with the Drug Free Workplace Act. The Bidder shall comply with the Illinois Drug Free Workplace Act as contained in the Illinois Compiled Statutes Ch. 30, Sec. 580/1 et seq.

- E. In submitting this Bid, Bidder certifies that it has a written Sexual Harassment Policy in place in full compliance with all applicable state and local laws and policies.
- F. In submitting this Bid, Bidder certifies that it is not currently delinquent in the payment of any tax administered by or owed to the Illinois Department of Revenue or otherwise in default upon any such tax as defined by the Illinois Compiled Statutes, or if it is:
 - 1. It is contesting its liability for the tax or the amount of tax in accordance with procedures established by the appropriate Revenue Act; or
 - 2. It has entered into an agreement with the Department of Revenue for payment of all taxes due and is currently in compliance with that agreement.
- G. In submitting this Bid, Bidder certifies that it is not barred from bidding on the Project, or entering into this Contract as a result of a violation of either Section 33E-3 or 33E-4 of the Illinois Criminal Code of 1961, or any similar offense of "bid rigging" or "bid rotating" of any state of the United States.
- H. The Bidder shall indemnify and hold harmless the Owner and its officers, officials, employees, volunteers and agents from and against all claims, damages, losses and expenses, including but not limited to legal fees (attorneys' and paralegals' fees and court costs), arising out of or resulting from the performance of the Bidder's work on the Project, provided that any such claim, damage, loss or expense (i) is attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property, including the loss of use therefrom, and (ii) is caused in whole or in part by any wrongful or negligent act or omission of the Bidder, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, except to the extent it is solely caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this Paragraph. The Bidder shall similarly protect, indemnify and hold and save harmless the Owner, its officers, officials, employees, volunteers and agents against and from any and all claims, costs, causes, actions and expenses including but not limited to legal fees, incurred by reason of the Bidder's breach of any of its obligations under, or the Owner's default of, any provision of the Contract. The indemnification obligations under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor or any subcontractor under Workers' Compensation or Disability Benefit Acts or Employee Benefit Acts.

Bid Schedule begins on next page

PART 2 - BID SCHEDULE

2.1 BASE BID – HEAT EXCHANGER REPAIR

A. Provide the Work described as Base Bid in the Bid Documents inclusive of all material parts, accessories, labor, transportation, delivery and all incidental items required to provide a complete project:

_____Dollars (\$_______).

Complete the Bid Form on next page

2.2 CERTIFICATIONS & SIGNATURES

2.3 THE BIDDER ACKNOWLEDGES RECEIPT OF THE FOLLOWING ADDENDA:

- A. It is the responsibility of all bidders to verify any addenda identified on the website before submitting their bid. It shall be conclusively presumed that all bids submitted are based on the final version of the Bid and Contract Documents which shall include all addenda issued prior to bids being due.
- B. Addendum _____, dated _____.
- C. Addendum _____, dated _____.
- D. Addendum _____, dated _____.

2.4 THE BIDDER HAS ATTACHED THE FOLLOWING ITEMS TO THIS BID FORM:

- A. Bid Bond in an amount no less than 10% of the aggregate sum including all alternates.
- B. Qualification Statement

2.5 COMMENCEMENT AND COMPLETION OF CONTRACT WORK

A. The undersigned agrees, if signatory to the Contract, to commence work upon receipt of Notice to Proceed.

Signatures: Complete the Signatures part of the Bid Form on next page

2.6 SIGNATURES AS REQUIRED TO BIND THE BIDDER.

L	
-/	-

(name) certify that I am employed as the

(title) of	_(cor	npany),
a bidder for the work described in the bid category to which this certificate is attached, a	and (c	heck each)

(title) of

I am authorized to make this certificate and that I have personal knowledge of the matters certified to herein, and that the Company named above is not disbarred from contracting with any unit of state or local government as a result of a violation of either Section 33E-3 or 33E-4 of Article 33E of the Illinois Criminal Code of 1961, and

The company operates a drug-free environment and that drugs are not allowed in the workplace or satellite locations as well as the project site in accordance with the Drug Free Workplace Act of January 1992, and

The Company is fully aware of and able to comply with all Local, State and Federal Safety and other Laws, Codes and Regulations applicable for the construction of the Project, and

The Company is not currently delinquent in the payment of any tax administered by or owed to the Illinois Department of Revenue or otherwise in default upon any such tax as defined by the Illinois Compiled Statutes, or if it is, it is contesting its liability for the tax or the amount of tax in accordance with procedures established by the appropriate Revenue Act; or It has entered into an agreement with the Department of Revenue for payment of all taxes due and is currently in compliance with that agreement, and

The Company has a written Sexual Harassment Policy in place in full compliance with all applicable state and local laws and policies.

Signature		-	
Name		-	
Title		-	
Date		-	
WITNESSED			
Subscribed and sworn	to before me this <u>Date:</u>		
Signature:		Printed Name:	
Date:	My Commission	n Expires:	
	END OF SEC	TION	NOTARY SEAI

SECTION 004513 – CONTRACTOR'S QUALIFICATION STATEMENT

PART 1 - GENERAL

1.1 OWNER RECEIPT OF QUALIFICATION STATEMENTS

- A. Qualification Statements are to be appended to the Bid Form and submitted as part of the Bid.
 - 1. Provide all attachments identified in the body of the attached form.
 - 2. Provide telephone numbers and addresses for all corporations, individuals or entities listed as references or sources of information in the body of the form or the required attachments.
 - 3. Form shall be signed and notarized. Signatory party shall be as legally designated to bind the corporation.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.1 BIDDER INFORMATION	
Ву:	Check one of the following
Name	Corporation
Company	Partnership
Address	Individual
City, State, Zip	Joint Venture
Phone	Other, specify
Fax	
Type of Work	

The submitter certifies under oath that the information provided herein is true and sufficiently complete so as not to be misleading. The information provided will be used in evaluating the ability of the potential bidder to complete the proposed work and shall be held in confidence.

HEAT EXCHANGER REPAIR

3.2 ORGANIZATION

А.	How many years has your organization been in business as a contractor?	
В.	How many years has your organization been doing business under its present business name?	
C.	Under what other names has your business operated under?	
L	Name	Time frame

D.	Corporate Information: Complete this section if your organization is a corporation.
	Date of Incorporation
	State of Incorporation
	President's Name
	Vice President's name(s)
	Secretary's Name
	Treasurer's name
	Ι
E.	Partnership Information: Complete this section if your organization is a partnership.
	Date of Organization
	Type of Partnership
	Names of General Partners

T TT" A	ATINE PUBLIC LIBRARY	EA Project 162592
HEA	AT EXCHANGER REPAIR	February 20, 2019
F.	Individual Ownership Information: Complete this section if your organization is individually owned.	
	Date of Organization	
	Name of Owner:	
G.	If other than the types identified above, describe your organization and name the principal individuals.	
	Description	
	Name of Principals:	
	Tune of The pub.	
H.	Licensing: List the jurisdictions and trade categories in which your	
H.	organization is licensed or registered to do business	Licopso o
Н.		
Н.	organization is licensed or registered to do business	
Н.	organization is licensed or registered to do business	
H.	organization is licensed or registered to do business	
H.	organization is licensed or registered to do business	
H.	organization is licensed or registered to do business	License or Registration No.
H. I.	organization is licensed or registered to do business	
	organization is licensed or registered to do business Trade Area Jurisdiction	Registration No
	organization is licensed or registered to do business Trade Area Jurisdiction	
	organization is licensed or registered to do business Trade Area Jurisdiction	Registration No
	organization is licensed or registered to do business Trade Area Jurisdiction	Registration No
	organization is licensed or registered to do business Trade Area Jurisdiction	Registration No
	organization is licensed or registered to do business Trade Area Jurisdiction	Registration No

HEAT EXCHANGER REPAIR

3.3 HISTORY

A.	List three public construction projects that are of similar size, complexity
	that your firm has completed. Provide the following information for
	each project:

1 Name of Project

Name of Owner (Include contact name and phone number)

Name of Architect (Include contact name and phone number)

Contract Amount

Completion Date

Percentage of total cost of the work completed with your own forces.

- 2 Name of Project
 - Name of Owner (Include contact name and phone number)

 Name of Architect (Include contact name and phone number)
 - Contract Amount
 - Completion Date
 - Percentage of total cost of the work completed with your own forces.
- 3 Name of Project

Name of Owner (Include contact name and phone number) Name of Architect (Include contact name and phone number)

Contract Amount

Completion Date

Percentage of total cost of the work completed with your own forces.

B. Claims and Suits: If the answer to any of these is yes, attach details.

Has your organization ever failed to complete any work awarded to it?

Are there any judgments, claims, arbitration proceedings or suits pending with regards to contracts within the last five years?

Has your organization filed any lawsuits or requested arbitration with regard to contracts within the last five years?

Has any officer or principal of your organization ever been an officer or principal of another organization when it failed to complete a contract?

HEAT EXCHANGER REPAIR

3.4	REFERENCES
А.	Trade References, provide 3
1	Name
	Company
	Address
	City/State/Zip
	Phone
	Fax
2	Name
	Company
	Address
	City/State/Zip
	Phone
	Fax
3	Name
	Company
	Address
	City/State/Zip
	Phone
	Fax

HEAT EXCHANGER REPAIR

3.5 SIGNATURES

	Ы	Ľ
Signature		
Name		
Title		
Date		
	7	۲ Corporate Seal (if required)
WITNESS		corporate scar (in requirea)
	Ы	ĸ
Signature		
Notary		
Date		
Commission Expiration Date		

7

Notary Seal

Γ

END OF SECTION

SECTION 005213 – FORM OF AGREEMENT STIPULATED SUM – SINGLE PRIME CONTRACT

PART 1 - GENERAL

1.1 FORM OF AGREEMENT

A. It is the intent of the Owner to enter into a Standard Form of Agreement between Owner and Contractor AIA A105 2007 as appended to this section.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION 00 52 13

DRAFT AIA Document A105[™] - 2017

Standard Short Form of Agreement Between Owner and Contractor

AGREEMENT made as of the « » day of « » in the year « » (*In words, indicate day, month and year.*)

BETWEEN the Owner: *(Name, legal status, address and other information)*

Palatine Public Library District 700 N. North Court Palatine, IL 60067

and the Contractor: (Name, legal status, address and other information)

« »« » « » « »

« »

for the following Project: (Name, location and detailed description)

Palatine Public Library Heat Exchanger Repair « »

The Architect: (Name, legal status, address and other information)

Engberg Anderson, Inc. 5600 North River Road Suite 800 Rosemont, IL 60018

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS: The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.





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TABLE OF ARTICLES

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- 3 CONTRACT SUM
- 4 PAYMENTS
- 5 INSURANCE
- 6 GENERAL PROVISIONS
- 7 OWNER
- 8 CONTRACTOR
- 9 ARCHITECT
- 10 CHANGES IN THE WORK
- 11 TIME
- 12 PAYMENTS AND COMPLETION
- 13 PROTECTION OF PERSONS AND PROPERTY
- 14 CORRECTION OF WORK
- 15 MISCELLANEOUS PROVISIONS
- 16 TERMINATION OF THE CONTRACT
- 17 OTHER TERMS AND CONDITIONS

-

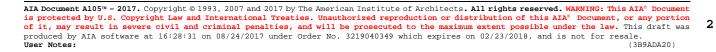
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ARTICLE 1 THE CONTRACT DOCUMENTS

The Contractor shall complete the Work described in the Contract Documents for the Project. The Contract Documents consist of

- .1 this Agreement signed by the Owner and Contractor;
- .2 the drawings and specifications prepared by the Architect, dated « », and enumerated as follows:

Drawings: Number	Title	Date
« »		
Specifications: Section « »	Title	Pages
	ne Architect as follows: Date	Pages
« »		·





- .4 written orders for changes in the Work, pursuant to Article 10, issued after execution of this Agreement; and
- .5 other documents, if any, identified as follows:

Certificates of Insurance, Performance Bond, Labor and Material Payment Bond, Completed Bid Form, Bid Documents.

ARTICLE 2 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 2.1 The Contract Time is the number of calendar days available to the Contractor to substantially complete the Work.

§ 2.2 Date of Commencement:

Unless otherwise set forth below, the date of commencement shall be the date of this Agreement. (Insert the date of commencement if other than the date of this Agreement.)

«»

§ 2.3 Substantial Completion:

Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion, as defined in Section 12.5, of the entire Work: (Check the appropriate box and complete the necessary information.)

[« »] Not later than « » (« ») calendar days from the date of commencement.

[« »] By the following date: « »

ARTICLE 3 CONTRACT SUM

§ 3.1 The Contract Sum shall include all items and services necessary for the proper execution and completion of the Work. Subject to additions and deductions in accordance with Article 10, the Contract Sum is:

« »(\$ « »)

§ 3.2 For purposes of payment, the Contract Sum includes the following values related to portions of the Work: (Itemize the Contract Sum among the major portions of the Work.)

Portion of the Work	Value	
« »		

§ 3.3 The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and hereby accepted by the Owner:

(Identify the accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

« »

§ 3.4 Allowances, if any, included in the Contract Sum are as follows: (Identify each allowance.)

	Item	Units and Limitations	Frice per Onit (\$0.00)
	14	Units and Limitations	Price per Unit (\$0.00)
•	nit prices, if any, are as follows: iv the item and state the unit price and quanting	ty limitations, if any, to which the t	unit price will be applicable.)
	« »		
	ltem	Price	$\langle \bigcirc \rangle$

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ARTICLE 4 PAYMENTS

§ 4.1 Based on Contractor's Applications for Payment approved by the Owner, the Owner shall pay the Contractor, in accordance with Article 12, as follows:

(Insert below timing for payments and provisions for withholding retainage, if any.)

« »

§ 4.2 Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate below, or in the absence thereof, at the legal rate prevailing at the place of the Project, in accordance with the Illinois Government Prompt Payment Act.

(Insert rate of interest agreed upon, if any.)

« »% « »

ARTICLE 5 INSURANCE

§ 5.1 The Contractor shall maintain the following types and limits of insurance until the expiration of the period for correction of Work as set forth in Section 14.2, subject to the terms and conditions set forth in this Section 5.1:

§ 5.1.1 GENERAL REQUIREMENTS

Certificates: All certificates of insurance required to be obtained by Contractor shall conform to the following:

- 1. All policies shall be issued by companies authorized to do business in the State where the project is located.
- 2. The Contractor shall provide insurance in compliance with an A. M. Best insurance rating of A, 8 or better. Such insurance shall include the scheduled coverages in the scheduled amounts.
- 3. The coverage under the policies named shall not be cancelled, modified, reduced or allowed to expire without at least 30 days prior written notice given to the Owner.
- 4. All certificates evidencing coverage extended beyond the date of final payment shall be provided at the time of the Final Pay Application.
- All certificates of insurance shall name the following as additional insured: 5.
 - Board of Library Trustees of the Palatine Public Library District, Illinois a.
 - b. Engberg Anderson, Inc.
- All insurance required of the Contractor shall state that it is Primary Insurance as to all additional insureds 6 with respect to claims arising out of operations by or on their behalf. If additional insureds have other applicable insurance coverages, those coverages shall be regarded as on an excess or contingent basis.
- The Contractor shall require that every subcontractor of any tier obtain insurance of the same character as that 7. required of the Contractor, naming the same additional insureds and subject to the same restrictions and obligations as set forth for the Contractor's insurance in the Contract Documents.

§ 5.1.2 Submittals

- 1. Certificates of Insurance in the amounts specified below must be submitted to the Architect within 10 days of award.
- 2. No Work shall be allowed to start until such requirements have been satisfied by all contractors and subcontractors.
- Upon the request of the Owner, the Bidder shall provide a copy to the Owner of all insurance forms relevant 3. to the Owner's interest. The forms must be satisfactory to the Owner.
- 4. Under no circumstances shall the Owner be deemed to have waived any of the insurance requirements of these Contract by act or omission, including, but not limited to:

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- a. Allowing the Contractor or any subcontractor of any tier to start before receipt of certificates of insurance.
- b. Failure to examine or to demand correction of any deficiency, of any certificate of insurance received.
- 5. The Contractor shall notify the Owner, in writing, of any possible or potential claim for personal injury or property damage arising out of the work of this Contract promptly whenever the occurrence giving rise to such a potential claim becomes known to the Contractor.

§ 5.1.3 The Contractor agrees that the obligation to provide insurance is solely the Contractor's responsibility and cannot be waived by any act or omission of the Owner.

- 1. Compliance with this section does not relieve the Contractor of liabilities and responsibilities as defined in the Bid Documents.
- 2. The purchase of insurance by the Contractor under this Contract shall not be deemed to limit the liability of the Contractor in any way, for damages suffered by the Owner in excess of policy limits or not covered by the policies purchased.

§ 5.1.4 Wherein the terms of this section are in conflict with the terms of the contract conditions, the terms of this section shall prevail.

§ 5.1.5 WORKERS COMPENSATION INSURANCE:

Statutory coverage as required by the State in which the project is located.

1 All Sub-contractors and material suppliers shall furnish to the Contractor and Owner evidence of similar insurance for all of their employees unless such protection is afforded by the Contractor.

§ 5.1.7 COMPREHENSIVE GENERAL LIABILITY INSURANCE:

Bidder shall provide Contractor's Protective Liability Policy (CPLP) coverage to include:

- 1. Premises, including staging, storage and layout areas, products & Operations are to be covered by the CPLP policy
- 2. The CPLP policy shall be primary and non-contributory.
- 3. Policy shall be maintained in force for 2 years beyond the date of Final Completion.
- 4. Policy shall include:
 - a. Broad Form Property Damage Endorsement.
 - b. Blanket Contractual Liability.
 - c. Personal injury Liability.
- 5 Coverage shall include explosion (x), collapse (c), and underground property damage (u) hazard exposures.
- 6 Coverage shall be subject to a combined limit of not less than:
 - a. \$2,000,000.00 per occurrence
 - b. \$2,000,000.00 aggregate

§ 5.1.8 COMPREHENSIVE AUTOMOBILE LIABILITY INSURANCE: Coverage to include operation of owned, hired, and non-owned motor vehicles.

1 Coverage shall be subject to a combined single limit of not less than \$1,000,000.00

§ 5.1.9 SUB-CONTRACTORS INSURANCE.

The Contractor shall require and obtain evidence that each subcontractor has their own insurance coverages in conformance with the following schedule.

1 General Liability:

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- a \$1,000,000.00 per occurrence
- b \$2,000,000.00 aggregate
- 3. Additional Insureds are to include the Contractor, the Owner and the Architect.
- 4. Workers Compensation
 - a. Statutory coverage as required by the State in which the project is located.
- Auto Liability

 \$1,000,000 combined single limit.

§ 5.2 The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance and shall provide property insurance to cover the value of the Owner's property. The Contractor is entitled to receive an increase in the Contract Sum equal to the insurance proceeds related to a loss for damage to the Work covered by the Owner's property insurance.

§ 5.3 The Contractor shall obtain an endorsement to its Commercial General Liability insurance policy to provide coverage for the Contractor's obligations under Section 8.12.

§ 5.4 Prior to commencement of the Work, each party shall provide certificates of insurance showing their respective coverages.

§ 5.5 Unless specifically precluded by the Owner's property insurance policy, the Owner and Contractor waive all rights against (1) each other and any of their subcontractors, suppliers, agents, and employees, each of the other; and (2) the Architect, Architect's consultants, and any of their agents and employees, for damages caused by fire or other causes of loss to the extent those losses are covered by property insurance or other insurance applicable to the Project, except such rights as they have to the proceeds of such insurance.

ARTICLE 6 GENERAL PROVISIONS

§ 6.1 The Contract

The Contract represents the entire and integrated agreement between the parties and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a written modification in accordance with Article 10.

§ 6.2 The Work

The term "Work" means the construction and services required by the Contract Documents, and includes all other labor, materials, equipment, and services provided, or to be provided, by the Contractor to fulfill the Contractor's obligations.

§ 6.3 Intent

The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all.

§ 6.4 Ownership and Use of Architect's Drawings, Specifications and Other Documents

Documents prepared by the Architect are instruments of the Architect's service for use solely with respect to this Project. The Architect shall retain all common law, statutory, and other reserved rights, including the copyright. The Contractor, subcontractors, sub-subcontractors, and suppliers are authorized to use and reproduce the instruments of service solely and exclusively for execution of the Work. The instruments of service may not be used for other Projects or for additions to this Project outside the scope of the Work without the specific written consent of the Architect.

§ 6.5 Electronic Notice

Written notice under this Agreement may be given by one party to the other by email as set forth below. (Insert requirements for delivering written notice by email such as name, title, and email address of the recipient, and whether and how the system will be required to generate a read receipt for the transmission.)

« »

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ARTICLE 7 OWNER

§ 7.1 Information and Services Required of the Owner

§ 7.1.1 If requested by the Contractor, the Owner shall furnish all necessary surveys and a legal description of the site.

§7.1.2 Except for permits and fees under Section 8.7.1 that are the responsibility of the Contractor, the Owner shall obtain and pay for other necessary approvals, easements, assessments, and charges.

§ 7.1.3 Prior to commencement of the Work, at the written request of the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence.

§ 7.2 Owner's Right to Stop the Work

If the Contractor fails to correct Work which is not in accordance with the Contract Documents, the Owner may direct the Contractor in writing to stop the Work until the correction is made. The exercise by Owner of its right to stop Work in the event of Contractor's default shall not be construed as placing the Owner in charge of the Work or making the Owner responsible for site safety

§ 7.3 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies, correct such deficiencies. In such case, the Architect may withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the cost of correction, provided the actions of the Owner and amounts charged to the Contractor were approved by the Architect.

§ 7.4 Owner's Right to Perform Construction and to Award Separate Contracts

§ 7.4.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project.

§ 7.4.2 The Contractor shall coordinate and cooperate with the Owner's own forces and separate contractors employed by the Owner.

ARTICLE 8 CONTRACTOR

§ 8.1 Review of Contract Documents and Field Conditions by Contractor

§ 8.1.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

§ 8.1.2 The Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by the Owner. Before commencing activities, the Contractor shall (1) take field measurements and verify field conditions; (2) carefully compare this and other information known to the Contractor with the Contract Documents; and (3) promptly report errors, inconsistencies, or omissions discovered to the Architect and Owner

§ 8.2 Contractor's Construction Schedule

The Contractor, promptly after being awarded the Contract, shall prepare and submit for the Owner's and Architect's information a Contractor's construction schedule for the Work.

§ 8.3 Supervision and Construction Procedures

§ 8.3.1 The Contractor shall supervise and direct the Work using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work.

§ 8.3.2 The Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner, through the Architect, the names of subcontractors or suppliers for each portion of the Work. The Contractor shall not contract with any subcontractor or supplier to whom the Owner or Architect have made a timely and reasonable objection.

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§ 8.4 Labor and Materials

§ 8.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work.

§ 8.4.2 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract Work. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.

§ 8.4.3 The Contractor and all trades shall conduct all their operations on this Project in such a manner that no labor or jurisdictional disputes arise.

§ 8.4.4 Contractor shall comply with all applicable laws and regulations relating to employment, including, but not limited to, the Fair Labor Standards Act and the Occupational Safety and Health Act of 1970. Contractor shall hold the Owner harmless from and reimburse it for any and all costs, damages and expenses (including attorney's fees) suffered by it directly or indirectly through the failure of Contractor to comply with any such laws, regulations or orders.

§ 8.4.5 Labor: Contractors and subcontractors employed upon work shall be required to conform to Labor Laws of the state in which the Project is located and various acts amendatory and supplementary thereto and to other law, ordinance and all requirements applicable thereto.

§ 8.4.5.1 Foremen, mechanics and employees of Contractor whose work is unsatisfactory to Owner, or Architect or are considered to be careless, incompetent, unskilled or otherwise objectionable shall be dismissed from work upon notice from the Owner.

§ 8.4.5.2 It shall be the duty of every contractor engaged in this work to enforce among all workmen directly or indirectly employed by him, all rules which Owner may lay down for conduct of workmen on premises.

§ 8.5 Warranty

The Contractor warrants to the Owner and Architect that: (1) materials and equipment furnished under the Contract will be new and of good quality unless otherwise required or permitted by the Contract Documents; (2) the Work will be free from defects in material and workmanship for three (3) years from the date of issuance of the final payment by Owner, and deficiencies shall be corrected by the Contractor immediately upon notification from the Owner; and (3) the Work will conform to the requirements of the Contract Documents. Any material or equipment warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 12.5. Such warranty does not preclude the Owner's right to bring action for breach of this Contract. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If required by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment

§ 8.6 Taxes

The Contractor shall pay sales, consumer, use, and similar taxes that are legally required when the Contract is executed.

§ 8.7 Permits, Fees and Notices

§ 8.7.1 The Contractor shall obtain and pay for the building permit and other permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work.

§ 8.7.2 The Contractor shall comply with and give notices required by agencies having jurisdiction over the Work. If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume full responsibility for such Work and shall bear the attributable costs. The Contractor shall promptly notify the Architect and Owner in writing of any known inconsistencies in the Contract Documents with such governmental laws, rules, and regulations.

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§ 8.8 Submittals

The Contractor shall promptly review, approve in writing, and submit to the Architect shop drawings, product data, samples, and similar submittals required by the Contract Documents. Shop drawings, product data, samples, and similar submittals are not Contract Documents.

§ 8.9 Use of Site

The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits, the Contract Documents, and the Owner.

§ 8.10 Cutting and Patching

The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly.

§ 8.11 Cleaning Up

The Contractor shall keep the premises and surrounding area free from accumulation of debris and trash related to the Work. At the completion of the Work, the Contractor shall remove its tools, construction equipment, machinery, and surplus material; and shall properly dispose of waste materials.

§ 8.12 Indemnification

To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them, from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder.

ARTICLE 9 ARCHITECT

§ 9.1 The Architect will provide administration of the Contract as described in the Contract Documents. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 9.2 The Architect will visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the Work.

§ 9.3 The Architect will not have control over or charge of, and will not be responsible for, construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility. The Architect will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents.

§ 9.4 Based on the Architect's observations and evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor.

§ 9.5 The Architect has authority to reject Work that does not conform to the Contract Documents.

§ 9.6 The Architect will promptly review and approve or take appropriate action upon Contractor's submittals, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 9.7 On written request from either the Owner or Contractor, the Architect will promptly interpret and decide matters concerning performance under, and requirements of, the Contract Documents.

ARTICLE 10 CHANGES IN THE WORK § 10.1

After execution of the Contract, changes in the Work may be accomplished by Change Order or by order of a minor change in the Work. No Change Orders shall be issued for the Work under this Contract which authorize or necessitate an increase or decrease in the cost of the Contract by a total of \$10,000 or more or in the time of completion by a total of thirty (30) days or more unless a written determination is made by the Owner or a duly authorized

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designee of the Owner other than the Architect:

- 1. The circumstances said to necessitate the change in performance were not reasonably foreseeable at the time this Contract was signed; or
- 2. The change is germane to the original Contract as signed; or
- 3. The Change Order is in the best interest of the Owner and is authorized by law; and
- 4. If applicable, that any change resulting in an increase in the Contract Sum of 50% or more will require the Owner to submit the change to competitive bidding in the same manner as the original Contract was bid.

ARTICLE 11 TIME

§ 11.1 Time limits stated in the Contract Documents are of the essence of the Contract.

§ 11.1.2 No extension of time beyond completion date stated will be allowed without the Owner's written consent. In order to qualify for such an extension, the Contractor must notify the Owner in writing five working days immediately following the occurrence of such circumstances to justify an extension, or the Contractor will have been deemed to have waived his right to an extension of time.

§ 11.1.3 Time of completion shall be strictly adhered to. In case of failure on the part of the Contractor to execute his work satisfactorily, Owner reserves the right to employ other means to complete the work as described in the Contract Documents

§ 11.2 If the Contractor is delayed at any time in progress of the Work by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, or other causes beyond the Contractor's control, the Contract Time shall be subject to equitable adjustment.

§ 11.3 If, for any reason other than the negligence of the Contractor, the required work cannot be performed during normal working hours on normal working days as defined by local ordinance, special arrangements can be made with the Owner to perform the work on evenings and on Saturday or Sunday. No extra compensation will be allowed because of premium time provided for Contractor's convenience or to comply with schedule.

ARTICLE 12 PAYMENTS AND COMPLETION

§ 12.1 Contract Sum

The Contract Sum stated in this Agreement, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 12.2 Applications for Payment

§ 12.2.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment for Work completed in accordance with the values stated in this Agreement. The Application shall be supported by data substantiating the Contractor's right to payment as the Owner or Architect may reasonably require, such as evidence of payments made to, and waivers of liens from, subcontractors and suppliers. Payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment stored, and protected from damage, off the site at a location agreed upon in writing. Payment certificates shall not be issued by Architect without such mechanics' lien waivers and Contractors' sworn statements

§ 12.2.2 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment, all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or other encumbrances adverse to the Owner's interests.

§ 12.3 Certificates for Payment

The Architect will, within seven days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; (2)

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§ 12.4 Progress Payments

§ 12.4.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner provided in the Contract Documents.

§ 12.4.2 The Contractor shall promptly pay each subcontractor and supplier, upon receipt of payment from the Owner, an amount determined in accordance with the terms of the applicable subcontracts and purchase orders.

§ 12.4.3 Neither the Owner nor the Architect shall have responsibility for payments to a subcontractor or supplier.

§ 12.4.4 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the requirements of the Contract Documents.

§ 12.5 Substantial Completion

§ 12.5.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use.

§ 12.5.2 When the Contractor believes that the Work or designated portion thereof is substantially complete, it will notify the Architect and Owner and the Architect and Owner will make an inspection to determine whether the Work is substantially complete. When the Architect and Owner determines that the Work is substantially complete, the Architect shall prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion, establish the responsibilities of the Owner and Contractor, and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of final payment is made to the Contractor unless otherwise provided in the Certificate of Substantial Completion.

§ 12.6 Final Completion and Final Payment

§ 12.6.1 Upon receipt of a final Application for Payment, the Architect and Owner will inspect the Work. When the Architect and Owner finds the Work acceptable and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment.

§ 12.6.2 Final payment shall not become due until the Contractor submits to the Architect releases and waivers of liens, and data establishing payment or satisfaction of obligations, such as receipts, claims, security interests, or encumbrances arising out of the Contract and the Owner finds the final work acceptable and the Contract fully performed.

§ 12.6.3 Acceptance of final payment by the Contractor, a subcontractor or supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 13 PROTECTION OF PERSONS AND PROPERTY

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs, including all those required by law in connection with performance of the Contract. The Contractor shall take reasonable precautions to prevent damage, injury, or loss to employees on the Work and other persons who may be affected thereby, the Work and materials and equipment to be incorporated therein, and other property at the site or adjacent thereto. The Contractor shall promptly remedy damage and loss to property caused in whole or in part by the Contractor, or by anyone for whose acts the Contractor may be liable.

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ARTICLE 14 CORRECTION OF WORK

§ 14.1 The Contractor shall promptly correct Work rejected by the Architect and Owner as failing to conform to the requirements of the Contract Documents. The Contractor shall bear the cost of correcting such rejected Work, including the costs of uncovering, replacement, and additional testing.

§ 14.2 In addition to the Contractor's other obligations including warranties under the Contract, the Contractor shall, for a period of one year after Substantial Completion, correct work not conforming to the requirements of the Contract Documents.

§ 14.3 If the Contractor fails to correct nonconforming Work within a reasonable time, the Owner may correct it in accordance with Section 7.3.

ARTICLE 15 MISCELLANEOUS PROVISIONS

§ 15.1 Assignment of Contract

Neither party to the Contract shall assign the Contract as a whole without written consent of the other.

§ 15.2 Tests and Inspections

§ 15.2.1 At the appropriate times, the Contractor shall arrange and bear cost of tests, inspections, and approvals of portions of the Work required by the Contract Documents or by laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities.

§ 15.2.2 If the Architect or Owner requires additional testing, the Contractor shall perform those tests.

§ 15.2.3 The Owner shall bear cost of tests, inspections, or approvals that do not become requirements until after the Contract is executed. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 15.3 Governing Law

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules.

ARTICLE 16 TERMINATION OF THE CONTRACT

§ 16.2 Termination by the Owner for Cause

§ 16.2.1 The Owner may terminate the Contract if the Contractor

- .1 refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the subcontractors;
- .3 persistently disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 is otherwise guilty of substantial breach of a provision of the Contract Documents.

§ 16.2.2 When any of the above reasons exist, the Owner, , may without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' written notice, terminate employment of the Contractor and may

- .1 take possession of the site and of all materials thereon owned by the Contractor, and
- .2 finish the Work by whatever reasonable method the Owner may deem expedient.

§ 16.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 16.2.1, the Contractor shall not be entitled to receive further payment.

§ 16.3 Termination by the Owner for Convenience

The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause. The Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.

ARTICLE 17 OTHER TERMS AND CONDITIONS

(Insert any other terms or conditions below.)

§17.1 Prevailing Wages

It is hereby stipulated that the Contractor shall pay not less than the prevailing hourly rate of wages, and the generally prevailing rate of hourly wages for legal holiday and overtime work, as determined by the Illinois Department of Labor and as set forth in the schedule of prevailing wages provided by the Owner for this Contract to all laborers, workers, and mechanics performing Work under this Contract. All bonds provided by the Contractor under the terms of this Contract shall include such provisions as will guarantee the faithful performance of the Contractor's obligations under this clause and under the Prevailing Wage Act, 820 ILCS 130/1, <u>et seq.</u> Should the Department of Labor revise any prevailing rate of hourly wages, such revised rate shall be applicable to this Contract; however, in no event shall the increase in any prevailing rate of hourly wages be a basis for a change order or other claim for an increase in the Contract Sum.

The Contractor shall comply with the requirements of Section 5 of the Prevailing Wage Act (820 ILCS 130/5). The Contractor shall require each Trade Contractor, and all subcontractors and sub-subcontractors participating on the Project to make and keep those records required under Section 5 of the Prevailing Wage Act (820 ILCS 130/5). In conformance with the Act, each Contractor and/or subcontractor, or other entity performing Work on the Project, shall maintain records of all laborers, mechanics and other workers employed by them on this Project, including the following information on each worker: (1) name; (2) address; (3) telephone number when available; (4) social security number; (5) classification or classifications; (6) hourly wages paid in each pay period; (7) number of hours worked each day; and (8) starting and ending times of each day. These records shall be kept by the participating Contractor and subcontractor for a period of not less than three (3) years. Each participating Contractor and subcontractor shall submit a monthly certified payroll to the Owner consisting of the above-referenced information as well as a statement signed by the participating Contractor or subcontractor that certifies: (a) the records are true and accurate; (b) the hourly rates paid to each worker is not less than the general prevailing rate of hourly wages required under the Prevailing Wage Act; and (c) the Contractor or subcontractor is aware that filing a certified payroll that he or she knows to be false is a Class B misdemeanor. Contractor shall include the above-referenced certified statement from each applicable Trade Contractor, subcontractor and/or sub-subcontractor referenced in each Application for Payment."

Insert the following additional terms and conditions in Article 17 as follows:

§ 17.2 Compliance with Governmental Regulations

The Contractor shall comply with all applicable governmental ordinances, statutes, rules and regulations as they apply to the duties of the Contractor pursuant to the terms of this Contract.

§ 17.3 Performance and Payment Bonds

The Contractor shall furnish to the Owner at the time of execution of the Contract, bonds in the full amount of the Contract Sum securing the full and faithful performance of this Contract and the payment for all labor and material furnished by the Contractor or anyone furnishing such under the Contractor's Contract or a Subcontract of any tier. Said bonds shall be in conformance as set forth below and any additional specifications imposed by other Contract Documents, including, but not limited to, the prevailing wage requirements set forth in the Contract Documents. Said bonds shall be written by a surety that is acceptable to the Owner, in the Owner's discretion. Such bonds shall be obtained from a company with a minimum A.M. Best Rating of A- and to which the Owner has no reasonable objection.

The Contractor shall provide Performance and Labor and Material Payment Bonds as follows:

- 1. Provide a 100 percent Performance Bond in conformance with AIA Document 312 as modified by Owner and Contractor.
- 2. Provide a 100 percent Payment Bond in conformance with AIA Document 312 as modified by Owner and Contractor.

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- 3. Deliver bonds within 10 days after execution of the Contract.
- 4. The bonds must be from a reputable company acceptable to the Owner set forth above and authorized to do surety business in Illinois.

§ 17.4 Miscellaneous Provisions

- (a) Contractor shall abide by all applicable local state and federal ordinances, statutes, rules and regulations including, but to limited to, the Illinois Human Rights Act and the Prevailing Wage Act.
- (b) Human Rights Act



The Contractor hereby agrees that this Contract shall be performed in compliance with all requirements of the Illinois Human Rights Act, 775 ILCS 5/1-101 et seq., and that all contractors and subcontractors performing Work on the Project shall not engage in any prohibited form of discrimination in employment as defined in that Act. The Contractor shall maintain, and require that its subcontractors maintain, policies of equal employment opportunity which shall prohibit discrimination against any employee or applicant for employment on the basis of race, religion, color, sex, national origin, ancestry, citizenship status, age, marital status, physical or mental disability unrelated to the individual's ability to perform the essential functions of the job, association with a person with a disability, or unfavorable discharge from military service. The Contractor and all subcontractors shall comply with all requirements of the Act and of the Rules of the Illinois Department of Human Rights with regard to posting information on employees' rights under the Act. The Contractor and all subcontractors and all subcontractors shall place appropriate statements identifying their companies as equal opportunity employers in all advertisements for workers to be employed in work to be performed under this Contract.

(c) Sexual Harassment Policy

Pursuant to Section 2-105 (A)(4) of the Illinois Human Rights Act, the Contractor and each subcontractor shall adopt and maintain written sexual harassment policies that shall include, at a minimum, the following information:

- (1) the illegality of sexual harassment;
- (2) the definition of sexual harassment under state law;
- (3) a description of sexual harassment, utilizing examples;
- (4) the Contractor/subcontractor's internal complaint process, including penalties;
- (5) the legal recourse, investigative and complaint process available through the Department and Commission (of Human Rights);
- (6) directions on how to contact the Department and the Commission; and
- (7) protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act.

A copy of these policies shall be provided to the Owner or the Architect on request.

(d) Certification to Enter Into Public Contracts

Prior to entering into any contract in regard to this Project, the Contractor and all subcontractors must certify that they are not barred from contracting with any unit of state or local government as a result of a violation of either Section 33E-3 or 33E-4 of the Illinois Criminal Code or any similar offense of any State of the United States which contains the same elements as the Illinois offenses of bid-rigging or bid rotating.

(e) No Waiver of Payment



Notwithstanding any language in any contract document to the contrary or inconsistent with this provision, Owner shall not be deemed to waive any claim or right to assert a claim by making any progress payment.

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(f) Waiver of Lien

Upon satisfaction of the terms and conditions of the Contract and final payment, the Contractor agrees to provide the Owner with a final release and waiver of all liens covering all work performed under the Contract relative to the project including all Work performed by all subcontractors. Said final waiver of lien shall identify and state that all Contractors and subcontractors have been paid in full and there are no contract balances outstanding and owed to any such Contractors or subcontractors.

(g) Substance Abuse Prevention on Public Works Projects Act, 820 ILCS 265/1 et seq.

Contractor certifies that it has in place a written program which meets or exceeds the program requirements of the Substance Abuse Prevention on Public Works Projects Act, and will provide a copy thereof to the Owner

(h) Fair Employment Practices

Contractor certifies that it has knowledge of any and all Palatine Public Library District ordinance(s) relating to Fair Employment Practices and knows and understands the contents thereof; that it certifies hereby that its business is an "equal opportunity employer' as defined by Section 2000 (e) of Chapter 21, Title 42 of the United States Code Annotated and Federal Executive Orders #11246 and #11375 which are incorporated herein by reference.

(i) Drug Free Workplace

Contractor certifies to that it will provide a drug-free workplace for all employees engaged in the performance of the work under the Contract by complying with the requirements of the Illinois Drug-Free Workplace Act and, further certifies, that it is not ineligible for award of this Contract by reasons of debarment for a violation of the Illinois Drug-Free Workplace Act (Ill. Rev. Stat. ch. 127 Para. 132.311 et seq.,).

(j) Child Labor

Contractor shall conform to the Child Labor Law, 820 ILCS 205/1, to ensure that no minor under 16 years of age at any time shall be employed, permitted or suffered to work in any type of construction work relating to the execution of Contractor's scope of work under this contract.

The Contractor will include verbatim or by reference the provisions contained herein in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. The Contractor will be liable for compliance with these provisions by such subcontractors.

The Contractor and each subcontractor shall keep or cause to be kept an accurate record of names, occupations and actual wages paid to each laborer, workman and mechanic employed by him in connection with the contract. This record shall be open at all reasonable hours for inspection by any representative of the Village or the Illinois Department of Labor and must be preserved for four (4) years following completion of the contract.

§ 17.5 No Damages for Delay. The Contractor agrees in the event of delay for any reason caused by any party or person, Contractor will be fully compensated for the delay by an extension of time to complete the Contract and will not seek additional compensation.

§ 17.6 Prompt Payment Act. All payments required to be made by the Owner under this Contract shall be made in conformance with the provisions of the Local Government Prompt Payment Act, 50 ILCS 505/1 et seq."

This Agreement entered into as of the day and year first written above. (If required by law, insert cancellation period, disclosures or other warning statements above the signatures.)

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OWNER (Signature)

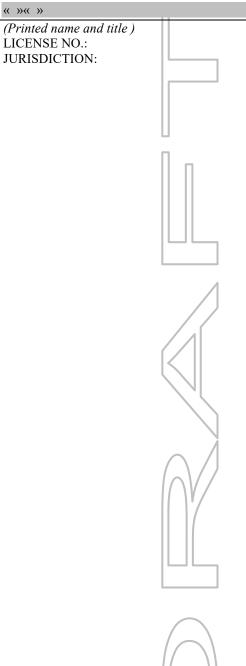
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(Printed name and title)

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CONTRACTOR (Signature)

« »« »



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HEAT EXCHANGER REPAIR

SECTION 00 73 00 - SUPPLEMENTARY CONDITIONS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes.
 - 1. Interpretation of Documents
 - 2. Contractor Payment Conditions
 - 3. Retainage
 - 4. Employment
 - 5. Hours of Work- Overtime
 - 6. Progress and Completion
- B. Related Sections.
 - 1. Section 00 22 13 Supplementary Instructions to Bidders: Resource Efficiency
 - 2. Section 01 26 00 Contract Modification Procedures: Changes in the Work
 - 3. Section 01 29 00 Payment Procedures: Waivers of Lien.

1.2 INTERPRETATION OF DOCUMENTS

A. In the event that conflicts exist within the contract documents, it shall be assumed that the contract includes the item(s) of higher value and/or quantity or the most restrictive method on installation. The Architect shall provide final interpretation and directions.

1.3 CONTRACTOR PAYMENT CONDITIONS

- A. Contractor is responsible for receipt, storage and protection of all materials and equipment for the Work, and for the safety and integrity of the Project site during the Work. Unless otherwise provided, all materials and equipment shall be new and free from defects. Workmanship shall be of the best quality and free from defects.
 - 1. If the Contractor should default in any material provision of this Contract, the Owner, in addition to all other rights provided by law, may require the Contractor, without cost to the Owner, to remove any work not in accordance with this Contract and perform the Work in compliance therewith.
 - 2. Should the Contractor fail to correct the Work following written notice from Owner, the Owner shall have the right to complete the corrections itself (or by work of a designated party) and to hold Contractor responsible for all costs thereof.
 - 3. Acceptance of the Project and payment of any retainage on the Project shall not release Contractor from the requirements of this clause on quality
- B. Whenever any employee, agent or other representative of any contractor, or any employee, agent or other representative of a subcontractor, material man, supplier, or delivery man whose activities on or about the site arise out of the work of a contractor, shall cause or be a substantial factor in causing any damage (including but not limited to cracking, gouging, breaking, scratching, marring, puncturing, loosening, weakening, shifting, obstructing, soiling, staining, splattering, wetting, burning, overheating, freezing, exposing, disconnecting, misconnecting, failure to guard or protect, and depriving support) to the work, materials or property of a third party (including, but not limited to the Owner, other Contractors, subcontractors, material men, suppliers, delivery men, frequenters, security holders, adjacent tenants, bodies politic, utilities, or members of the public) such contractor shall promptly proceed to remedy and correct such damage and pay all costs, expenses, and damages involved.

- 1. To the extent such Contractor shall fail to do so, he shall be accountable, under his Contract with the Owner, for all therefrom, whether liquidated or not, and whether certain or contingent, including but not limited to costs of renovation, repair, replacement, relocation, vicarious liabilities, losses by delays, charges for architectural or other services, and extra costs, charges, work or material of every description.
- 2. Upon certification by the Architect of the identity of the responsible Contractor and of the extent of such damage so caused, Owner shall be entitled, for its security, to withhold or deduct from payments otherwise due such contractor, any sum reasonably estimated to be required or secure Owner's right to such account, until Owner shall otherwise be fully indemnified and made whole. Such liability to account shall be deemed contractual, and shall arise strictly, regardless of whether or not circumstances of conventional tort are present or proven, and shall bind the sureties and indemnities of such Contractor; but the Owner shall not be deemed to have waived, released, settled, or otherwise impaired its right to full account by reason of any payment, withholding, deduction, failure to withhold or deduct, or other form of claim or failure to claim; and in no event shall exercise or non-exercise of the Owner's right be deemed or implied to impose on the Owner any liability toward any other person; or to affect, except as expressly provided, the rights or liabilities of any of the parties arising independently of this provision.
- C. Whenever the Contractor or Contractors whose activities cause any such damage cannot, in the opinion of the Architect, be specifically ascertained, or whenever a Contractors' proportionate responsibility to account therefor according to the foregoing provisions cannot in the opinion of the Architect be finally determined, the Contractor(s) to whose general division(s) the damage pertains shall proceed promptly to remedy and correct such damage as extra work, and the reasonable charges for so doing, together with the amounts of any further damages which may so arise, shall be certified by the Architect to the Owner, with authorization to charge the aggregate sum to the respective accounts of all contractors who, directly or through subcontractors, material men, suppliers or delivery men, were engaged in any activity at the site of the damage when it arose, in proportion to the gross amounts of their respective contracts. Such allocated accountability shall continue, as security to the Owner, until a different accountability is ascertained, in the opinion of the Architect or until the Owner is otherwise fully indemnified and made whole.

1.4 RETAINAGE

- A. As provided in AIA A201-1997 Edition, Retainage shall be made on each application for payment in the amount of 10% of the work completed to date.
- B. At the time at which the project is 50% complete, the Owner shall have, entirely at its discretion, the option of reducing the amount of retainage withheld to date or on subsequent applications to an amount not less than 5% of the amount of the work completed under that application or to date.
- C. Upon approval by Owner and Architect's determination, payments shall be authorized for the total retainage in the Contract, except that an amount equal to twice the established cost to complete or correct items on the tentative list of uncompleted items may be retained until final completion.

1.5 EMPLOYMENT

- A. The Contractor and all trades shall conduct all their operations on this Project in such a manner that no labor jurisdictional disputes arise.
- B. Contractor shall comply with all applicable laws and regulations relating to employment, including, but not limited to, the Fair Labor Standards Act and the Occupational Safety and

Health Act of 1970. Contractor shall hold the Owner harmless from and reimburse it for any and all costs, damages and expenses (including attorney's fees) suffered by it directly or indirectly through the failure of Contractor to comply with any such laws, regulations or orders.

- C. Labor: Contractors and subcontractors employed upon work shall be required to conform to Labor Laws of the State in which the Project is located and various acts amendatory and supplementary thereto and to other law, ordinance and all requirements applicable thereto.
 - 1. Foremen, mechanics and employees of contractor whose work is unsatisfactory to Owner, or Architect or are considered to be careless, incompetent, unskilled or otherwise objectionable shall be dismissed from work upon notice from the Owner.
 - 2. It shall be duty of every contractor engaged in this work to enforce among all workmen directly or indirectly employed by him, all rules which Owner may lay down for conduct of workmen on premises.

1.6 HOURS OF WORK - OVERTIME

- A. If, for any reason, the required work cannot be performed during normal working hours on normal working days as defined by local ordinance, special arrangements can be made with the Owner to perform the work on evenings and on Saturday or Sunday.
- B. No extra compensation will be allowed because of premium time provided for Contractor's convenience or to comply with schedule.
- C. If and when overtime work is required and authorized by Owner, the Owner will pay by Change Order, at established rates, the increase in hourly pay due to overtime hours worked, exclusive of Contractor's overhead and profit, upon approval of payroll records.

1.7 PROGRESS AND COMPLETION

- A. Contractor shall begin work upon written notice to proceed and shall diligently execute work to its final completion by the date agreed upon with Owner.
- B. No extension of time beyond completion date stated will be allowed without the Owner's written consent. In order to qualify for such an extension, the Contractor must notify the Architect in writing five working days immediately following the occurrence of such circumstances to justify an extension, or the contractor will have been deemed to have waived his right to an extension of time.
- C. Time of completion shall be strictly adhered to. In case of failure on part of contractor to execute his work satisfactorily, Owner reserves right to employ other means to complete work as described in Contract Documents.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION

SECTION 00 73 13 – PERFORMANCE AND PAYMENT BOND REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes1. Performance and Payment Bond
- B. Related Section
 1. Section 00 52 13 Form of Agreement: Other provisions regarding Bonds

1.2 PERFORMANCE BOND

- A. The Apparent Low Bidder shall, upon Notice of Award, provide a Performance Bond/Labor &Material Payment Bond for 100% of the amount of the total Bid.
- B. Bonds shall comply with the following:
 - 1. The Bonding Company shall be licensed to do business in the State in which the Project is located.
 - 2. The Bonding Company shall have an A. M. Best rating of IX or better.
- C. The form of the Bond shall be AIA A-312 or equivalent and shall include sections applicable to Performance and Payment.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 00 73 13

HEAT EXCHANGER REPAIR

SECTION 00 73 16 -INSURANCE REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes1. General Requirements
- B. Related Sections
 1. Section 007213 General Conditions Insurance Limits

1.2 GENRAL REQUIREMENTS

- A. Certificates: All certificates of insurance required to be obtained by Contractor shall conform to the following:
 - 1. All policies shall be issued by companies authorized to do business in the State where the project is located.
 - 2. The Contractor shall provide insurance in compliance with an A. M. Best insurance rating of A, 8 or better. Such insurance shall include the scheduled coverages in the scheduled amounts.
 - 3. The coverage under the policies named shall not be cancelled, modified, reduced or allowed to expire without at least 30 days prior written notice given to the Owner.
 - 4. All certificates evidencing coverage extended beyond the date of final payment shall be provided at the time of the Final Pay Application.
 - 5. All certificates of insurance shall name the following as additional insured:
 - a. Board of Library Trustees of the Palatine Public Library District, Cook County, Illinois
 - b. Engberg Anderson, Inc.
 - 6. All insurance required of the Contractor shall state that it is Primary Insurance as to all additional insureds with respect to claims arising out of operations by or on their behalf. If additional insureds have other applicable insurance coverages, those coverages shall be regarded as on an excess or contingent basis.
 - 7. The Contractor shall require that every subcontractor of any tier obtain insurance of the same character as that required of the Contractor, naming the same additional insureds and subject to the same restrictions and obligations as set forth for the Contractor's insurance in the Contract Documents.
- B. Submittals
 - 1. Certificates of Insurance in the amounts specified below must be submitted to the Architect within 10 days of award.
 - 2. No Work shall be allowed to start until such requirements have been satisfied by all contractors and subcontractors.
 - 3. Upon the request of the Owner, the Bidder shall provide a copy to the Owner of all insurance forms relevant to the Owner's interest. The forms must be satisfactory to the Owner.
 - 4. Under no circumstances shall the Owner be deemed to have waived any of the insurance requirements of these Contract by act or omission, including, but not limited to:
 - a. Allowing the Contractor or any subcontractor of any tier to start before receipt of certificates of insurance.

- b. Failure to examine or to demand correction of any deficiency, of any certificate of insurance received.
- 5. The Contractor shall notify the Owner, in writing, of any possible or potential claim for personal injury or property damage arising out of the work of this Contract promptly whenever the occurrence giving rise to such a potential claim becomes known to the Contractor.
- C. The Contractor agrees that the obligation to provide insurance is solely the Contractor's responsibility and cannot be waived by any act or omission of the Owner.
 - 1. Compliance with this section does not relieve the Contractor of liabilities and responsibilities as defined in the Bid Documents.
 - 2. The purchase of insurance by the Contractor under this Contract shall not be deemed to limit the liability of the Contractor in any way, for damages suffered by the Owner in excess of policy limits or not covered by the policies purchased.
- D. Wherein the terms of this section are in conflict with the terms of the contract conditions, the terms of this section shall prevail.

1.3 WORKERS COMPENSATION INSURANCE:

- A. Statutory coverage as required by the State in which the project is located.
- B. All Sub-contractors and material suppliers shall furnish to the Contractor and Owner evidence of similar insurance for all of their employees unless such protection is afforded by the Contractor.

1.4 COMPREHENSIVE GENERAL LIABILITY INSURANCE:

- A. Bidder shall provide Contractor's Protective Liability Policy (CPLP) coverage to include
 - 1. Premises, including staging, storage and layout areas, products & Operations are to be covered by the CPLP policy
 - 2. The CPLP policy shall be primary and non-contributory.
 - 3. Policy shall be maintained in force for 2 years beyond the date of Final Completion.
 - 4. Policy shall include:
 - a. Broad Form Property Damage Endorsement.
 - b. Blanket Contractual Liability.
 - c. Personal injury Liability.
- B. Coverage shall include explosion (x), collapse (c), and underground property damage (u) hazard exposures.
- C. Coverage shall be subject to a combined limit of not less than:
 - 1. \$2,000,000.00 per occurrence
 - 2. \$2,000,000.00 aggregate

1.5 COMPREHENSIVE AUTOMOBILE LIABILITY INSURANCE:

- A. Coverage to include operation of owned, hired, and non-owned motor vehicles.
- B. Coverage shall be subject to a combined single limit of not less than \$1,000,000.00

1.6 SUB-CONTRACTORS INSURANCE.

A. The Contractor shall require and obtain evidence that each subcontractor has their own insurance coverages in conformance with the following schedule.

B. General Liability:

1. \$1,000,000.00 per occurrence

PALATINE PUBLIC LIBRARY

HEAT EXCHANGER REPAIR

- 2. \$2,000,000.00 aggregate
- 3. Additional Insureds are to include the Contractor, the Owner and the Architect.
- C. Workers Compensation
 - 1. Statutory coverage as required by the State in which the project is located.
- D. Auto Liability
 - 1. \$1,000,000 combined single limit.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 00 73 16

SECTION 00 73 43 – PREVAILING WAGE RATE REQUIREMENTS

PART 1 - GENERAL

1.1 ILLINOIS

Α. The Contractor and each of its Subcontractors shall pay prevailing wages as established by the Illinois Department of Labor for each craft or type of work needed to execute the contract in accordance with 820 ILCS 130/.01 et seq. The Contractor shall prominently post the current schedule of prevailing wages at the Contract site and shall notify immediately in writing all of its Subcontractors, of all changes in the schedule of prevailing wages. Any increases in costs to the Contractor due to changes in the prevailing rate of wage during the terms of any contract shall be at the expense of the Contractor and not at the expense of the Owner. The change order shall be computed using the prevailing wage rates applicable at the time the change order work is scheduled to be performed. The Contractor shall be solely responsible to maintain accurate records as required by the prevailing wage statute and shall be solely liable for paying the difference between prevailing wages and any wages actually received by laborers, workmen and/or mechanics engaged in the Work and in every way defend and indemnify the Owner against any claims arising under or related to the payment of wages in accordance with the Prevailing Wage Act. The Illinois Department of Labor publishes the prevailing wage rates on its website at http://www.state.il.us/agency/idol/rates/rates.HTM. The Department revises the prevailing wage rates and the Bidder and any of its subcontractors have an obligation to check the Department's web site for revisions to prevailing wage rates. For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor's website.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 00 73 43

HEAT EXCHANGER REPAIR

SECTION 00 73 44 - LIQUIDATED DAMAGES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes.
 - 1. Basis for Liquidated Damages.
 - 2. Terms of Liquidated Damages.
 - 3. Terms of Incentive.

1.2 BASIS FOR LIQUIDATED DAMAGES:

- A. The Owner asserts that time is of the essence and that the Owner will suffer financial loss if the Work is not completed within the times or by the dates specified in the Documents (Section 011000).
- B. The Owner asserts that the Contractor also recognizes the delays, expense and difficulties involved in proving in a legal proceeding the actual loss suffered by the Owner if the Work is not completed as scheduled.
- C. Accordingly, instead of requiring such proof, it is intended that the Agreement between Owner and Contractor shall include provisions for Liquidated Damages to be paid for delay (but not as a penalty) in accordance with the provisions outlined below.

1.3 TERMS OF LIQUIDATED DAMAGES:

- A. Liquidated damages in the amount of \$100.00 per day will be paid by the Contractor to the Owner for each calendar day that expires after 14 calendar days of the date of executed contract, wherein Contractor fails to order materials and parts necessary to complete the project in a timely manner. Contractor shall provide receipt or record of purchase to the Owner verifying materials and parts have been ordered within the aforementioned timeframe.
- B. Liquidated damages in the amount of \$100.00 per day will be paid by the Contractor to the Owner for each calendar day that expires after 14 days of the receipt of materials, wherein Substantial Completion as determined by the Architect fails to be established.

1.4 TERMS OF INCENTIVE:

A. Incentive in the amount of \$250.00 per calendar week will be paid by the Owner to the Contractor for each calendar week (7 days) wherein the date of Substantial Completion is established prior to the dates specified in the Documents (Section 011000 & Part 3).

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.1 SCHEDULE

А	Task	Start	Calendar Days	End
1	Bidding Period	2/22/2019	17	3/11/2019
2	Library Board Meeting	3/13/2019	0	3/13/2019
3	Contracts	3/13/2019	12	3/25/2019
4	Construction Phase	3/25/2019	70	6/3/2019
5	Submittals	3/25/2019	14	4/8/2019
6	Material Order Date ¹	4/8/2019	0	4/8/2019
7	Assumed Lead Time	4/8/2019	42	5/20/2019
8	Installation ²	5/20/2019	14	6/3/2019

Material Order Date: Is subject to the contract signature date by both parties.
 a. Provide receipt of order to Palatine Public Library and copy to the Architect.

- 2. Installation Dates: Are subject to material delivery date.
 - a. End date is subject to the Substantial Completion date.

END OF SECTION

SECTION 011000 - SUMMARY OF THE WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SECTION INCLUDES

- A. This Section includes the following:
 - 1. Project Information
 - 2. Schedule
 - 3. Work covered by Contract Documents.
 - 4. Access to site.
 - 5. Use of premises.
 - 6. Coordination with occupants.
 - 7. Work restrictions.
 - 8. Specification formats and conventions.

1.3 **PROJECT INFORMATION**

- A. Project Identification: Palatine Public Library Heat Exchanger Repair
 - 1. Project Location: 700 N. North Court, Palatine, IL 60067
- B. Owner: Poplar Creek Public Library District
 - 1. Owner Representative: Jeannie Dilger, Executive Director
- C. Architect: Engberg Anderson Inc.
 - 1. Shaun Kelly Project Manager, 5600 North River Road, Suite 800, Rosemont, IL 60018
 - 2. Architect's Project Number : 162592
- D. MEP Engineering: IMEG Engineering
 - 1. Jeff Oke, 1100 Warrenville Road, Suite 400W, Naperville, IL 60563
- E. The building was constructed in 1991 and the original Architect was PSA.

1.4 SCHEDULE

A. The heat exchanger work shall be completed between March 25, 2019 and June 3, 2019.

1.5 CONTRACT DOCUMENTS - INTENT AND USE

A. Intent of Documents:

- 1. It is the intent of the Contract Documents to illustrate the parameters of a complete project. The Contract shall provide a complete project within the scope shown and specified.
- 2. Singular notations and specifications shall be considered plural where application is reasonably inferred.
- 3. Mention or indication of extent of work under any work division or specification section is done only for convenience of Contractor and shall not be construed as describing all work required under that division or section.
- 4. The list of related sections in individual sections is provided for the convenience of Contractor and is not necessarily all-inclusive. Contractor may not rely upon this listing for determination of scope of Work. Other sections of the specifications, not referenced in individual sections shall apply as required for proper performance of the Work.
- 5. Command type sentences may be used in the Contract Documents. These sentences refer to and are directed to Contractor.
- 6. Symbols for various elements and systems are shown on the drawings. Should there be any doubt regarding the meaning or intent of the symbols used, a written interpretation shall be obtained from the Engineer.
- B. Use of Documents:
 - 1. Contractor shall examine all Specifications and drawings for the work; including those that may pertain to work Contractor does not normally perform with its own forces.
 - 2. Contractor shall use all of the project Drawings and Specifications:
 - a. For a complete understanding of the project.
 - b. To determine the type of construction and systems required.
 - c. For coordination with other contractors.
 - d. To determine what other work may be involved in various parts or phases.
 - e. To anticipate and notify others when work by others will be required.
 - f. And all other relevant matters related to the project.
 - 3. Contractor is also bound by all requirements of the Contract Documents which are applicable to, pertain to, or affect its work, as may be shown or inferred by the entire set of project drawings and specifications.

1.6 **PROJECT SCOPE**

A. Contractor shall provide all items, articles, materials, operations or methods mentioned or scheduled on the drawings or herein specified including all labor, supervision, equipment, incidentals, taxes and permits necessary to complete the Work as described within the Contract Documents. Contractor shall install all items provided by Owner as mentioned or scheduled on the drawings or herein specified.

1.7 WORK COVERED BY CONTRACT DOCUMENTS

A. The project consists of repairing the heat exchanger system in the lower level mechanical room. Work will include (but not limited to) replacement of the internal tube network and gaskets

1.8 ACCESS TO SITE

A. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

- 1. Limits: Limit site disturbance, for earthwork and clearing of vegetation and earth at parking lot edge, to 10 feet beyond the perimeter.
- 2. Minimize disturbance of topsoil, plantings and turf at all other areas of parking lot perimeter.
- 3. Minimize disturbance of green roof area.
- 4. Driveways, Walkways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles based on the approved schedule and required life safety of the building. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

1.9 COORDINATION WITH OCCUPANTS

- A. Full Owner Occupancy: Owner will occupy adjacent site and adjacent building during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations.
 - 1. Maintain access to existing walkways and other adjacent occupied or used facilities. Do not close or obstruct walkways, driveways or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
 - 2. Notify Owner not less than 72 hours in advance of activities that will affect Owner's operations.
- B. Coordination of Use of Premises:
 - 1. The Contractor shall prepare a master schedule and plan indicating all areas required for operations at the start of the Project for review and acceptance by the Owner.
 - 2. Revisions to this schedule and plan of operations must be submitted for review and acceptance by the Owner prior to commencing any modified plan.
 - 3. Under provisions of Division 1 Section Project Management and Coordination, the actual progress of the work and the anticipated activities within the next week shall be reviewed as part of each progress meeting. Requirements of the Owner shall be provided in a manner that allows each to achieve the required closures, rearrangements or changes in operation necessary to accommodate the Contractor's operations.

1.10 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work in the existing building to normal business working hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, except as otherwise indicated, or otherwise limited by the township.
- C. Existing Utility Interruptions: Do not interrupt utilities.
- D. 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 and Owner not less than 2 working days in advance of proposed disruptive operations.
- E. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet of entrances, operable windows, or outdoor air intakes.

1.11 SPECIFICATION AND DRAWING CONVENTIONS

- A. 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. Imperative mood and streamlined language are generally used in the Specifications. 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.
 - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Drawing Coordination: Requirements for materials and products identified on the Drawings are described in detail in the Specifications. One or more of the following are used on the 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 scheduled on Drawings.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SECTION INCLUDES

- A. Administrative and procedural requirements for handling and processing contract modifications.
 - 1. Minor Changes in the Work
 - 2. Proposal Requests
 - 3. Allowances Adjustment
 - 4. Change Order Procedures
 - 5. Construction Change Directives

1.3 MINOR CHANGES IN THE WORK

A. The Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or Contract Time.

1.4 **PROPOSAL REQUESTS**

- A. Owner-Initiated Proposal Requests: The Architect will issue a detailed description of proposed changes in the Work that will require adjustment to the Contract Sum or Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Proposal requests issued by the Architect are for information only. Do not consider them as an instruction either to stop work in progress or to execute the proposed change.
 - 2. Within 20 days of receipt of a proposal request, submit an estimate of cost necessary to execute the change to the Architect for the Owner's review.
 - a. Include a list of quantities of products required and unit costs, with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include a statement indicating the effect the proposed change in the Work will have on the Contract Time.
 - d. Quotation Form: Use CSI Form 13.6D, "Proposal Worksheet Summary," and Form 13.6C, "Proposal Worksheet Detail."
- B. Contractor-Initiated Proposals: When latent or unforeseen conditions require modifications to the Contract, the Contractor may propose changes by submitting a request for a change to the Architect.

- 1. Include a statement outlining the 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 Contract Time.
- 2. Include a list of quantities of products required and unit costs, with the 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 a statement indicating the effect the proposed change in the Work will have on the Contract Time.
- 5. Comply with requirements in Section "Product Substitutions" if the proposed change requires substitution of one product or system for a product or system specified.
- 6. Change Order Proposal Request Form: Use AIA Document G709 for Change Order Proposal Requests.

1.5 CHANGE ORDER PROCEDURES

- A. Upon the Owner's approval of a Proposal Request, the Architect will issue a Change Order for signatures of the Owner and the Contractor.
- B. Changes in the Work:
 - For changes in the Work, the cost shall be determined as provided under this subparagraph. The Contractor shall submit an itemized list of quantities with the applicable unit costs and extended price for each, in such form and detail and shall include and indicate the items enumerated below. Items (a) and (b) constitute the cost of labor, and items (a), (b), (c) and (d) constitute the basic costs referred to under this Article.
 - a. Labor costs, itemized by each trade involved, showing the hourly rates for each, and the hours required for the change. Labor rates shall be the same for extra and credit computations and shall be the actual rate paid the workman in accordance with established management labor agreements.
 - b. Burden on labor, which shall be only the actual costs of mandatory fringe benefits required by established agreements, taxes on labor, worker's or workmen's compensation, insurance on labor as affected by payroll, unemployment taxes and insurance, including FICA and FUTA. No other costs will be allowed as burden on labor.
 - c. Quantities of materials, equipment and supplies, at their actual costs, with unit costs indicated.
 - d. The cost of subcontracted work, computed in the same way as provided for under this subparagraph.
 - e. Overhead, profit and commission.
 - 2. The maximum that will be allowed for overhead and profit, or commission, shall be as follows, expressed as a percentage of the basic cost of the change.
 - a. The maximum allowable percentages for profit, overhead or commission may be less, depending on the nature, extent or complexity of the change, where the percentage is not commensurate with the responsibility and administration involved (such as the Contractor merely processing a substantial Change Order to a Subcontractor) but in no event shall they exceed the following:

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	Overhead & Profit	Commission
1.		
To the Contractor and/or its	10%	0%
Subcontractor for work per-		
formed with their own forces:		
2.		
To the Contractor and/or its	0%	5%
Subcontractor for work per-		
formed by other than their own		
forces:		

- 3. Not more than above specified percentages for overhead, profit and commission will be allowed to be added to the basic cost regardless of the number of tiers of Contractors, Subcontractors, or Sub-subcontractors.
- 4. The burden on labor may be indicated as a dollar/cents addition to the hourly rate or may be expressed as a percentage of the extended hourly rate costs. If required by the Owner or the Architect, the Contractor shall provide a detailed breakdown to justify the labor burden. The Owner shall reserve the right to reject any labor burden which is inconsistent with other similar contractors or where the cost of fringe benefits are in excess of established labor agreements.
- 5. Material, equipment and supply costs shall be quoted at the actual cost to the Contractor, or Subcontractor. Upon request, the Contractor (or Subcontractor) shall submit evidence to substantiate the costs. Said costs shall be quoted at trade discount prices, with quantity discounts also applied where the quantities warrant. In any proposal with material, equipment and supply credit, the credit shall be based on the actual Contract cost of the material (including trade and quantity discounts) less any charges actually incurred for handling or returning a material which has been delivered.
- 6. The percentages allowed for overhead, profit or commission shall be deemed to include, and no further addition allowed the Contractor, Subcontractor or Sub-subcontractors for: (1) field and office supervision and administration, including the field superintendent and non-working foremen; (2) general insurance, except that listed as the labor burden; (3) use or replacement of tools; (4) shop burden; (5) engineering costs; (6) performance (guaranty) and labor/material payment bonds; (7) cost of safety measures (including those imposed by OSHA); (8) permits, unless a new permit type is required; (9) or any other costs except those enumerated.
- 7. Cost changes shall be computed by determining the basic costs to which the overhead may be added, then the profit figure may be added and finally adding the sales tax on materials.
- 8. Subcontractors (or Sub-subcontractors) shall compute their costs in the same way and are subject to the same conditions of what may be included in the cost and the same maximum percentages for overhead and profit. To the Subcontractor's price, the Contractor may add up to a maximum of 5% commission.
- 9. For Changes involving work of the Contractor with its own forces and work by a Subcontractor (or Sub-subcontractors), the Commission shall be applied directly to the Subcontractor's price, with the overhead and profit figure applied only to the Work the Contractor performs with its own forces.
- 10. For Changes involving both extra and credit amounts, the overhead and profit, or commission, shall be applied only to net difference where the extra exceeds the credit.
- 11. For Changes resulting in a credit in the basic costs, a reasonable allowance for overhead, profit or commission may be required to be credited the Owner. In general, no credit for overhead, profit or commission will be required where the net change credit is minor or where the Change in Work indicates it is reasonable that no credit be allowed to the

Owner due to the effort, cost or responsibility of the Contractor. In the event of substantial subcontract credits, or for Work the Contractor does not provide or perform, a reasonable overhead, profit or commission credit shall be allowed to the Owner.

1.6 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: When the Owner and the Contractor disagree on the terms of a Proposal Request, the Architect may issue a Construction Change Directive on AIA Form G714. The Construction Change Directive instructs the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. The Construction Change Directive contains a complete description of the change in the Work. It also designates the method to be followed to determine change in the Contract Sum or 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 the 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 012600

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SECTION INCLUDES

- A. This Section Includes:
 - 1. Administrative and procedural requirements governing the Contractor's Applications for Payment.
 - 2. Coordination of the Schedule of Values and Applications for Payment with the Contractor's Construction Schedule, Submittal Schedule, and List of Subcontracts.

1.3 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.

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of the Contractor's Construction Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative schedules and forms, including:
 - a. Application for Payment forms, including Continuation Sheets.
 - b. Submittal schedule.
 - c. Contractor's construction schedule.
 - d. Schedule of allowances.
 - e. Schedule of alternates.
 - f. List of subcontractors.
 - g. List of principal suppliers and fabricators.
 - h. List of products.
 - 2. Submit the Schedule of Values to the Architect at the earliest possible date but no later than 7 days before the date scheduled for submittal of the initial Applications for Payment.
 - 3. Sub-schedules: Where 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 the format 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 the Architect.
- c. Project number.
- d. Contractor's name and address.
- e. Date of submittal.
- 2. Arrange schedule of values consistent with format of AIA Document G703.
- 3. 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 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 as a percentage of Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
- 4. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.
- 5. Round amounts to nearest whole dollar; the total shall equal the Contract Sum.
- 6. 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 requirements for insurance and bonded warehousing, if required.
- 7. Provide separate line items on the Schedule of Values for initial cost of the materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 8. 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.
- 9. Purchase Contracts: Provide a separate line item in the schedule of values for each purchase contract. Show line-item value of purchase contract. Indicate owner payments or deposits, if any, and balance to be paid by Contractor.
- 10. Each item in the Schedule of Values and Applications for Payment shall be complete. Include the total cost and proportionate share of general overhead and profit margin 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 the Contractor's option.
- 11. Schedule Updating: Update and resubmit the Schedule of Values prior to the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by the Architect and paid for by the Owner.
 - 1. Initial Application for Payment, the Application for Payment at time of Substantial Completion, and the 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. Application for Payment Forms: Use AIA Document G702 and Continuation Sheets G703 or equivalent as the form for Applications for Payment.
- D. Application Preparation: Complete every entry on the form. Notarize and execute by a person authorized to sign legal documents on behalf of the Contractor. The Architect will return incomplete applications without action.
 - 1. Entries shall match data on the Schedule of Values and the Contractor's Construction Schedule. Use updated schedules if revisions were made.
 - 2. Include amounts of Change Orders and Construction Change Directives issued prior to the last day of the construction period covered by the application.
- E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
 - 1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment, for stored materials.
 - 2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
 - 3. Provide summary documentation for stored materials indicating the following:
 - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
 - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
 - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- F. Transmittal: Submit three (3) signed and notarized original copies of each Application for Payment to the Architect by a method ensuring receipt within 24 hours. One copy shall be complete, including waivers of lien and similar attachments, when required.
 - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information related to the application, in a manner acceptable to the Architect.
- G. Waivers of Mechanics Lien: With each Application for Payment, submit waivers of mechanics 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.
 - 1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit final or full waivers.

- 3. The Owner reserves the right to designate which entities involved in the Work must submit waivers.
- 4. Waiver Delays: Submit each Application for Payment with the Contractor's waiver of mechanics lien for the period of construction covered by the application. Subcontractor's waivers may be submitted with the following Application for Payment.
- 5. Submit final Applications 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.
- 6. Waiver Forms: Submit waivers of lien on forms, and executed in a manner, acceptable to the Owner.
- H. Initial Application for Payment: Administrative actions and submittals, that must precede or coincide with submittal of the 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 (preliminary if not final).
 - 5. Schedule of unit prices.
 - 6. Submittal schedule (preliminary if not final).
 - 7. List of Contractor's staff assignments.
 - 8. Copies of building permits.
 - 9. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 - 10. Report of preconstruction conference.
 - 11. Initial progress report.
 - 12. Certificates of insurance and insurance policies.
 - 13. Performance and payment bonds.
 - 14. Data needed to acquire Owner's insurance.
- I. Intermediate Applications for Payment: Administrative actions and submittals, that must precede or coincide with submittal of each Application for Payment, include the following:
 - 1. Revisions to items identified in Initial Application for Payment:
 - a. List of subcontractors.
 - b. Schedule of values.
 - c. Contractor's construction schedule.
 - d. Products list.
 - e. Schedule of unit prices.
 - f. Submittal schedule.
 - g. Copies of authorizations, inspection reports and licenses from governing authorities for continued performance of the Work.
 - h. Progress Meeting Report(s).
 - 2. Review and Completion of Administrative Requirements of the Work including:
 - a. Resolution of Proposal Requests and Change Orders issued prior to 14 days preceding the current Application.
 - b. Record documents, including log book, product data, test reports and record drawings are current with the progress of the Work.
 - c. For purposes of accounting, the value of these functions shall be established at 5% of the payment Application in review.

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- J. Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit an Application for Payment.
 - 1. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
 - 2. Administrative actions and submittals that shall precede or coincide with this application include:
 - a. Warranties (guarantees) and maintenance agreements.
 - b. Maintenance instructions.
 - c. Final cleaning.
 - d. Application for reduction of retainage and consent of surety.
 - e. Final progress photographs.
 - f. List of incomplete Work, recognized as exceptions to Architect's Certificate of Substantial Completion.
- K. Final Payment Application: Administrative actions and submittals that must precede or coincide with submittal of the final Application for Payment include the following:
 - 1. Completion of items specified for completion after Substantial Completion.
 - 2. Completion of Project closeout requirements.
 - a. Transmittal of required Project construction records to the Owner.
 - b. Proof that fees, and similar obligations were paid.
 - c. Updated final statement, accounting for final changes to the Contract Sum.
 - d. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
 - e. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
 - f. Retain first subparagraph below if a surety is involved.
 - g. AIA Document G707, "Consent of Surety to Final Payment."
 - h. Evidence that claims have been settled.
 - 3. Removal of temporary facilities and services.
 - 4. Removal of surplus materials, rubbish, and similar elements.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for project meetings, including, but not limited to, the following:
 - 1. General coordination procedures.
 - 2. Pre-construction conferences.
 - 3. Progress meetings.

1.3 DEFINITIONS

A. RFI: Request from Owner, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

1.4 INFORMATIONAL SUBMITTALS

- A. 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.
- B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel 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, office, and cellular telephone numbers and e-mail addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.

1.5 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction 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.
- 4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- B. 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. Project closeout activities.
 - 7. Startup and adjustment of systems.
- C. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.
 - 1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. Refer to other Sections for disposition of salvaged materials that are designated as Owner's property.
- D. Inspection of Conditions: Require the Installer of each major component to inspect both the substrate and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.
- E. Coordinate temporary enclosures with required inspections and tests to minimize the necessity of uncovering completed construction for that purpose.

1.6 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.
- B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel 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. Keep list current at all times.

1.7 REQUESTS FOR INFORMATION (RFIS)

A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.

- 1. Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
- 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
 - 1. Project name.
 - 2. Project number.
 - 3. Date.
 - 4. Name of Contractor.
 - 5. Name of Architect.
 - 6. RFI number, numbered sequentially.
 - 7. RFI subject.
 - 8. Specification Section number and title and related paragraphs, as appropriate.
 - 9. Drawing number and detail references, as appropriate.
 - 10. Field dimensions and conditions, as appropriate.
 - 11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 - 12. Contractor's signature.
 - 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
 - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.
- C. RFI Forms: AIA Document G716 or Software-generated form with substantially the same content as indicated above, acceptable to Architect.
 - 1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow seven working days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
 - 1. The following Contractor-generated RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for approval of Contractor's means and methods.
 - d. Requests for coordination information already indicated in the Contract Documents.
 - e. Requests for adjustments in the Contract Time or the Contract Sum.
 - f. Requests for interpretation of Architect's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFIs.
 - 2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt of additional information.
 - 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.

- E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log at each progress meeting. Include the following:
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect.
 - 4. RFI number including RFIs that were returned without action or withdrawn.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Architect's response was received.
- F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.
 - 1. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
 - 2. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

1.8 **PRE-CONSTRUCTION CONFERENCE**

- A. Schedule and conduct a preconstruction conference before starting construction, at a time convenient to the Owner and the Architect, but no later than 15 days after execution of the Agreement. Hold the conference at the Project Site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
- B. Attendees: Authorized representatives of the Owner, Architect, and their consultants; the 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 the Project and authorized to conclude matters relating to the Work.
- C. Agenda: Discuss items of significance that could affect progress, including the following:
 - 1. Tentative construction schedule.
 - 2. Phasing.
 - 3. Critical work sequencing and long-lead items.
 - 4. Designation of key personnel and their duties.
 - 5. Lines of communications.
 - 6. Procedures for processing field decisions and Change Orders.
 - 7. Procedures for RFIs.
 - 8. Procedures for testing and inspecting.
 - 9. Procedures for processing Applications for Payment.
 - 10. Distribution of the Contract Documents.
 - 11. Submittal procedures.
 - 12. Preparation of Record Documents.
 - 13. Use of the premises and existing building.
 - 14. Work restrictions.
 - 15. Working hours.
 - 16. Owner's occupancy requirements.
 - 17. Responsibility for temporary facilities and controls.
 - 18. Construction waste management and recycling.
 - 19. Parking availability.
 - 20. Office, work, and storage areas.
 - 21. Equipment deliveries and priorities.

- 22. First aid.
- 23. Security.
- 24. Progress cleaning.
- D. Reporting: No later than 3 days after the meeting, 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.

1.9 PROGRESS MEETINGS

- A. Conduct progress meetings at the Project Site at regular intervals. Notify the Owner and the Architect of scheduled meeting dates. Coordinate dates of meetings with preparation of the Pay Application.
- B. Attendees: In addition to representatives of the Owner, and the Architect, each subcontractor, supplier, or other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with the Project and authorized to conclude matters relating to the Work.
- C. Agenda: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the status of the Project.
 - 1. Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to insure that current and subsequent activities will be completed within the Contract Time.
 - a. Review schedule for next period.
 - 2. Review the present and future needs of each entity present, including the following:
 - a. Interface requirements.
 - b. Sequence of operations
 - c. Status of submittals.
 - d. Deliveries.
 - e. Access.
 - f. Site utilization.
 - g. Temporary facilities and services.
 - h. Construction waste management.
 - i. Progress cleaning.
 - j. Quality and work standards.
 - k. Status of correction of deficient items.
 - l. Field observations.
 - m. Status of RFIs.
 - n. Status of proposal requests.
 - o. Pending changes.
 - p. Status of Change Orders.
 - q. Pending claims and disputes.
 - r. Documentation of information for payment requests.

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 - D. Reporting: No later than 3 days after each meeting, 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.
 - 1. Schedule Updating: Revise the Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue the revised schedule concurrently with the report of each meeting.

1.10 **PROJECT CLOSEOUT CONFERENCE:**

- A. Schedule and conduct a project closeout conference, at a time convenient to Owner and Architect, but no later than 90 days prior to the scheduled date of Substantial Completion.
 - 1. Conduct the conference to review requirements and responsibilities related to Project closeout.
 - 2. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
 - a. Preparation of record documents.
 - b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
 - c. Submittal of written warranties.
 - d. Requirements for preparing maintenance data.
 - e. Requirements for delivery of material samples, attic stock, and spare parts.
 - f. Preparation of Contractor's punch list.
 - g. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
 - h. Submittal procedures.
 - i. Responsibility for removing temporary facilities and controls.
- B. Reporting: No later than 3 days after each meeting, distribute minutes of the meeting to each party present and to parties who should have been present.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 **REVIEW OF ONGOING COORDINATION ACTIVITIES**

- A. Review and Completion of Administrative Requirements of the Work including the work of this Section as well as the items scheduled below are required for approval of progress payments.
 - 1. Resolution of Proposal Requests and Change Orders issued prior to 14 days preceding the current Application.
 - 2. Record documents, including log book, product data, test reports and record drawings are current with the progress of the Work.

3. For purposes of accounting, the value of these functions shall be established at 5% of the payment Application in review.

PART 4 - PRODUCTS (Not Used)

PART 5 - EXECUTION (Not Used)

END OF SECTION 013100

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SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Contractor's Construction Schedule.
 - 2. Submittals Schedule.
 - 3. Daily Construction Reports and Photographs
 - 4. Material Location Reports.
 - 5. Field Condition Reports.
 - 6. Special Reports.

1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
 - 1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.
 - 2. Predecessor Activity: An activity that precedes another activity in the network.
 - 3. Successor Activity: An activity that follows another activity in the network.
- B. Cost Loading: The allocation of the schedule of values for the completion of an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum unless otherwise approved by Architect.
- C. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- D. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- E. Event: The starting or ending point of an activity.
- F. Float: The measure of leeway in starting and completing an activity.
 - 1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
 - 2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
 - 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.

- G. Major Area: A story of construction, a separate building, or a similar significant construction element.
- H. Milestone: A key or critical point in time for reference or measurement.
- I. Resource Loading: The allocation of manpower and equipment necessary for the completion of an activity as scheduled.

1.4 SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
 - 1. Paper or PDF electronic file.
- B. Submittals Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and Construction Manager and additional time for handling and reviewing submittals required by those corrections.
 - 1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
- C. Contractor's Construction Schedule: Submit 3 opaque copies of initial schedule, large enough to show entire schedule for entire construction period.
 - 1. Submit an electronic copy of schedule, using software indicated, on CD-R, and labeled to comply with requirements for submittals. Include type of schedule (Initial or Updated) and date on label.
- D. Construction Schedule Updating Reports: Submit with Applications for Payment.
- E. Daily Construction Reports: Submit with Applications for Payment.
- F. Material Location Reports: Submit with Applications for Payment.
- G. Field Condition Reports: Submit at time of discovery of differing conditions.
- H. Special Reports: Submit at time of unusual event.

1.5 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.

PART 2 - PRODUCTS

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2.1 SUBMITTALS SCHEDULE

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by 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 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.
 - 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 Notice to Proceed to date of Final 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.
- 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 20 days, unless specifically allowed by Architect.
 - 2. Procurement Activities: Include procurement process activities for the following 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. 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.
 - 5. Punch List and Final Completion: Include not more than 30 days for completion of punch list items and final completion.
- D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
 - 1. Phasing: Arrange list of activities on schedule by phase.
 - 2. Products Ordered in Advance: Include a separate activity for each product. Include delivery date indicated in Division 1 Section "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
 - 3. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
 - a. Subcontract awards.
 - b. Submittals.

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- c. Purchases.
- d. Fabrication.
- e. Deliveries.
- f. Installation.
- g. Tests and inspections.
- E. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion, and the following interim milestones:
- F. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragments to demonstrate the effect of the proposed change on the overall project schedule.

2.3 CONTRACTOR'S CONSTRUCTION SCHEDULE (CPM SCHEDULE)

- A. CPM Schedule: Prepare Contractor's Construction Schedule using a time-scaled CPM network analysis diagram for the Work.
 - 1. Develop network diagram in sufficient time to submit CPM schedule so it can be accepted for use no later than 15 days after date established for the Notice to Proceed.
 - a. Failure to include any work item required for performance of this Contract shall not excuse Contractor from completing all work within applicable completion dates, regardless of Architect's approval of the schedule.
 - 2. Use "one workday" as the unit of time. Include list of nonworking days and holidays incorporated into the schedule.
 - 3. Activities: Indicate the estimated time duration, sequence requirements, and relationship of each activity in relation to other activities. Include estimated time frames for the following activities:
 - a. Preparation and processing of submittals.
 - b. Mobilization and demobilization.
 - c. Purchase of materials.
 - d. Delivery.
 - e. Fabrication.
 - f. Installation.
 - g. Testing
 - 4. Critical Path Activities: Identify critical path activities, including those for interim completion dates. Scheduled start and completion dates shall be consistent with Contract milestone dates.
- B. Schedule Updating: Concurrent with making revisions to schedule, prepare tabulated reports showing the following:
 - 1. Identification of activities that have changed.
 - 2. Changes in the critical path.
 - 3. Changes in total float or slack time.
 - 4. Changes in the Contract Time.

2.4 DAILY REPORTS AND PHOTOGRAPHS

A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:

- 1. List of subcontractors at Project site.
- 2. Approximate count of personnel at Project site.
- 3. Material deliveries.
- 4. High and low temperatures and general weather conditions.
- 5. Photographs of daily progress:
- 6. Accidents.
- 7. Meetings and significant decisions.
- 8. Unusual events (refer to special reports).
- 9. Stoppages, delays, shortages, and losses.
- 10. Emergency procedures.
- 11. Orders and requests of authorities having jurisdiction.
- 12. Change Orders received and implemented.
- 13. Change Directives received and implemented.
- 14. Substantial Completions authorized.
- B. Daily Digital Photographs:
 - 1. Submit image files daily as noted:
 - a. Submit images daily as existing cladding is removed. Compose images to show areas of damage to building wrap, foil faced rigid board insulation (and where needed, underlying wood studs and fiberglass batt insulation).
 - b. Collect daily images and submit weekly for all activities not included above.
 - 2. Digital Camera: Minimum sensor resolution of 8 megapixels.
 - 3. Format: Minimum 3200 by 2400 pixels, in unaltered original files, with same aspect ratio as the sensor, uncropped, date and time stamped, in folder named by date of photograph, accompanied by key plan file.
 - 4. Identification: Provide the following information with each image description in file metadata tag:
 - a. Name of Project.
 - b. Name of Contractor.
 - c. Date photograph was taken.
 - d. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.

2.5 OTHER REPORTS

- A. Material Location Reports: At monthly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site.
- B. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a request for interpretation. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

2.6 SPECIAL REPORTS

A. General: Submit special reports directly to Owner within one day of an occurrence. Distribute copies of report to parties affected by the occurrence.

B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

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 one week 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. As the Work progresses, indicate Actual Completion percentage for each activity.
- B. Distribution: Distribute copies of approved schedule to Architect and Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
 - 1. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 013200

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

1.3 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 responsive action. Submittals may be rejected for not complying with requirements.
- C. Coordination Drawings show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or to function as intended.
 - 1. Preparation of Coordination Drawings is specified in Division 1 Section "Coordination" and may include components previously shown in detail on Shop Drawings or Product Data.
- D. Field samples are full-size physical examples erected on-site to illustrate finishes, coatings, or finish materials. Field samples are used to establish the standard by which the Work will be judged.
- E. Mockups are full-size assemblies for review of construction, coordination, testing, or operation; they are not Samples.
- F. File Transfer Protocol (FTP): Communications protocol that enables transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users are able to access files.
- G. 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.

1.4 SUBMITTAL PROCEDURES

- A. Architect's Digital Data Files: Electronic digital data files of the Contract Drawings will be provided by Architect for Contractor's use in preparing submittals.
 - 1. Architect will furnish Contractor one set of digital data drawing files of the Contract Drawings for use in preparing Shop Drawings and Project record drawings.

- a. Architect makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
- b. Digital Drawing Software Program: The Contract Drawings are available in Autodesk AutoCAD 2015.
- c. Contractor shall execute a data licensing agreement in the form of Agreement form acceptable to Owner and Architect.
- d. The following digital data files will by furnished:
 - 1) Architectural Floor plans.
 - 2) Architectural Reflected ceiling plans.
- e. Limitations: Available files are limited to files that already exist, in the software listed above as drawn by the designer, without incorporating modifications after "Issue for Bid."
- B. Submittals Schedule: Comply with requirements in Section 013200 "Construction Progress Documentation" for list of submittals and time requirements for scheduled performance of related construction activities.
- C. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 - 3. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
 - a. The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.
- 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. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 - 1. Initial Review: Allow 7 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 - 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 3. Resubmittal Review: Allow 7 days for review of each resubmittal.
- E. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
 - 1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
 - 2. Name file with submittal number and revision identifier.
 - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number.

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- 3. Provide means for insertion to permanently recorded Contractor's review and approval markings and action taken by Architect and Construction Manager.
- 4. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Owner, containing the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Name of firm or entity that prepared submittal.
 - g. Names of subcontractor, manufacturer, and supplier.
 - h. Category and type of submittal.
 - i. Submittal purpose and description.
 - j. Specification Section number and title.
 - k. Specification paragraph number or drawing designation and generic name for each of multiple items.
 - 1. Drawing number and detail references, as appropriate.
 - m. Location(s) where product is to be installed, as appropriate.
 - n. Related physical samples submitted directly.
 - o. Indication of full or partial submittal.
 - p. Submittal distribution record.
 - q. Other necessary identification.
 - r. Remarks.
- F. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked "Reviewed with No Comments" or "Reviewed with Comments".
- G. 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.
- H. Use for Construction: Use only final submittals with mark indicating "Reviewed with No Comments" or "Reviewed with Comments" as action taken by Architect.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
 - 1. Submit electronic submittals via email as PDF electronic files.
 - a. Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.

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2.2 **PRODUCT DATA:**

- A. Collect product data into a single submittal for each element of construction or system. Product Data includes printed information, such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams, and performance curves.
 - 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 catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Manufacturer's installation instructions.
 - d. Color charts.
 - e. Compliance with specified referenced standards.
 - f. Testing by recognized testing agency.
 - g. Application of testing agency labels and seals.
 - h. Notation of coordination requirements.
 - i. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 - j. Availability and delivery time information.
 - 4. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
 - 5. Submit PDF electronic file.
 - 6. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
 - a. Do not proceed with installation until a copy of Product Data is in the Installer's possession.
 - b. Do not permit use of unmarked copies of Product Data in connection with construction.

2.3 SHOP DRAWINGS

- A. Submit newly prepared information drawn accurately to scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not a Shop Drawing.
- B. Shop Drawings include fabrication and installation Drawings, setting diagrams, schedules, patterns, templates and similar Drawings. Include the following information:
 - 1. Preparation
 - a. Identification of products and materials included by sheet and detail number.
 - b. Drawings shall be to scale with dimensions.
 - c. Compliance with specified standards.
 - d. Fabrication and installation drawings.
 - e. Notation of coordination requirements.
 - f. Relationship to adjoining construction clearly indicated.

- 2. 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 42 inches.
- 3. Submit Shop Drawings as a PDF electronic file.

2.4 SAMPLES

- A. Submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture, and pattern.
 - 1. Mount or display Samples in the manner to facilitate review of qualities indicated. Prepare samples to match the Architect's sample. Include the following:
 - a. Specification Section number and reference.
 - b. Generic description of the Sample.
 - c. Product name and name of the manufacturer.
 - d. Sample source.
 - e. Compliance with recognized standards.
 - f. Availability and delivery time.
 - 2. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
 - 3. Submit Samples for review of size, kind, color, pattern, and texture. Submit Samples for a final check of these characteristics with other elements and a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
 - a. Where variation in color, pattern, texture, or other characteristic is inherent in the material or product represented, submit at least 3 multiple units that show approximate limits of the variations.
 - b. Refer to other Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation, and similar construction characteristics.
 - c. Samples not incorporated into the Work, or otherwise designated as the Owner's property, are the property of the Contractor and shall be removed from the site prior to Substantial Completion.
 - 4. Submittals: Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, operation, and similar characteristics, submit 3 sets. The Architect will return one set marked with the action taken.
 - 5. Maintain sets of Samples, as returned, at the Project Site, for quality comparisons throughout the course of construction.
 - a. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
 - b. Sample sets may be used to obtain final acceptance of the construction associated with each set.
- B. Distribution of Samples: Prepare and distribute additional sets to subcontractors, manufacturers, fabricators, suppliers, installers, and others as required for performance of the Work. Show distribution on transmittal forms.
 - 1. Field samples are full-size examples erected on-site to illustrate finishes, coatings, or finish materials and to establish the Project standard.

a. Comply with submittal requirements to the fullest extent possible. Process transmittal forms to provide a record of activity.

2.5 OTHER ACTION SUBMITTALS

- A. Submittals Schedule: Comply with requirements specified in Section 01300 Construction Progress Documentation.
- B. Application for Payment and Schedule of Values: Comply with requirements specified in Section 012900 "Payment Procedures."
- C. 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.
- D. Contractor's Construction Schedule: Comply with requirements specified in Section 013200 "Construction Progress Documentation."
- E. Product Schedule or List: As required in individual Specification Sections, 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.
 - 4. Submit product schedule as a PDF electronic file.

2.6 INFORMATIONAL SUBMITTALS

- A. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Section 014000 "Quality Requirements."
- B. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 017700 "Closeout Procedures."
- C. Maintenance Data: Comply with requirements specified in Section 017823 "Operation and Maintenance Data."
- D. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- E. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
- F. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- G. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

- H. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- I. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- J. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- K. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. 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.
- L. Research Reports: Submit 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.
- M. Preconstruction Test Reports: Submit 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 in the Contract Documents.
- N. Compatibility Test Reports: Submit 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.
- O. Field Test Reports: Submit written reports 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 in the Contract Documents.
- P. Design Data: Prepare and submit 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.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Project Closeout and Maintenance Material Submittals: See requirements in Section 017700 "Closeout Procedures."

C. 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. Action Submittals; Architect will review each submittal, make marks to indicate corrections or revisions required, stamp and return it promptly.
 - 1. Compliance with specified characteristics is the Contractor's responsibility.
- B. Action Stamp: The Architect will stamp each submittal with a uniform, action stamp. The Architect will mark the stamp appropriately to indicate the action taken, as follows:
 - 1. Final Unrestricted Release: When the Architect marks a submittal "Reviewed Without Comment," the Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents. Final payment depends on that compliance.
 - 2. Final-But-Restricted Release: When the Architect marks a submittal "Reviewed With Comments," the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents. Final payment depends on that compliance.
 - 3. Returned for Resubmittal: When the Architect marks a submittal "Revise and Resubmit," do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal according to the notations; resubmit without delay. Repeat if necessary to obtain different action mark.
 - a. Do not use, or allow others to use, submittals marked " Revise and Resubmit" at the Project Site or elsewhere where Work is in progress.
 - 4. Other Action: Where a submittal is for information or record purposes or special processing or other activity, the Architect will return the submittal marked "Action Not Required."
- C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Submittals not required by the Contract Documents may be returned by the Architect without action.

END OF SECTION 013300

SECTION 014000 - QUALITY REQUIREMENTS

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 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-assurance and -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 other qualityassurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.
- C. Mockups: Full-size, physical assemblies that are constructed on-site. Mockups are constructed 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; to show interface between dissimilar materials; and to demonstrate compliance with specified installation tolerances. Mockups are not Samples. Unless otherwise indicated, approved mockups establish the standard by which the Work will be judged.
- D. Laboratory Mockups: Full-size, physical assemblies that are constructed at testing facility to verify performance characteristics.
- E. Pre-construction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.
- F. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.

- G. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.
- H. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- I. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- J. Installer/Applicator/Erector: 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.
 - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- K. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of 5 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.

1.4 CONFLICTING REQUIREMENTS

- A. General: 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.
- B. 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.

1.5 INFORMATIONAL SUBMITTALS

- A. Testing Agency Qualifications: 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. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
 - 1. Specification Section number and title.
 - 2. Entity responsible for performing tests and inspections.
 - 3. Description of test and inspection.
 - 4. Identification of applicable standards.
 - 5. Identification of test and inspection methods.
 - 6. Number of tests and inspections required.
 - 7. Time schedule or time span for tests and inspections.
 - 8. Requirements for obtaining samples.
 - 9. Unique characteristics of each quality-control service.

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1.6 **REPORTS AND DOCUMENTS**

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. 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. Record of temperature and weather 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 reinspecting.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
 - 1. Name, address, and telephone number of technical 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.
- C. 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.

1.7 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. 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.
- C. 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, as well as sufficient production capacity to produce required units.
- D. 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.

- 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 regulations governing the Work.
- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. 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.

1.8 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply fully with manufacturer's instructions, including each step in sequence.
- C. Should manufacturer's instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified to produce workmanship of specified quality.
- F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

1.9 **REFERENCES**

- A. Conform to reference standard cited in specific testing or inspection requirement listed below. If no specific test is cited, conform to most current standard by date of Contract Documents.
- B. Should specified reference standards conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.

C. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION

3.1 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply fully with manufacturer's instructions, including each step in sequence.
- C. Should manufacturer's instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform work by persons qualified to produce workmanship of specified quality.
- F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

3.2 REFERENCES

- A. Conform to reference standard cited in specific testing or inspection requirement listed below. If no specific test is cited, conform to most current standard by date of Contract Documents.
- B. Should specified reference standards conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- C. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

3.3 CONTRACTOR RESPONSIBILITIES

- A. Contractor Responsibilities: Unless otherwise indicated as the responsibility of another identified entity, Contractor shall provide inspections, tests, and other quality-control services specified elsewhere in the Contract Documents and required by authorities having jurisdiction. Costs for these services are included in the Contract Sum.
 - 1. Where individual Sections specifically indicate that certain inspections, tests, and other quality-control services are the Owner's responsibility, the Owner will employ and pay a qualified independent testing agency to perform those services.
 - a. Where the Owner has engaged a testing agency for testing and inspecting part of the Work, and the Contractor is also required to engage an entity for the same or related element, the Contractor shall not employ the entity engaged by the Owner, unless agreed to in writing by the Owner.

- B. Re-testing: The Contractor is responsible for re-testing where results of inspections, tests, or other quality-control services prove unsatisfactory and indicate noncompliance with Contract Document requirements, regardless of whether the original test was Contractor's responsibility.
 - 1. The cost of re-testing construction, revised or replaced by the Contractor, is the Contractor's responsibility where required tests performed on original construction indicated noncompliance with Contract Document requirements.
- C. Associated Services: Contractor shall cooperate with agencies performing required inspections, tests, and similar services, and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include, but are not limited to, the following:
 - 1. Provide access to the Work.
 - 2. Furnish incidental labor and facilities necessary to facilitate inspections and tests.
 - 3. Take adequate quantities of representative samples of materials that require testing or assist the agency in taking samples.
 - 4. Provide facilities for storage and curing of test samples.
 - 5. Deliver samples to testing laboratories.
 - 6. Provide the agency with a preliminary design mix proposed for use for materials mixes that require control by the testing agency.
 - 7. Provide security and protection of samples and test equipment at the Project Site.
- D. Coordination: Coordinate the sequence of activities to accommodate required services with a minimum of delay. Coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.
 - 1. The Contractor is responsible for scheduling times for inspections, tests, taking samples, and similar activities.

END OF SECTION 014000

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes requirements for construction facilities and temporary controls, including temporary utilities, support facilities, and security and protection.
 - 1. Temporary utilities include, but are not limited to, the following:
 - a. Water service and distribution.
 - b. Temporary electric power and light.
 - c. Sanitary facilities, including drinking water.
 - 2. Support facilities include, but are not limited to, the following:
 - a. Field offices and storage sheds.
 - b. Hoists and temporary elevator use.
 - c. Temporary project identification signs and bulletin boards.
 - d. Waste disposal services.
 - e. Construction aids and miscellaneous services and facilities.
 - 3. Security and protection facilities include, but are not limited to, the following:
 - a. Temporary fire protection.
 - b. Barricades, warning signs, and lights.
 - c. Sidewalk bridge or enclosure fence for the site.
 - d. Environmental protection.
 - e. Tree protection.

1.3 SUBMITTALS

- A. Implementation and Termination Schedule: Within 15 days of the date established for commencement of the Work, submit a schedule indicating implementation and termination of each temporary utility.
- B. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

1.4 QUALITY ASSURANCE

- A. Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction including, but not limited to, the following:
 - 1. Building code requirements.

- 2. Health and safety regulations.
- 3. Utility company regulations.
- 4. Police, fire department, and rescue squad rules.
- 5. Environmental protection regulations.
- B. Standards: Comply with NFPA 241 "Standard for Safeguarding Construction, Alterations, and Demolition Operations," ANSI A10 Series standards for "Safety Requirements for Construction and Demolition," and NECA Electrical Design Library "Temporary Electrical Facilities."
 - 1. Electrical Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service. Install service in compliance with NFPA 70 "National Electric Code."
- C. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.5 USE CHARGES

- A. Water Service: 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.
- B. Electric Power Service: 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.

1.6 **PROJECT CONDITIONS**

- A. Temporary Utilities: Prepare a schedule indicating dates for implementation and termination of each temporary utility. At the earliest feasible time, when acceptable to the Owner, change over from use of temporary service to use of permanent service.
- B. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Relocate temporary services and facilities as the Work progresses. Do not overload facilities or permit them to interfere with progress. Take necessary fire-prevention measures. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on-site.
- C. 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.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.
- B. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
 - 1. Provide construction for temporary offices, shops, and sheds located within construction area or within 30 feet (9 m) of building lines that is noncombustible according to ASTM E 136. Comply with NFPA 241.
 - 2. Maintain support facilities until Architect schedules Substantial Completion inspection. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Waste Disposal Facilities: Comply with requirements specified in Section 017419 "Construction Waste Management and Disposal."
- C. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with progress cleaning requirements in Section 017300 "Execution."
- D. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
 - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.
- E. Existing Stair Usage: Use of Owner's existing stairs will be permitted to access the roof hatch as needed, as long as stairs are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore stairs to condition existing before initial use.
 - 1. Provide protective coverings, barriers, devices, signs, or other procedures to protect stairs and to maintain means of egress. If, despite such protection, stairs become damaged, restore damaged areas so no evidence remains of correction work.
- F. Existing Elevator Use: Use of Owner's existing elevators will be not be permitted.
- G. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
 - 1. Existing Restroom Use: Use of Owner's existing restrooms will be permitted.

3.3 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
 - 1. Comply with work restrictions specified in Section 011000 "Summary."
- C. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings.
 - 1. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross tree- or plant- protection zones.
 - 2. Inspect, repair, and maintain erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
 - 3. Clean, repair, and restore adjoining properties and roads affected by erosion and sedimentation from Project site during the course of Project.
 - 4. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.
- D. Stormwater Control: Comply with authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- E. Pest Control: Take measures to prevent pest infestation of open wall segments. If necessary, engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Obtain extended warranty for Owner. Perform control operations lawfully, using environmentally safe materials.
- F. Site Enclosure Fence: Prior to commencing earthwork, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.
 - 1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations.
 - 2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Furnish one set of keys to Owner.
- G. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- H. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.

- I. Security Enclosure and Lockup: Install substantial temporary enclosure of partially completed areas of construction. Provide locking entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
 - 1. Storage: Where materials and equipment must be stored, and are of value or attractive for theft, provide a secure lockup. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.
- J. 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 weather-tight enclosure for building exterior.
 - 1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.

3.4 TREE AND PLANT PROTECTION

A. Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

3.5 MOISTURE AND MOLD CONTROL

- A. Contractor's Moisture-Protection Plan: Avoid trapping water in finished work. Document visible signs of mold that may appear during construction.
- B. Exposed Construction Phase: Before installation of weather barriers, when materials are subject to wetting and exposure and to airborne mold spores, protect as follows:
 - 1. Protect porous materials from water damage.
 - 2. Protect stored and installed material from flowing or standing water.
 - 3. Keep porous and organic materials from coming into prolonged contact with concrete.
 - 4. Remove standing water from decks.
 - 5. Keep deck openings covered or dammed.
- C. Partially Enclosed Construction Phase: After installation of weather barriers but before full enclosure and conditioning of building, when installed materials are still subject to infiltration of moisture and ambient mold spores, protect as follows:
 - 1. Do not load or install drywall or other porous materials or components, or items with high organic content, into partially enclosed building.
 - 2. Keep interior spaces reasonably clean and protected from water damage.
 - 3. Periodically collect and remove waste containing cellulose or other organic matter.
 - 4. Discard or replace water-damaged material.
 - 5. Do not install material that is wet.
 - 6. Discard, replace, or clean stored or installed material that begins to grow mold.
 - 7. Perform work in a sequence that allows any wet materials adequate time to dry before enclosing the material in drywall or other interior finishes.

3.6 OPERATION, TERMINATION, AND REMOVAL

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

- B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage by freezing temperatures and similar elements.
 - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
 - 2. Protection: Prevent water-filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.
- C. Termination and Removal: 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 property of Contractor.

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for selection of products for use in Project;
 - 1. Product delivery, storage, and handling;
 - 2. Manufacturers' standard warranties on products; special warranties;
 - 3. Comparable products;
 - 4. Product substitutions.

1.3 DEFINITIONS

- A. Definitions used in this Article are not intended to change the meaning of other terms used in the Contract Documents, such as "specialties," "systems," "structure," "finishes," "accessories," and similar terms. Such terms are self-explanatory and have well-recognized meanings in the construction industry.
- B. Products: Items purchased for 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.
 - 4. Materials: Products that are substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the Work.
 - 5. Equipment: Products with operational parts, whether motorized or manually operated, that requires service connections, such as wiring or piping.
- 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. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

1.4 PRODUCT LIST

- A. Prepare a list showing products specified in tabular form acceptable to the Architect. Include generic names of products required. Include the manufacturer's name and proprietary product names for each item listed.
 - 1. Coordinate product list with the Contractor's Construction Schedule and the Schedule of Submittals.
 - 2. Form: Prepare product list with information on each item tabulated 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.
- B. Initial Submittal: Within 30 days after date of commencement of the Work, submit 3 copies of an initial product list. Provide a written explanation for omissions of data and for known variations from Contract requirements.
- C. Completed List: Within 60 days after date of commencement of the Work, submit 3 copies of the completed product list. Provide a written explanation for omissions of data and for known variations from Contract requirements.
- D. Architect's Action: The Architect will respond in writing to Contractor within 2 weeks of receipt of the completed product list. No response within this period constitutes no objection to listed manufacturers or products but does not constitute a waiver of the requirement that products comply with Contract Documents. The Architect's response will include a list of unacceptable product selections, containing a brief explanation of reasons for this action.

1.5 COMPARABLE PRODUCT REQUESTS:

- Submit request for consideration of each comparable product. Identify product or fabrication or installation method identified as the Basis of Design to be replaced by a comparable product. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
 - 2. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.
 - a. Form of Approval: As specified in Section 013300 "Submittal Procedures."
 - b. Use product specified if Architect cannot make a decision on use of a comparable product request within time allocated.

1.6 SUBSTITUTION REQUESTS:

- A. Submit request for substitution for all proposed substitutions. 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 facsimile of form provided at end of Section.
 - 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. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
 - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - i. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
 - j. 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.
 - k. Cost information, including a proposal of change, if any, in the Contract Sum.
 - 1. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
 - m. 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.
- B. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within 7 days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.
 - 1. Form of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
 - 2. Use product specified if Architect cannot make a decision on use of a proposed substitution within time allocated.

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1.7 QUALITY ASSURANCE

- A. Source Limitations: To the fullest extent possible, provide products of the same kind from a single source.
 - 1. When specified products are available only from sources that do not, or cannot, produce a quantity adequate to complete project requirements in a timely manner, consult with the Architect to determine the most important product qualities before proceeding. Qualities may include attributes, such as visual appearance, strength, durability, or compatibility. When a determination has been made, select products from sources producing products that possess these qualities, to the fullest extent possible.
- B. Compatibility of Options: When the Contractor is given the option of selecting between two or more products for use on the Project, the product selected shall be compatible with products previously selected, even if previously selected products were also options.
 - 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.
- C. Nameplates: Except for required labels and operating data, do not attach or imprint manufacturer's or producer's nameplates or trademarks on exposed surfaces of products that will be exposed to view in occupied spaces or on the exterior.
 - 1. Labels: Locate required product labels and stamps on concealed surfaces or, where required for observation after installation, on accessible surfaces that are not conspicuous.
 - 2. Equipment Nameplates: Provide a permanent nameplate on each item of serviceconnected or power-operated equipment. Locate on an easily accessible surface that is inconspicuous in occupied spaces. The nameplate shall contain the following information and other essential operating data:
 - a. Name of product and manufacturer.
 - b. Model and serial number.
 - c. Capacity.
 - d. Speed.
 - e. Ratings.

1.8 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products according to the manufacturer's recommendations, using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 - 1. Schedule delivery to minimize long-term storage at the site and to prevent overcrowding of construction spaces.
 - 2. Coordinate delivery with installation time to assure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 - 3. Deliver products to the site in an undamaged condition in the manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products upon delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

C. Storage:

- 1. Store products to allow for inspection and measurement of quantity or counting of units.
- 2. Store materials in a manner that will not endanger Project structure.
- 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
- 4. Store cementitious products and materials on elevated platforms.
- 5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
- 6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
- 7. Protect stored products from damage and liquids from freezing.
- 8. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

1.9 **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.
 - 1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. 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.
- 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: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
 - 3. See other 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 SELECTION PROCEDURES**

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, new at the time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners, safety guards, and other devices and details needed for a complete installation and the intended 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 Part 2 "Comparable Products" Article to obtain approval for use of an unnamed product.
- B. Product Selection Procedures:
 - 1. Product: Where Specifications name a single product and manufacturer, provide the named product that complies with requirements.
 - 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.
 - 3. Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
 - 4. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
 - 5. Available Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
 - 6. Available Manufacturers: Where Specifications include a list of manufacturers, provide a product by one of the manufacturers listed, or an unnamed manufacturer, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
 - 7. Product Options: Where Specifications indicate that sizes, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.
 - 8. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide 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 Part 2 "Comparable Products" Article for consideration of an unnamed product by the other named manufacturers.
- C. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
 - 1. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.
- D. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product that complies with other specified requirements.

- 1. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that does not include premium items.
- 2. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration: Architect will consider Contractor's request for comparable product 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. 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.

2.3 **PRODUCT SUBSTITUTIONS**

- A. Timing: Architect will consider requests for substitution if received within 60 days after the Notice to Proceed. 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.

PART 3 - EXECUTION

3.1 SUBSTITUTION REQUEST FORM

A. Substitution Request form is appended to this section.

SEE NEXT PAGE FOR SUBSTITUTION REQUEST FORM

SUBSTITUTION REQUEST FORM PALATINE PUBLIC LIBRARY | HEAT EXCHANGER REPAIR

We,___

hereby submit for your consideration the following product instead of the specified item for the above referenced project:

Section	Paragraph	Specified Item

Proposed Substitution:

Attach complete technical data, including laboratory tests, if necessary. Include complete information on changes to Drawings and or Specifications which the proposed substitution requires for proper installation.

Fill in the blanks below. Use additional sheets if necessary. A. Does the proposed substitution affect dimensions shown on the Drawings?

B. Will the undersigned pay for changes to the building design, including engineering and detailing costs caused by the proposed substitution, if any?

C. What effect does the proposed substitution have on other trades?

D. What are the differences between the proposed substitution and the specified item?

E. What are the differences in the Manufacturer's Warranties between the proposed substitution and the specified item?

The undersigned states that the function, appearance and quality of the proposed substitution are equivalent or superior to the specified item. The undersigned acknowledges that acceptance of the proposed substitution is entirely at the Architect's discretion.

Signature	For Architect's Use:	
Name	Accepted Accepted As Noted Not Accepted Received Too Late	
Firm:	By: Date	
Address:	Duc	
Telephone		

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Installation of the Work.
 - 2. Progress cleaning.
 - 3. Starting and adjusting.
 - 4. Protection of installed construction.
 - 5. Correction of the Work.

1.3 SUBMITTALS

A. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, mechanical and electrical systems, 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; underground electrical services, and other utilities.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, 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. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- C. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:

- 1. Description of the Work.
- 2. List of detrimental conditions, including substrates.
- 3. List of unacceptable installation tolerances.
- 4. Recommended corrections.
- D. 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. 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.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. 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.

3.3 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. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.

HEAT EXCHANGER REPAIR

- G. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
 - 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.
 - 3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- H. 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.
- I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.4 CUTTING AND PATCHING

- A. Cutting and Patching, 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 in-place 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. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of work to be cut.
- D. Protection: Protect in-place 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.
- E. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching according to requirements in Section 011000 "Summary."
- F. Cutting: Cut in-place 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 neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. 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 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.
- G. 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 practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
 - 1. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
 - a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
 - b. Restore damaged pipe covering to its original condition.
 - 2. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weather-tight condition and ensures thermal and moisture integrity of building enclosure.
- H. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.5 **PROGRESS CLEANING**

- A. This Article refers to regular cleaning operations conducted while construction is in progress. Requirements for final cleaning before Substantial Completion are included in Division 1 Section "Closeout Procedures."
- B. 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.
 - 4. Coordinate progress cleaning for joint-use areas where Contractor and other contractors are working concurrently.
- C. Site: Maintain Project site free of waste materials and debris.
- D. 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.
- E. 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.

- F. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- G. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- H. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Section 017419 "Construction Waste Management and Disposal."
- 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.

3.6 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.

3.7 CORRECTION OF THE WORK

- A. Repair or remove and replace defective construction. Restore damaged substrates and finishes.
 - 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.

SECTION 017419 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for the following:
 - 1. Recycling non-hazardous demolition and construction waste.
 - 2. Disposing of non-hazardous demolition and construction waste.

1.3 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.4 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Disposal Sites, Recyclers, and Waste Materials Processors: Use only facilities properly permitted by state and local authorities.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.1 PLAN IMPLEMENTATION

A. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work.

- B. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.
 - 2. Comply with Section 015000 "Temporary Facilities and Controls" for controlling dust and dirt, environmental protection, and noise control.

3.2 RECYCLING, DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall accrue to Contractor.
- B. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
- C. Procedures:
 - 1. Stockpile sorted recyclable and waste materials on-site without intermixing with each other or other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 2. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 - 3. Store components off the ground and protect from the weather.
 - 4. Remove recyclable and waste off Owner's property and transport to recycling receiver or processor.

3.3 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Burning of waste materials is permitted only at designated areas on Owner's property, provided required permits are obtained. Provide full-time monitoring for burning materials until fires are extinguished.
- C. Disposal: Transport waste materials off Owner's property and legally dispose of them.

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
 - 5. Repair of the Work.

1.3 SUBMITTALS

- A. Action Submittals
 - 1. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
 - 2. Certified List of Incomplete Items: Final submittal at Final Completion.
- B. Closeout Submittals
 - 1. Certificate of Insurance: For continuing coverage.
 - 2. Field Report: For pest control inspection.

1.4 MAINTENANCE MATERIAL SUBMITTALS

A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.5 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, final completion construction

photographic documentation, damage or settlement surveys, property surveys, and similar final record information.

- 3. Submit closeout submittals specified in individual Sections, including specific warranties, and similar documents.
 - a. Schedule of Maintenance Material Items: Prepare and submit schedule of maintenance material submittal items, including name and quantity of each item and name and number of related Specification Section. Obtain Architect's signature for receipt of submittals.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Advise Owner of pending insurance changeover requirements.
 - 2. Instruct Owner's personnel in maintenance of products.
 - 3. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - 4. Complete final cleaning requirements, including touchup painting.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 7 days prior to date the work will be completed and ready for final inspection and tests. 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. Reinspection: Request reinspection 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.

1.6 FINAL ACCEPTANCE

- A. Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.
 - 1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include insurance certificates for products and completed operations where required.
 - 2. Submit a certified copy of the Architect's final inspection list of items to be completed or corrected, endorsed and dated by the Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated by the Architect.
 - 3. Submit consent of surety to final payment.
 - 4. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - 5. Submit pest-control final inspection report and warranty.
- 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.
- C. Reinspection Procedure: The Architect will reinspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to the Architect.

- 1. Upon completion of reinspection, the Architect will prepare a certificate of final acceptance. If the Work is incomplete, the Architect will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.
- 2. If necessary, reinspection will be repeated at Contractor's expense.

1.7 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: 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. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
 - 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
 - 3. Include the following information at the top of each page:
 - a. Project name.
 - b. Date.
 - c. Name of Architect and Construction Manager.
 - d. Name of Contractor.
 - e. Page number.

1.8 SUBMITTAL OF PROJECT WARRANTIES

A. Time of Submittal: 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, or when delay in submittal of warranties might limit Owner's rights under warranty.

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 FINAL CLEANING

- A. General: Perform 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.
- 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. Remove snow and ice to provide safe access to building.
- f. Remove labels that are not permanent.
- g. Leave Project clean.
- C. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects, and other pests. Prepare a report.
- D. Construction Waste Disposal: Comply with waste disposal requirements in Section 017419 "Construction Waste Management and Disposal."

3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations before requesting inspection for determination of Substantial Completion.
- B. Repair or remove and replace defective construction. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment. Where damaged or worn items cannot be repaired or restored, provide replacements. Remove and replace operating components that cannot be repaired. Restore damaged construction and permanent facilities used during construction to specified condition.
 - 1. Remove and replace chipped, scratched, and broken glass, reflective surfaces, and other damaged transparent materials.
 - 2. Touch up and otherwise repair and restore marred or exposed finishes and surfaces. Replace finishes and surfaces that that already show evidence of repair or restoration.

SECTION 017710 - WARRANTIES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for warranties required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.
 - 1. Refer to the General Conditions for terms of the Contractor's period for correction of the Work.
- B. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

1.2 WARRANTY REQUIREMENTS

- A. Related Damages and Losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.
- B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- D. Owner's Recourse: Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights, or remedies.
 - 1. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
- E. Where the Contract Documents require a special warranty, or similar commitment on the Work or part of the Work, the Owner reserves the right to refuse to accept the Work, until the Contractor presents evidence that entities required to countersign such commitments are willing to do so.

1.3 SUBMITTALS

- A. Submit written warranties to the Architect prior to the date certified for Substantial Completion. If the Architect's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.
 - 1. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Architect within 15 days of completion of that designated portion of the Work.
- B. When the Contract Documents require the Contractor, or the Contractor and a subcontractor, supplier or manufacturer to execute a special warranty, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner, through the Architect, for approval prior to final execution.
 - 1. Refer to Divisions 2 through 16 Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Form of Submittal: At Final Completion compile (2) copies of each required warranty properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
- D. Bind warranties and bonds in heavy-duty, commercial-quality, durable 3-ring, vinyl-covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 - 1. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address, and telephone number of the Installer.
 - 2. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project title or name, and name of the Contractor.
 - 3. When warranted construction requires operation and maintenance manuals, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

HEAT EXCHANGER REPAIR

SECTION 017823 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Product maintenance manuals.

1.3 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

1.4 CLOSEOUT SUBMITTALS

- A. Submit operation and maintenance manuals indicated. Provide content for each manual as specified in individual Specification Sections, and as reviewed and approved at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
 - 1. Architect will comment on whether content of operation and maintenance submittals is acceptable.
 - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operation and maintenance manuals in the following format:
 - 1. Submit on digital media acceptable to Architect.
 - 2. Submit one paper copies.
- C. Comply with Section 017700 "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

1.5 FORMAT OF OPERATION AND MAINTENANCE MANUALS

- A. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.
 - 1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
 - 2. File Names and Bookmarks: Bookmark individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.
- B. Manuals, Paper Copy: Submit manuals in the form of hard-copy, bound and labeled volumes.
 - 1. Binders: Heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - a. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents, and indicate Specification Section number on bottom of spine. Indicate volume number for multiple-volume sets.
 - 2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section of the manual. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
 - 3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software storage media for computerized electronic equipment. Enclose title pages and directories in clear plastic sleeves.
 - 4. Supplementary Text: Prepared on 8-1/2-by-11-inch white bond paper.
 - 5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

1.6 PRODUCT MAINTENANCE MANUALS

A. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.

- B. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- C. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.
- D. Product Information: Include the following, as applicable:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Color, pattern, and texture.
 - 4. Material and chemical composition.
 - 5. Reordering information for specially manufactured products.
- E. Maintenance Procedures: Include manufacturer's written recommendations and the following:
 - 1. Inspection procedures.
 - 2. Types of cleaning agents to be used and methods of cleaning.
 - 3. List of cleaning agents and methods of cleaning detrimental to product.
 - 4. Schedule for routine cleaning and maintenance.
 - 5. Repair instructions.
- F. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- G. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 017839 – PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.

1.2 SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit (1) set of marked-up Record Prints.
- B. Record Specifications: Submit (1) copy of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit (1) copy.
 - 1. Where Record Product Data is required as part of operation and maintenance manuals, submit marked-up Product Data as an insert in manual instead of submittal as Record Product Data.

PART 2 - PRODUCTS

2.1 **RECORD DRAWINGS**

- A. Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and Shop Drawings.
 - 1. Preparation: 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 would be difficult to identify or measure and record later.
 - b. Accurately record information in an understandable drawing technique.
 - c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.

- 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Revisions to details shown on Drawings.
 - b. Details not on the original Contract Drawings.
 - c. Field records for variable and concealed conditions.
- 3. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.

2.2 **RECORD SPECIFICATIONS**

- A. Preparation: Mark Specifications 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. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
 - 4. For each principal product, indicate whether Record Product Data has been submitted in operation and maintenance manuals instead of submitted as Record Product Data.
 - 5. Note related Change Orders and Record Drawings where applicable.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.

SECTION 017900 - DEMONSTRATION AND TRAINING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
 - 1. Demonstration of operation of systems, subsystems, and equipment.
 - 2. Training in operation and maintenance of systems, subsystems, and equipment.

1.3 SUBMITTALS

- A. Instruction Program: Submit outline of instructional program for demonstration and training, including a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.
 - 1. At completion of training, submit complete training manual(s) for Owner's use.
- B. Qualification Data: For instructor.
- C. Attendance Record: For each training module, submit list of participants and length of instruction time.

1.4 QUALITY ASSURANCE

- A. Facilitator Qualifications: A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.
- B. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Division 1 Section "Quality Requirements," experienced in operation and maintenance procedures and training.

1.5 COORDINATION

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

PART 2 - PRODUCTS

2.1 INSTRUCTION PROGRAM

- A. 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.
- B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following:
 - 1. Basis of System Design, Operational Requirements, and Criteria: Include the following:
 - a. System, subsystem, and equipment descriptions.
 - b. Performance and design criteria if Contractor is delegated design responsibility.
 - c. Operating standards.
 - d. Regulatory requirements.
 - e. Equipment function.
 - f. Operating characteristics.
 - g. Limiting conditions.
 - h. Performance curves.
 - 2. Documentation: Review the following items in detail:
 - a. Emergency manuals.
 - b. Operations manuals.
 - c. Maintenance manuals.
 - d. Project Record Documents.
 - e. Identification systems.
 - f. Warranties and bonds.
 - g. Maintenance service agreements and similar continuing commitments.
 - 3. Emergencies: Include the following, as applicable:
 - a. Instructions on meaning of warnings, trouble indications, and error messages.
 - b. Instructions on stopping.
 - c. Shutdown instructions for each type of emergency.

- d. Operating instructions for conditions outside of normal operating limits.
- e. Sequences for electric or electronic systems.
- f. Special operating instructions and procedures.
- 4. Operations: Include the following, as applicable:
 - a. Startup procedures.
 - b. Equipment or system break-in procedures.
 - c. Routine and normal operating instructions.
 - d. Regulation and control procedures.
 - e. Control sequences.
 - f. Safety procedures.
 - g. Instructions on stopping.
 - h. Normal shutdown instructions.
 - i. Operating procedures for emergencies.
 - j. Operating procedures for system, subsystem, or equipment failure.
 - k. Seasonal and weekend operating instructions.
 - 1. Required sequences for electric or electronic systems.
 - m. Special operating instructions and procedures.
- 5. Adjustments: Include the following:
 - a. Alignments.
 - b. Checking adjustments.
 - c. Noise and vibration adjustments.
 - d. Economy and efficiency adjustments.
- 6. Troubleshooting: Include the following:
 - a. Diagnostic instructions.
 - b. Test and inspection procedures.
- 7. Maintenance: Include the following:
 - a. Inspection procedures.
 - b. Types of cleaning agents to be used and methods of cleaning.
 - c. List of cleaning agents and methods of cleaning detrimental to product.
 - d. Procedures for routine cleaning
 - e. Procedures for preventive maintenance.
 - f. Procedures for routine maintenance.
 - g. Instruction on use of special tools.
- 8. Repairs: Include the following:
 - a. Diagnosis instructions.
 - b. Repair instructions.
 - c. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - d. Instructions for identifying parts and components.
 - e. Review of spare parts needed for operation and maintenance.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a combined training manual organized in coordination with requirements in Section 017823 "Operation and Maintenance Data."
- B. Set up instructional equipment at instruction location.

3.2 INSTRUCTION

- A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.
- B. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
- C. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
 - 1. Schedule training with Owner, through Architect, with at least 7 days' advance notice.
- D. Cleanup: Collect used and leftover educational materials and remove from Project site. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

SECTION 024119 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Demolition and removal of selected portions of building or structure.

1.3 DEFINITIONS

- A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged or reinstalled.
- B. Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and deliver to Owner ready for reuse.
- C. Remove and Reinstall: Detach items from existing construction, in a manner to prevent damage, prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Leave existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.
- E. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.

1.4 MATERIALS OWNERSHIP

A. Unless otherwise indicated, demolition waste becomes property of Contractor.

1.5 CLOSEOUT SUBMITTALS

A. Inventory: Submit a list of items that have been removed and salvaged.

1.6 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
 - 1. Hazardous materials will be removed by Owner before start of the Work.
 - 2. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.
- E. Storage or sale of removed items or materials on-site is not permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
 - 1. Maintain fire-protection facilities in service during selective demolition operations.

1.7 COORDINATION

A. Arrange selective demolition schedule so as not to interfere with Owner's operations.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ASSE A10.6 and NFPA 241.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that utilities have been disconnected and capped before starting selective demolition operations.

B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
 - 1. Arrange to shut off utilities with utility companies.
 - 2. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
 - 3. Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components indicated on Drawings to be removed.
 - a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
 - b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material and leave in place.
 - c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
 - d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
 - e. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.
 - f. Ducts to Be Removed: Remove portion of ducts indicated to be removed and plug remaining ducts with same or compatible ductwork material.
 - g. Ducts to Be Abandoned in Place: Cap or plug ducts with same or compatible ductwork material and leave in place.

3.3 **PROTECTION**

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
 - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
 - 2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
 - 3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
 - 4. Cover and protect furniture, furnishings, and equipment that have not been removed.
 - 5. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Section 015000 "Temporary Facilities and Controls."
- B. Remove temporary barricades and protections where hazards no longer exist.

3.4 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
 - 2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
 - 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - 4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
 - 5. Maintain fire watch during and for at least 4 hours after flame-cutting operations.
 - 6. Maintain adequate ventilation when using cutting torches.
 - 7. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
 - 8. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
 - 9. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 - 10. Dispose of demolished items and materials promptly.
- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- C. Removed and Reinstalled Items:
 - 1. Clean and repair items to functional condition adequate for intended reuse.
 - 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
 - 3. Protect items from damage during transport and storage.
 - 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- D. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

A. Roofing: Remove no more existing roofing than what can be covered in one day by new roofing and so that building interior remains watertight and weathertight.

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3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction and recycle or dispose of them according to Section 017419 "Construction Waste Management and Disposal."
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
 - 4. Comply with requirements specified in Section 017419 "Construction Waste Management and Disposal."
- B. Burning: Do not burn demolished materials.

3.7 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.