



## PROJECT MANUAL

FOR

**Livingston County  
Drive Through Facility Design and CA  
Services**

**Pontiac, IL**

**Project No: 0211957.00**

**Bid Set  
July 22, 2022**

**Owner:**

Livingston County  
112 W. Madison Street  
Pontiac, Illinois 61764

**SECTION 00 0107 - SEALS PAGE**

The portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed Civil Engineer under the laws of the State of Illinois.

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SIGNATURE:

NAME: Craig M. Earl

DATE: 06/15/2022

LICENSE EXPIRES: 11/30/2023

---

SEAL

The portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed Structural Engineer under the laws of the State of Illinois.

---

SIGNATURE:

NAME: Paige M. Hefner

DATE: 06/15/2022

LICENSE EXPIRES: 11/30/22

---

SEAL

The portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed Architect under the laws of the State of Illinois.

---

SIGNATURE:

NAME: Samantha R. Hill

DATE: 06/15/2022

LICENSE EXPIRES: 11/30/2022

---

SEAL

The portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed Mechanical Engineer under the laws of the State of Illinois.

\_\_\_\_\_  
SIGNATURE:

NAME: Dustin R. Rhoades

DATE: 06/15/2022

LICENSE EXPIRES: 11/30/2023

\_\_\_\_\_  
SEAL

The portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed Electrical Engineer under the laws of the State of Illinois.

\_\_\_\_\_  
SIGNATURE:

NAME: Jay D. Eman

DATE: 06/15/2022

LICENSE EXPIRES: 11/30/2023

\_\_\_\_\_  
SEAL

**END OF SECTION**

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Livingston County and Public Property Committee is inviting sealed Bid Proposals from interested and qualified parties for a new Drive Thru Vaccination Facility, located at 310 E. Torrance Ave, Pontiac, Illinois 61764.

This project consists of construction of a new Drive Thru Vaccination Building of 3,248 building gross square feet, single story, slab on grade as well as limited associated site development. This work shall include all labor, supervision, materials, transportation and services necessary and required to perform the Drive Through Facility project as set forth in the Contract Documents.

This project is designed and shall be constructed in coordination with a separate Health and Education Building Parking Phase 2 project.

The intent of the owner is to issue two separate contracts to one successful bidder. Preference will be given to combined bidders.

Sealed Bids will be received by Livingston County until the date and time listed below.

A Pre-Bid meeting will not be conducted for this project, but Bidders are invited to submit questions to the Architect via Requests for Information.

Bid Date: 08-31-2022

Bid Time: 02:00 PM

Bid Location: Historic Courthouse 112 W. Madison Street, Pontiac, IL 61764

Bid security shall be submitted with each bid in the amount of five (5) percent of the bid amount. No bids may be withdrawn for a period of 90 days after opening of bids. Owner reserves the right to reject any and all bids and to waive informalities and irregularities.

All requests for information (RFI) shall be submitted to Farnsworth Group in writing. The project team will maintain a record of RFI's. Written response to RFI's will be provided by Farnsworth Group and shared with all plan holders.

Online procurement and contracting documents: documents will be available online through an electronic bid site managed by Farnsworth Group, Inc. Obtain access after 2:00 PM, August 3, 2022, by visiting [www.f-w.com](http://www.f-w.com) and clicking on the project bid list link at the bottom of the page or by contacting Farnsworth Group, Inc. Online access will be provided to all registered bidders during the bidding process. A separate ftp site will be made available to the successful bidder for the duration of construction.

Bidders must be properly licensed under the laws governing their respective trades and be able to obtain insurance and bonds required for the Work. A Performance Bond, separate Labor and Material Payment Bond, and Insurance in a form acceptable to Owner will be required of the successful Bidder.

The Owner requires all contractors and vendors doing business with the Owner not to discriminate against anyone on the basis of race, age, color, religion, gender, sexual orientation, ancestry, non job-related handicaps or national origin.

Livingston County reserves the right to accept or reject any and all bids, and to waive any and all informalities in the bidding. After receipt of bids and completion of the review process, Livingston County may award a contract to the bidder that, in its opinion, will provide a combination of the best services and reasonable cost.

Bids will be held good for a period of sixty (60) calendar days subsequent to the opening of bids.



Bidders are required to submit certifications of compliance with Non-Collusion, Eligibility to Enter into Public Contracts, Sexual Harassment Policy, Drug Free Workplace, Prevailing Wages and Bidder's Qualifications with their bid.

**END OF SECTION**

**SECTION 00 2100 - INSTRUCTIONS TO BIDDERS****1.1. GENERAL**

- A. Summary of Work: Type of Bid: Bids shall be on a stipulated sum basis.
- 1) Livingston County seeks bids for all material, labor and equipment necessary to complete the Work associated with construction of a new Drive Thru Vaccination Building and limited associated site development.
  - a. The Work includes General, MEP and Site trades for new building and limited site development as shown on the Contract Documents.
  - b. The Work includes coordination and collaboration with a separate Parking Phase 2 project by Livingston County to expand parking lot for the adjacent Health and Education Building.
  - c. The Work includes coordination and collaboration with a separate project by Livingston County to remove the former existing Health Department building.
- B. Time and Location for Opening of Bids:
- 1) Bid Date and Time: 08-31-2022, 02:00 PM.
  - 2) Bid Location: Livingston County Board Office, Livingston County Historic Courthouse, Historic Courthouse 112 W. Madison Street, Pontiac, IL 61764 61764.
- C. Examination and Procurement of Documents: Documents will be available online through an electronic bid site managed by Farnsworth Group, Inc. Obtain access after 2:00 PM, August 3, 2022, by visiting [www.f-w.com](http://www.f-w.com) and clicking on the Project Bid List Link at the bottom of the page or by contacting Farnsworth Group, Inc. Online access will be provided to all registered bidders during the bidding process. A separate FTP site will be made available to the successful bidder for the duration of construction.
- D. Bidders will be required to provide Bid security in the form of a Bid Bond and Performance and Payment Bond in the amount of five percent (5%) percent of the Bid.
- E. Interpretations of Addenda
- 1) No oral interpretation will be made to any Bidder as to the meaning of the Bidding Documents or any part thereof.
  - 2) Requests for interpretations shall be made in writing to the Architect.
  - 3) Contact : Farnsworth Group, Inc.
  - a. Samantha Hill; [shill@f-w.com](mailto:shill@f-w.com).
  - 4) Inquiries received seven (7) or more days or more business days prior to the date fixed for opening of bids will be given consideration.
  - 5) Changes to the Bidding Documents will be in the form of an Addendum to the Bidding Documents, and when issued, will be on file in the office of the Architect upon issuance.
  - 6) Addenda will be distributed to each registered plan holder holding Bidding Documents by means of the electronic bid site maintained by Farnsworth Group, Inc. It shall be the

Bidders' responsibility to make inquiry as to the Addenda issued and provide distribution of Addenda to all Subcontractors and Suppliers not registered through the electronic bid site.

- 7) Addenda shall become part of the Contract and all Bidders shall be bound by such Addenda, whether or not received by the Bidders.

F. Inspection of Site and Documents

- 1) Bidder shall visit the site of the proposed work and fully acquaint himself/herself with the existing conditions there relating to construction and labor, and should fully inform himself/herself as to the facilities involved, the difficulties and restrictions attending the performance of the Contract.
- 2) The Bidder shall thoroughly examine and familiarize himself/herself with the Drawings, Technical Specifications and all other Bidding Documents.
- 3) The Contractor by the execution of the Contract shall in no way be relieved of any obligation under it due to his/her failure to receive or examine any form or legal instrument or to visit the site and acquaint himself/herself with the existing conditions, and the Owner will be justified in rejecting any claim based on facts regarding which the contractor should have noticed as a result thereof.
- 4) A Pre-Bid meeting will not be conducted for this project, but Bidders are invited to submit questions to the Architect via Requests for Information.

G. Bids

- 1) Scheduled Completion Dates: Owner has provided the required Substantial Completion Date on the Bid Form. Bidder shall state a stipulated sum amount for performance of the work in accordance with these schedule dates.
  - a. Substantial Completion of new Drive Thru Building and associated site development shall be by 05/26/2023.
  - b. Should Board approval to start construction extend beyond the anticipated approval at the September 15, 2022 Board meeting, the project schedule will be adjusted accordingly, including potential accommodations for winter weather if necessary.
- 2) Each bidder shall include in his/her bid the following information:
  - a. Principals
    - 1) Names
  - b. Firm
    - 1) Name
    - 2) Treasury Number
    - 3) Address (City, State, Zip Code and Telephone Numbers)
  - c. Supplementary Information: In addition to Bidder's Qualifications documentation required in this Section, provide information demonstrating compliance with the following:
    - 1) Bonding Capacity - The Contractor must be capable of providing bonding for the value of the contract from a bond company licensed in the State of Illinois and having an AM Best Rating of A VII or better..

- 2) 5 years minimum U.S. experience in building contracts.
- 3) Contractors bidding the work shall their own place of business, equipment, staff, manpower, etc., required for the type of work they are licensed to perform.
- 4) Contractors bidding the project shall have successfully completed similar size and scope projects during the last 5 years.
- 5) Apparent successful bidding Contractor shall provide the necessary financial information to Owner when requested including but not limited to financial statements for the 3 previous years. The financial statements shall be prepared by a C.P.A.
- 6) A list of references and past projects shall be submitted with the bid.
- 7) Contractors bidding the work shall be able to meet necessary insurance limits required by the Contract Documents. The insurance company shall be acceptable to the Owner. See Supplementary Conditions section for applicable insurance coverage and required monetary limits. Failure to provide proper Certificate of Insurance will result in a breach of contract and payment for completed work.
- 8) The successful Contractor shall submit to the Owner a list of his subcontractors not listed in Section 00 4336 for review and approval by the Owner within 3 days after being notified that his bid has been accepted.
- 3) Bidder shall attach a preliminary bar chart construction schedule coordinated with time frames indicated on his/her bid form. Include any additional time for construction beyond the date of substantial completion if needed.
- 4) The Owner reserves the right to require all or part of any remaining Work not completed by date designated for Substantial Completion to be performed after normal business hours or on other than normal working days at no "extra" or additional cost to Owner and with no extension of time.
- 5) Bids must be submitted on forms supplied by the Architect. All shall be properly signed and seal affixed. Bids must be regular in every respect and no interlineations, excisions or special conditions shall be made or included in the Bid Form by the Bidder except as stated above. The Contractor shall submit two copies of the completed Bid Form and retain one copy for his/her records.
- 6) Bid Proposal Documents, including the Bid Form, shall be enclosed in an envelope which shall be sealed and clearly labeled with words "0211957.00", name of Bidder, and date and time of Bid Opening. Faxed bid proposals will not be accepted.
- 7) The Owner may consider as irregular any Bid on which there is an alteration of or departure from the Bid Form provided herein, and at his/her option may reject same.
- 8) Corrections, erasures or other changes in the Bid Proposal Documents must be explained or noted over the signature of the Bidder.
- 9) Bids received prior to the advertised hour of opening will be securely kept sealed. The officer whose duty it is to open them will decide when the specified time has arrived. No Bid received thereafter will be considered.
- 10) Opening Of Bids
  - a. At the time and place fixed for the opening of Bids, the Owner will cause to be opened every Bid received within the time set for receiving Bids, irrespective of any irregularities therein.

- b. The Owner's Property Committee will take the Bids into consideration and will subsequently determine recommendations to the Board for their action. It is anticipated that the Board will take action during their September 15, 2022 Board meeting.

11) Withdrawal Of Bids

- a. Bids may be withdrawn on written or telegraphic request dispatched by the Bidder in time for delivery in the normal course of business to the time fixed for opening; provided that written confirmation of any telegraphic withdrawal over the signature of the Bidder is placed in the mail and postmarked prior to the time set for Bid opening. The Bid guaranty of any Bidder withdrawing his Bid in accordance with the foregoing conditions will be returned promptly

H. Substitutions

- 1) Each Bidder represents that his/her Bid is based upon the materials and equipment described in the Bidding Documents.
- 2) No Substitution will be considered unless request has been submitted to the Architect for approval at least seven (7) days prior to the date of receipt of Bids. Substitution requests shall be written and accompanied by adequate technical and cost data.
- 3) Requests shall include a complete description of the proposed Substitution, name of the material or equipment for which it is to be substituted, drawings, cuts, performance and test data, and any other data or information necessary for a complete evaluation by the Architect.
- 4) If the Architect approves any proposed Substitution, such approval will be set forth in an Addendum not less than three (3) days prior to the date for receipt of Bids.

I. Award of Contract: Rejection of Bids

- 1) The Contract, if awarded, will be awarded to the qualified, responsible Bidder submitting the lowest combination of "Base Bid" for the Work; plus any acceptable Alternates, complying with the conditions of the Bidding Documents, within the Owner's Budget.
- 2) The Contract shall be deemed to have been awarded when notice of an award shall have been given to the Bidder by some officer or agent of the Owner. The Bidder to whom the awards are made will be notified at the earliest possible date.
- 3) The Owner reserves the right to consider as unqualified to do the work of general construction any Bidder who does not habitually perform with his own forces the major portions of the work involved in construction of the Improvements embraced in this Contract.
- 4) The Owner, however, reserves the right to reject any and all Bids and to waive any informality in Bids received whenever such action(s) will serve the Owner's best interest.
- 5) In addition to price and terms of sale as conditions for award of bid, the following shall also be given great consideration: quality of goods bid, the financial condition and proven ability of the supplier, ability to provide goods/services in a timely manner, and the history of the supplier in past dealings with Livingston County.

J. Contract Negotiations

- 1) Livingston County reserves the right to negotiate a Contract after the successful firm is selected. Selection will be based only on the bid proposal submitted and subsequent interviews, if any; therefore, the bid proposals must be complete. Submission of a bid proposal shall constitute a valid offer, which may be accepted by the County for a period of ninety (90) days following the bid proposal opening.
- a. Bids for Base Bids will be held good for a period of sixty (60) calendar days and Alternates will be held good for a period of seven (7) days subsequent to the opening of Bids.

K. Use and Clarification of Drawings and Specifications

- 1) All Drawings and Specifications for the work are the property of Owner and are intended solely for use in the work contemplated in such Drawings and Specifications.
- 2) If there are any discrepancies in, or omissions from, the Drawings or Specifications, or if the Bidder is in doubt as to the true meaning of any part of the Bidding Documents, he/she shall request clarification from Architect. Such request must be in writing and shall be made not less than seven (7) or more days working days prior to the time scheduled for the termination of Bidding. Interpretations in response to inquiries from any Bidder, or any clarification or corrections issued, will be mailed to each Bidder. If the Bidder fails to request clarification regarding methods of performing work or the material required, his/her proposal shall be deemed to include the method requiring the greater quantity of work or material or upon the material of greatest cost indicated.

L. Execution of Agreement; Submittal of Performance and Payment Bonds and Certificate of Insurance

- 1) Subsequent to the award and within ten (10) days after the prescribed forms are prepared and presented for signature by the Architect, the successful Contractor shall execute and return to the Architect, an Agreement in the form referenced in the Contract Documents in such number of copies as the Owner may require. The submittal shall include required certificates of insurance forms/insurance policies, performance and payment bonds, and data requested by Owner for Owner's insurance. These submittals shall be complete prior to initiation of on-site work.
- 2) Contractor shall furnish Performance and Payment Bonds in penal sum equal to the contract. The bond premium is to be included in the Stipulated Sum Bid. Contractor represents that this Proposal does include all costs of such bonds.
- 3) Bidders should note that this Project Manual consists of all pages listed in the Table of Contents. Upon notification, the Architect will furnish any pages missing from the Project Manual, or from the Drawings as printed.
- 4) If the Bidder to whom the award is made shall fail to enter into a contract for the performance of the Work or furnish the Performance and Payment Bonds and the required certificates within ten (10) days, he/she shall forfeit his/her claim to the Work and the amount represented by the Bid Security accompanying his/her Proposal shall become the property of the Owner as the agreed and liquidated amount of damages caused by such failure.

M. Pre-Construction Conference

- 1) A "Pre-Construction" Conference will be scheduled shortly after the issuance of the "Notice to Proceed", to establish lines of communication, review schedules, and establish guidelines for execution of the work. This meeting is to be attended by the Contractor, any Subcontractors, the Owner, and the Architect.

N. Bidder's Responsibility for Condition of Work

- 1) The Bidder shall, before submitting his/her Proposal, be held to have examined the premises, so as to compare them with the Drawings and Specifications, and to have satisfied himself/herself as to the existing conditions of the premises and limitations under which the work will have to be executed. No allowance shall subsequently be made on behalf of the Bidder by reason of any error or neglect on his/her part for having failed to follow the instruction here given.
- 2) The Bidder shall be held to have carefully read the Instructions to Bidders, the General Conditions, the Specifications for his/her work and other branches of the work to the end that he/she may be fully informed not only as to the work he/she is to perform, but also know about the work that will be required to be done by all Subcontractors.

O. Contract Information:

- 1) Refer to Item G.1 above for completion date information.
- 2) Bids for Base Bids will be held good for a period of sixty (60) calendar days and Alternates will be held good for a period of seven (7) days subsequent to the opening of Bids.
- 3) If Contractor does not complete work by date designated Substantial Completion, Owner may require that all or part of any remaining Work to be performed after building leaser's/user's normal business hours or on other than normal working days at no "extra" or additional cost to Owner and with no extension of time.

P. Sales Tax

- 1) Owner is a tax exempt organization and Contractor will be permitted to use Owner's tax exempt number for this project.

Q. Building Permits

- 1) The Owner shall provide the Building and other required Permits for the project as may be required by government and quasi-governmental entities with jurisdiction. Contractor shall obtain the permits.

R. Payment

- 1) Owner will make partial payments as the work progresses, if found satisfactory by Architect. Contractor may submit to Owner, not more than once a month, a partial payment invoice, using the form designated in Section 00 6100, setting forth the value, based on the prices in this Proposal, of labor, materials and supplies furnished and incorporated in the work to the satisfaction of Owner's Liaison and Architect and of materials suitably stored on the site at the date of such submission.

S. Execution of Agreement: Performance and Payment Bond

- 1) Subsequent to the award and within ten (10) days after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver to the Owner an Agreement in the form included in the Contract Documents in such number of copies as the Owner may require.
- 2) Having satisfied all conditions of award as set forth elsewhere in these documents, the successful Bidder shall, within the period specified in paragraph "a" above, furnish a surety bond in a penal sum not less than the amount of the Contract as awarded, as

security for the faithful performance of the Contract, and for the payment of all persons, firms or corporations to whom the Contractor may become legally indebted for labor, materials, tools, equipment, or services of any nature including utility and transportation services, employed or used by him in performing the work. Such bond shall be in the same form as that included in the Contract Documents and shall bear the same date as, or a date subsequent to that of the Agreement. The current power of attorney for the person who signs for any surety company shall be attached to such bond. This bond shall be signed by a guaranty or surety company listed in the latest issue of the U.S. Treasury Circular 570.

T. Non-Collusion Affidavit

- 1) The Contractor is required to execute the Non-Collusion Affidavit included in this package as Bid Form Attachment A. The executed Non-Collusion Affidavit is to be included with the Contractor's bid. Failure to execute and include the Non-Collusion Affidavit with the Contractor's bid may deem the Contractor's proposal non-responsive.

U. Certificate of Eligibility to Enter into Public Contracts

- 1) The Contractor is required to execute a Certificate of Eligibility to Enter into Public Contracts included in this package as Bid Form Attachment B. The executed Certificate is to be included with the Contractor's bid. Failure to execute and include the Certificate with the Contractor's bid may deem the Contractor's proposal non-responsive.

V. Certificate of Sexual Harassment Policy

- 1) The Contractor is required to execute the Certificate of Sexual Harassment Policy included in this package as Bid Form Attachment C. The executed Certificate is to be included with the Contractor's bid. Failure to execute and include the Certificate with the Contractor's bid may deem the Contractor's proposal non-responsive.

W. Drug Free Workplace Certification

- 1) The Contractor is required to execute the Drug Free Workplace Certification included in this package as Bid Form Attachment D. The executed Certificate is to be included with the Contractor's bid. Failure to execute and include the Certificate with the Contractor's bid may deem the Contractor's proposal non-responsive.

X. Prevailing Wage Rate Certification

- 1) The Contractor is required to execute the Prevailing Wage Rate Certification included in this package as Bid Form Attachment E. The executed Certificate is to be included with the Contractor's bid. Failure to execute and include the Certificate with the Contractor's bid may deem the Contractor's proposal non-responsive.

Y. Federal Acquisition Regulation: Buy American Act Requirements

- 1) The Contractor is required to execute the Buy American Act Certification included in this package as Bid Form Attachment F. The executed Certificate is to be included with the Contractor's bid. Failure to execute and include the Certificate with the Contractor's bid may deem the Contractor's proposal non-responsive.

Z. Bidder's Qualifications



- 1) Contractor's submitting bids for this project are required to execute the Bidder's Qualifications document included in this package as Bid Form Attachment G. The executed document is to be included with the Contractor's bid. Failure to execute and include the document with the Contractor's bid may deem the Contractor's proposal non-responsive

AA. Equal Employment Opportunity

- 1) See Section 00 7300.

BB. Insurance Requirements

- 1) See Section 00 7300.

**END OF SECTION**

**SECTION 00 4000 - PROCUREMENT FORMS AND SUPPLEMENTS****PART 1 GENERAL**

1.1. Contractor is responsible for obtaining a valid license to use all copyrighted documents specified but not included in the Project Manual.

**1.2. FORMS**

- A. Use the following forms for the specified purposes unless otherwise indicated elsewhere in the procurement requirements.
- B. Instructions to Bidders: Section 002100 - Instructions to Bidders
- C. Substitution Request Form (During Procurement): CSI Form 1.5C - Substitution Request (During Bidding/Negotiating Stage).
- D. Bid Form: Section 00 4100 - Bid Form.
- E. Procurement Form Supplements:
  - 1) Bid Security Form: AIA A310.
  - 2) Substitution Request Form (for substitutions requested with bid): CSI/CSC Form 1.5C - Substitution Request (During the Bidding/Negotiating Stage).
  - 3) Proposed Schedule of Values Form: AIA G703.
- F. Representations and Certifications:
  - 1) Bidder's Qualifications: AIA A305.

**1.3. REFERENCE STANDARDS**

- A. AIA A305 - Contractor's Qualification Statement; 1986.
- B. AIA A310 - Bid Bond; 2010.
- C. AIA G703 - Continuation Sheet; 1992.
- D. CSI/CSC Form 1.5C - Substitution Request (During the Bidding/Negotiating Stage); Current Edition.

**PART 2 PRODUCTS - NOT USED****PART 3 EXECUTION - NOT USED****END OF SECTION**

**SECTION 00 4100 - BID FORM****THE PROJECT AND THE PARTIES****1.1. TO:**

- A. Livingston County (Owner)  
1. 112 West Madison, Pontiac, Illinois, 61764 61764

**1.2. FOR:**

- A. Project: 0211957.00 Livingston County Drive Thru Facility  
310 E. Torrance Ave  
Pontiac, Illinois 61764

**1.3. DATE:** \_\_\_\_\_ (Bidder to enter date)**1.4. SUBMITTED BY:** (Bidder to enter name and address)

- A. Bidder's Full Name \_\_\_\_\_  
1. Address \_\_\_\_\_  
2. City, State, Zip \_\_\_\_\_

**1.5. OFFER**

- A. The Undersigned, having received and examined the Bidding Documents titled, "0211957.00 - Livingston County Health and Education Building" dated 2:00 PM, June 27, 2022, and having visited the site and examined the conditions affecting the Work, we hereby proposes and agrees to furnish all labor, materials, equipment, appliances and services, and to perform operations necessary to complete the Work as required by said Bidding Documents, for the Work identified below.

- B. Base Bid: \_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.

- C. Alternate No. 1 Bid: \_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.

- D. Alternate No. 2 Bid: \_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.

- E. Alternate No. 3 Bid: \_\_\_\_\_ dollars  
(\$ \_\_\_\_\_), in lawful money of the United States of America.

- F. All Contingency Allowances described in Section 01 2100 - Allowances are included in the Bid Sum.

**1.6. ACKNOWLEDGEMENTS**

- A. The Undersigned acknowledges the following:
1. Receipt of complete set of bidding documents and understands the meaning of their content and shall willingly comply with the guidelines set forth in those documents.
  2. Receipt of Addenda numbers \_\_\_\_\_.
  3. Bid Guarantee/Bond executed by the Bidder, equal to five percent (5%) percent of bid amount, is attached to completed bid form.
  4. Non-Collusion Affidavit (attachment A) is completed and attached to completed bid form.
  5. Certification of Eligibility to Enter into Public Contracts (attachment B) is completed and attached to completed bid form.

6. Drug Free Workplace Certification (attachment D) is completed and attached to completed bid form.
7. Certification of compliance with Prevailing Wage Rates (attachment E) is completed and attached to completed bid form.
8. Bidder's Qualifications (attachment F) is completed and attached to completed bid form.
9. Costs and premiums for all associated bonds, insurance, all permits and fees are included in the bid amount.
10. Bids for Base Bid will be held good for a period of sixty (60) calendar days and Alternates will be held good for a period of seven (7) days subsequent to the opening of Bids.
11. The undersigned agrees to comply with Owner's and building leaser's policies:
  - a. Comply with the Illinois Drug Free Workplace Act,
  - b. Comply with the Illinois Prevailing Wage Act, 820 IL CS 130/1 et seq. and use Wage Determination as determined by the Illinois Department of Labor, Conciliation, and Mediation Division,
  - c. Comply with Public Works Employment Discrimination Act (775 ILCS 10/001 and 775 ILCS 5/2-105(A), (1), (2), (3), (4)).

1.7. CONTRACT TIME

- A. If the Undersigned receives written notification of acceptance of this Proposal within fifteen (15) days after the Bid Opening Date he agrees to execute a Contract for the Work described in the Bidding Documents for the compensation identified in the Bidding Documents for the compensation identified in this proposal and to guarantee substantial completion of the Work no later than January 15, 2023.

1.8. BID FORM SIGNATURE(S)

- A. The Corporate Seal of
- B. \_\_\_\_\_
- C. was hereunto affixed in the presence of:
- D. \_\_\_\_\_
- E. (Authorized signing officer, Title)
- F. (Seal)
- G. \_\_\_\_\_
- H. (Authorized signing officer, Title)

**END OF BID FORM**

**SECTION 00 4105 - BID FORM ATTACHMENT A - NON-COLLUSION AFFIDAVIT**

(COMPLETE AND SUBMIT WITH BID)

STATE OF \_\_\_\_\_)

) SS

COUNTY OF \_\_\_\_\_)

\_\_\_\_\_ being duly sworn, says that he/she is  
\_\_\_\_\_ OF \_\_\_\_\_,

*(Sole owner, member of firm, corporate official)**(Individual, firm or corporate name)*

which has by the enactment of this document affirmed that he/she, in the preparation of the bid estimates, has not entered into any verbal and/or written agreement with any of the other bidders or their agents for the specific purpose of fixing bid estimates to benefit him/her-self or the firm he/she represents.

Certification: The Undersigned Bidder certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois, or any unit of government in the State of Illinois, nor has the Bidder made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the Bidder committed bribery or attempted bribery on behalf of the Bidder and pursuant to the direction or authorization of a responsible official of the Bidder. The Undersigned Bidder further certifies that it is not barred from bidding on this contract as a result of a conviction for the violation of state laws prohibiting bid-rigging or bid-rotating.

Signature \_\_\_\_\_

Subscribed and sworn to me this \_\_\_\_ DAY OF \_\_\_\_\_ A.D. \_\_\_\_\_.

\_\_\_\_\_  
(seal)**END OF SECTION**

**SECTION 00 4105.06 - BID FORM ATTACHMENT G - BIDDERS QUALIFICATION**

(COMPLETE AND SUBMIT WITH BID)

1.1. How many years has your organization been in business under its present business name?

\_\_\_\_\_

1.2. What type of organization is your Company (i.e. corporation, partnership, individually owned)?

\_\_\_\_\_

1.3. On separate sheet, describe Bidder's experience record in constructing the type of improvements embraced in this contract.

1.4. On separate sheet, describe Bidder's organization and equipment available for the work involved in this contract.

1.5. Supplementary Information: Provide information on 5 most recent projects of similar budget and scope including the following:

A. Project 1:

\_\_\_\_\_

1. Project Name \_\_\_\_\_

2. Project Completion Date \_\_\_\_\_

3. Contract amount at award \_\_\_\_\_

4. Total Change Order amount \_\_\_\_\_

5. Owner Contact Information \_\_\_\_\_

B. Project 2:

\_\_\_\_\_

1. Project Name \_\_\_\_\_

2. Project Completion Date \_\_\_\_\_

3. Contract amount at award \_\_\_\_\_

4. Total Change Order amount \_\_\_\_\_

5. Owner Contact Information \_\_\_\_\_

C. Project 3:

\_\_\_\_\_

1. Project Name \_\_\_\_\_

2. Project Completion Date \_\_\_\_\_

3. Contract amount at award \_\_\_\_\_

4. Total Change Order amount \_\_\_\_\_

5. Owner Contact Information \_\_\_\_\_

D. Project 4:

\_\_\_\_\_

1. Project Name \_\_\_\_\_

2. Project Completion Date \_\_\_\_\_

3. Contract amount at award \_\_\_\_\_

4. Total Change Order amount \_\_\_\_\_

5. Owner Contact Information \_\_\_\_\_

E. Project 5:

1. Project Name \_\_\_\_\_
2. Project Completion Date \_\_\_\_\_
3. Contract amount at award \_\_\_\_\_
4. Total Change Order amount \_\_\_\_\_
5. Owner Contact Information \_\_\_\_\_

1.6. Signature \_\_\_\_\_

**SECTION 00 4105.11 - BID FORM ATTACHMENT B**

**CERTIFICATE OF ELIGIBILITY TO ENTER INTO PUBLIC CONTRACTS**

(COMPLETE AND SUBMIT WITH BID)

STATE OF \_\_\_\_\_)

COUNTY OF \_\_\_\_\_)

\_\_\_\_\_ being duly sworn, says that  
he/she is

\_\_\_\_\_ OF

\_\_\_\_\_,

(Sole owner, member of firm, corporate official)  
name)

(Individual, firm or corporate

Certification: The Undersigned Bidder certifies that his company is eligible to enter into public  
contracts in the State of Illinois.

\_\_\_\_\_ (seal)

**END OF SECTION**



**SECTION 00 4105.22 - BID FORM ATTACHMENT C**

**CERTIFICATE OF COMPLIANCE WITH SEXUAL HARASSMENT POLICY**

(COMPLETE AND SUBMIT WITH BID)

STATE OF \_\_\_\_\_)

COUNTY OF \_\_\_\_\_)

\_\_\_\_\_ being duly sworn, says that  
he/she is

\_\_\_\_\_ OF  
\_\_\_\_\_,

(Sole owner, member of firm, corporate official)  
name)

(Individual, firm or corporate

Certification: The Undersigned Bidder certifies that this company is in compliance with the County's  
Sexual Harassment Policy.

Signature \_\_\_\_\_

Subscribed and sworn to me this \_\_\_\_ DAY OF \_\_\_\_\_ A.D. \_\_\_\_.

\_\_\_\_\_ (seal)

**END OF SECTION**

**SECTION 00 4105.33 - BID FORM ATTACHMENT D**

**DRUG FREE WORKPLACE CERTIFICATION**

(COMPLETE AND SUBMIT WITH BID)

STATE OF \_\_\_\_\_)

COUNTY OF \_\_\_\_\_)

\_\_\_\_\_ being duly sworn, says that  
he/she is

\_\_\_\_\_ OF  
\_\_\_\_\_,

Certification: The Undersigned Bidder certifies that his company is in compliance with Drug Free  
Workplace requirements in the State of Illinois.

Signature \_\_\_\_\_

Subscribed and sworn to me this \_\_\_\_ DAY OF \_\_\_\_\_ A.D. \_\_\_\_.

\_\_\_\_\_ (seal)

**END OF SECTION**

**SECTION 00 4105.44 - BID FORM ATTACHMENT E**

**CERTIFICATION OF PREVAILING WAGE RATES**

(COMPLETE AND SUBMIT WITH BID)

STATE OF \_\_\_\_\_)

COUNTY OF \_\_\_\_\_)

\_\_\_\_\_ being duly sworn, says that  
he/she is

\_\_\_\_\_ OF  
\_\_\_\_\_,

(Sole owner, member of firm, corporate official)  
name)

(Individual, firm or corporate

Certification: The Undersigned Bidder certifies that his bid complies with Prevailing Wage Rate  
requirements for Livingston County, Illinois.

Signature \_\_\_\_\_

Subscribed and sworn to me this \_\_\_\_ DAY OF \_\_\_\_\_ A.D. \_\_\_\_.

\_\_\_\_\_ (seal)

**END OF SECTION**

**SECTION 00 4105.44 - BID FORM ATTACHMENT F**

**CERTIFICATION OF BUY AMERICAN ACT REQUIREMENTS**

(COMPLETE AND SUBMIT WITH BID)

STATE OF \_\_\_\_\_)

COUNTY OF \_\_\_\_\_)

\_\_\_\_\_ being duly sworn, says that  
he/she is

\_\_\_\_\_ OF  
\_\_\_\_\_,

(Sole owner, member of firm, corporate official)  
name)

(Individual, firm or corporate

Certification: The Undersigned Bidder certifies that his bid complies with the Buy American Act and  
Final Rule 87 Fed. Reg. 12780 requirements for Livingston County, Illinois.

Signature \_\_\_\_\_

Subscribed and sworn to me this \_\_\_\_ DAY OF \_\_\_\_\_ A.D. \_\_\_\_.

\_\_\_\_\_ (seal)

**END OF SECTION**

**SECTION 00 4336 - PROPOSED SUBCONTRACTORS FORM****PARTICULARS**

- 1.1. Herewith is the list of Subcontractors referenced in the bid submitted by:
- 1.2. (Bidder) \_\_\_\_\_
- 1.3. TO (Owner ): Livingston County
- 1.4. Dated \_\_\_\_\_ and which is an integral part of the Bid Form.
- 1.5. The following work will be performed (or provided) by Subcontractors and coordinated by us:

**LIST OF SUBCONTRACTORS****WORK SUBJECT SUBCONTRACTOR NAME**

- |    |            |       |
|----|------------|-------|
| A. | Concrete   | _____ |
| B. | Masonry    | _____ |
| C. | Roofing    | _____ |
| D. | Plumbing   | _____ |
| E. | HVAC       | _____ |
| F. | Electrical | _____ |
| G. |            | _____ |
| H. |            | _____ |
| I. |            | _____ |

**END OF SECTION**

**SECTION 00 5000 - CONTRACTING FORMS AND SUPPLEMENTS****PART 1 GENERAL****1.1. AGREEMENT AND CONDITIONS OF THE CONTRACT**

- A. The Agreement is based on AIA A101-2017.
- B. The General Conditions are based on AIA A201-2007.
- C. The General Conditions are based on AIA A201-2017 as modified under Section 00 7300 - Supplementary Conditions.

**1.2. FORMS**

- A. Use the following forms for the specified purposes unless otherwise indicated elsewhere in Contract Documents.
- B. Bond Forms:
  - 1. Bid Bond Form: AIA A310.
  - 2. Performance and Payment Bond Form: AIA A312.
- C. Post-Award Certificates and Other Forms:
  - 1. Certificate of Insurance Form: ACORD Certificate of Insurance 25.
  - 2. Application for Payment Forms: AIA G702 with AIA G703 (for Contractors).
  - 3. Consent of Surety to Reduction of Retainage Form: G707A.
- D. Clarification and Modification Forms:
  - 1. Architect's Supplemental Instructions Form: AIA G710.
  - 2. Construction Change Directive Form: AIA G714.
  - 3. Change Order Form: AIA G701.
- E. Closeout Forms:
  - 1. Certificate of Substantial Completion Form: AIA G704.

**1.3. REFERENCE STANDARDS**

- A. AIA A101-2017 - Standard Form of Agreement Between Owner and Contractor where the basis of Payment is a Stipulated Sum; 2017.
- B. AIA A201 - General Conditions of the Contract for Construction; 2017.
- C. AIA A310 - Bid Bond; 2010.
- D. AIA A312 - Performance Bond and Payment Bond; 2010.
- E. AIA G701 - Change Order; 2001.
- F. AIA G702 - Application and Certificate for Payment; 1992.
- G. AIA G703 - Continuation Sheet; 1992.
- H. AIA G704 - Certificate of Substantial Completion; 2000.
- I. AIA G710 - Architect's Supplemental Instructions; 1992.
- J. AIA G714 - Construction Change Directive; 2007.

**PART 2 PRODUCTS - NOT USED****PART 3 EXECUTION - NOT USED****END OF SECTION**

**SECTION 00 7200 - GENERAL CONDITIONS**

FORM OF GENERAL CONDITIONS

- 1.1. The General Conditions applicable to this contract are AIA A201-2017, copy not included with this manual but available upon request.

RELATED REQUIREMENTS

- 2.1 SECTION 00 5000 - Contracting Forms and Supplements.
- 2.2 SECTION 00 7300 - SUPPLEMENTARY CONDITIONS.

**END OF SECTION**

**SECTION 00 7300 - SUPPLEMENTARY CONDITIONS****PART 1 GENERAL****1.1. SUMMARY**

- A. These Supplementary Conditions amend and supplement the General Conditions defined in Document 00 7200 - General Conditions and other provisions of Contract Documents as indicated below. Provisions that are not so amended or supplemented remain in full force and effect.
- B. The terms used in these Supplementary Conditions that are defined in the General Conditions have the meanings assigned to them in the General Conditions.

**1.2. MODIFICATIONS TO GENERAL CONDITIONS****A. ARTICLE 2: OWNER****1. Add new Paragraph 2.6 Waivers**

The County's waiver of any breach or failure to enforce any of the terms, conditions and specifications of the invitation to bidder, shall not in any way affect, limit or waive the County's right thereafter to enforce and compel strict compliance with every term, condition and specification thereof.

**B. ARTICLE 3: CONTRACTOR****1. 3.4 Labor and Materials****a. ADD the following to Paragraph 3.4.1:**

3.4.1 "...Should the Contract Documents require work to be performed after regular working hours or should the Contractor elect to perform work after regular working hours, the additional cost of such work shall be borne by the Contractor"

**b. Add the following Subparagraph 3.4.2.1 to Paragraph 3.4.2:**

"3.4.2.1 After Contract has been executed, Owner and Architect will consider formal requests for the substitution of products in place of those specified only under the conditions set forth in the General Requirements (Division 01 of the Specifications).

By making requests for substitutions based on Subparagraph 3.4.3 above, Contractor:

- .1 represents that Contractor has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified;
- .2 represents that Contractor will provide the same warranty for the substitution that Contractor would for that specified;
- .3 certifies that the cost data presented is complete and includes all related costs under this Contract except Architect's redesign costs, and waives all claims for additional costs related to the substitution which subsequently become apparent; and
- .4 will coordinate the installation of the accepted substitute, making such changes as may be required for the Work to be complete in all respects."

**2. 3.5 Warranty****a. Add the following Paragraph 3.5.3:**

"3.5.3 Contractor makes the following warranties to the County that he will, at the date of delivery, have good title to any and all goods supplied in the project and said goods will be free and clear of any and all liens and encumbrances.

- .1 Contractor shall, at his sole cost and expense, promptly repair or replace to the County's satisfaction all damaged or defective goods/services received for a period of



one (1) year from date of delivery or date of installation, unless the Project Bid Specifications require a greater warranty period."

3. 3.6 Taxes

- a. Add the following Paragraph 3.6.1:

"3.6.1 Owner is a tax exempt organization and Contractor will be permitted to use Owner's tax exempt number for this project for all materials physically incorporated into the project, that become property of Owner.

Items which do not become property of Owner and are not incorporated into real estate are taxable. (Example: fuel oil for machinery, construction stakes, temporary fencing, etc.)

Refer any questions about taxability of specific items to the Illinois Department of Revenue."

4. 3.10 Contractor's Construction Schedules

- a. Change Subparagraph 3.10.1 to read as follows:

"3.10.1 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. The schedule shall not exceed time limits current under the Contract Documents, shall be revised only with the Owner's approval as required by conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work."

5. 3.12 Shop Drawings, Product Data and Samples

- a. Add Paragraph 3.12.11 to Section 3.12:

3.12.11 Architect's review of Contractor's submittals will be limited to examination of an initial submittal and two (2) resubmittals. Owner is entitled to obtain reimbursement from Contractor for amounts paid to Architect for evaluation of additional resubmittals."

6. 3.13 Use of Site

- a. Add the following Paragraph 3.13.1:

3.13.1 The Contractor acknowledges that portions of the property on which the Project and Work are located will be occupied and in use by the Owner during the execution of the Work. The Contractor shall perform and coordinate his work in such a manner that the portions of the property occupied and in use will not be encumbered or the use interfered with or interrupted.

7. Add the following paragraph 3.19:

3.19 Non-Collusion Affidavit State of Illinois

3.19.1 The Contractor is required to execute the Non-Collusion Affidavit included in this package as Bid Form Attachment A. The executed Non-Collusion Affidavit is to be included with the Contractor's bid. Failure to execute and include the Non-Collusion Affidavit with the Contractor's bid may deem the Contractor's proposal non-responsive.

8. Add the following paragraph 3.20:

3.20 Certificate of Eligibility to Enter into Public Contracts

3.20.1 The Contractor is required to execute a Certificate of Eligibility to Enter into Public Contracts included in this package as Bid Form Attachment B. The executed Certificate is to be included with the Contractor's bid. Failure to execute and include the Certificate with the Contractor's bid may deem the Contractor's proposal non-responsive.

9. Add the following paragraph 3.21:

3.21: Sexual Harassment Policy

3.21.1: The Contractor is required to execute the Certificate of Sexual Harassment Policy included in this package as Bid Form Attachment C. The executed Certificate is to be included with the Contractor's bid. Failure to execute and include the Certificate with the Contractor's bid may deem the Contractor's proposal non-responsive.

10. Add the following paragraph 3.22:

3.22: Drug Free Workplace Certification

3.22.1: The Contractor is required to execute the Drug Free Workplace Certification included in this package as Bid Form Attachment D. The executed Certificate is to be included with the Contractor's bid. Failure to execute and include the Certificate with the Contractor's bid may deem the Contractor's proposal non-responsive.

11. Add the following paragraph 3.23:

3.23: Certification of Prevailing Wage Rates

3.23.1 The Contractor is required to execute the Prevailing Wage Rate Certification included in this package as Bid Form Attachment E. The executed Certificate is to be included with the Contractor's bid. Failure to execute and include the Certificate with the Contractor's bid may deem the Contractor's proposal non-responsive.

C. ARTICLE 7: CHANGES IN THE WORK

1. 7.1 General

a. Add the following Paragraph 7.1.4 to Section 7.1:

"7.1.4 The Contractor is entitled to add a fixed percentage fee to the actual cost involved for changes in the Work. The combined overhead and profit included in the total cost to Owner for a change in the Work shall be based on the following schedule:

- .1 For Contractor, for Work performed by Contractor's own forces, 10 percent
- .2 For Contractor, for Work performed by Contractor's Subcontractors, 8 percent of the amount due the Subcontractors.
- .3 For each Subcontractor involved, for Work performed by that Subcontractor's own forces, 8 percent of the cost.
- .4 For each Subcontractor involved, for Work performed by the Subcontractor's Sub-subcontractors, 8 percent of the amount due the Sub-subcontractor.
- .5 Cost to which overhead and profit is to be applied shall be determined in accordance with Section 7.3.4.
- .6 In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, materials and Subcontracts. Labor and materials shall be itemized in the manner prescribed above. Where major cost items are Subcontracts, they shall be itemized also. In no case will a change involving over \$200.00 be approved without such itemization.

D. ARTICLE 8: TIME

1. 8.1 Definitions

a. Delete Paragraph 8.1.4 and substitute the following:

"8.1.4 The term "day" as used in the Contract Documents shall mean working day, excluding weekends and legal holidays."

2. 8.2 Progress and Completion

a. Add the following Subparagraph 8.2.4:

"8.2.4 Owner reserves the right to require all or part of any remaining work not completed by date designated for Substantial Completion to be performed after normal business hours or on other than normal working days at no "extra" or additional cost to Owner and with no extension of time."

E. ARTICLE 9: PAYMENTS AND COMPLETION

1. 9.3 Applications for Payment

a. Add the following sentence to Paragraph 9.3.1:

"9.3.1 The form of Application for Payment, duly notarized, shall be a current authorized edition of AIA G702-1992, Application and Certificate for Payment, supported by a current authorized edition of AIA G703-1992, Continuation Sheet."

b. Add the following Subparagraph 9.3.1.3 and 9.3.1.4 to Paragraph 9.3.1:

9.3.1.3 Until Substantial Completion, Owner shall pay 90 percent of the amount due the Contractor on account of progress payments.

9.3.1.4 The first payment application shall be accompanied by Contractor's partial waiver for the full amount of the payment. Each subsequent monthly payment application shall be accompanied by the Contractor's partial waiver and the partial waivers of the Subcontractors and Suppliers who were included in the immediately preceding payment application to the extent of that payment. Application for final payment shall be accompanied by final waivers of lien from the Contractor, Subcontractor and Suppliers who have not previously furnished such final waivers.

2. 9.8 Substantial Completion

a. Add the following Subparagraph 9.8.3.1 to Paragraph 9.8.3:

9.8.3.1 Architect will perform no more than one (1) inspection per phase to determine whether the Work or a designated portion thereof has attained Substantial Completion in accordance with the Contract Documents. Owner is entitled to reimbursement from the Contractor for amounts paid to Architect for any additional inspections."

3. 9.10 Final Completion and Final Payment

a. Add the following Subparagraph 9.10.1.1 to Paragraph 9.10.1:

9.10.1.1 Architect will perform no more than one (1) inspections to determine whether the Work or a designated portion thereof has attained Final Completion in accordance with the Contract Documents. Owner is entitled to reimbursement from the Contractor for amounts paid to Architect for any additional inspections."

F. ARTICLE 10: PROTECTION OF PERSONS AND PROPERTY

1. 10.1 Safety Precautions and Programs

a. Add the following Paragraphs 10.1.1, 10.1.2 and 10.1.3 to Section 10.1:

10.1.1 The Contractor shall not use asbestos, PCB or any material which contains asbestos or PCB in his work. If requested by Architect, Contractor shall submit a signed statement insuring that no asbestos or PCB has been used on this project."

10.1.2 If reasonable precautions will be inadequate to prevent foreseeable bodily injury of death to persons resulting from a material or substance encountered on the

site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner and Architect in writing. The Owner, Contractor and Architect shall then proceed in the same manner described in Subparagraph 10.1.3.

10.1.3 The Owner shall be responsible for obtaining the services of a licensed laboratory to verify a presence of the material or substance reported by the Contractor and, in the event such material or substance reported by and, in the event such material or substance is found to be present, to verify that it has been rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor and the Architect the names and qualifications of persons or entities who are to perform the task of removal or safe containment of such material or substance. The Contractor and the Architect will promptly reply to the Owner in writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If Either the Contractor or the Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor and the Architect have no reasonable objection.

G. ARTICLE 11: INSURANCE AND BONDS

1. 11.1 Contractor's Liability Insurance

a. Add the following Subparagraphs 11.1.2.1 through 11.1.2.6.2 to Paragraph 11.1.2:

"11.1.2.1 The limits for Worker's Compensation and Employers' Liability insurance shall meet statutory limits mandated by State and Federal Laws. If (1) limits in excess of those required by statute are to be provided, (2) the employer is not statutorily bound to obtain such insurance coverage, or (3) additional coverages are required, additional coverages and limits for such insurance shall be as follows:

11.1.2.2 The limits for Commercial General Liability insurance including coverage for Premises-Operations, Independent Contractors' Protective, Products-Completed Operations, Contractual Liability, Personal Injury and Broad Form Property Damage (including coverage for Explosion, Collapse and Underground hazards) shall be as follows:

\$1,000,000 Each Occurrence

\$2,000,000 General Aggregate

\$1,000,000 Personal and Advertising Injury

\$2,000,000 Products-Completed Operations Aggregate

.1 The policy shall be endorsed to have the General Aggregate apply to this Project only.

.2 The Contractual Liability insurance shall include coverage sufficient to meet the obligations in O/C A201™-2007 under Section 3.18.

.3 Products and Completed Operations insurance shall be maintained for a minimum period of at least four (4) year(s) after the expiration of the period for correction of Work.

11.1.2.3 Automobile Liability insurance (owned, non-owned and hired vehicles) for bodily injury and property damage:

\$1,000,000 Each Accident

11.1.2.4 Umbrella or Excess Liability coverage: \$4,000,000.

b. 11.1.2.5 Contractor shall at Contractor's own expense provide insurance coverage for materials stored off the site after written approval of Owner at the value established in the approval, and also for portions of the Work in transit until such materials are permanently attached to the Work. "

11.1.2.6 Contractor shall furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder. Bonds may be obtained through Contractor's usual source and the cost thereof shall be included in the Contract Sum. The amount of each bond shall be equal to 100 percent of the Contract Sum.

.1 Contractor shall deliver the required bonds to Owner not later than three days following the date the Agreement is entered into, or if the Work is to be commenced prior thereto in response to a letter of intent, Contractor shall, prior to the commencement of the Work, submit evidence satisfactory to Owner that such bonds will be furnished.

.2 Contractor shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney."

- c. Add the following sentence to Paragraph 11.1.3:

"11.1.3 ...If this insurance is written on a Commercial General Liability policy form, the certificates shall be ACORD form 25-S, completed and supplemented in accordance with AIA G715™-1991, Instruction Sheet and Supplemental Attachment for ACORD Certificate of Insurance 25-S."

2. 11.2 Owner's Insurance

- a. Add the following Subparagraph 11.2.1.1 to Paragraph 11.2.1:

11.2.1.1 The insurance required by Section 11.2 is not intended to cover machinery, tools or equipment owned or rented by Contractor that are utilized in the performance of the Work but not incorporated into the permanent improvements. Contractor shall, at Contractor's own expense, provide insurance coverage for owned or rented machinery, tools or equipment, which shall be subject to the provisions of Section 11.3."

H. ARTICLE 13: MISCELLANEOUS PROVISIONS

1. 13.5 Interest

- a. Delete Paragraph 13.5.  
b. Add the following Paragraphs 13.5 through 13.7 to Article 13:

13.5 Wage Rates

13.5.1 The Contractor shall comply in all respects with "An Act Regulating Wages of Laborers and Mechanics and other Workmen Employed under Contracts for Public Works" enacted by the 62nd General Assembly, approved on June 26, 1941, as amended and codified as the Illinois Prevailing Wage Act, 820 ILCS 1130/1 et seq, and use the Wage Determination as determined by the Illinois Department of Labor, Conciliation, and Mediation Division current at this project's bid opening date. These wages will remain in effect until superseded by a new determination.

13.5.1.1 The prevailing rates of wages are indicated in the schedule following this section and at the State of Illinois' website = <http://www.state.il.us/agency/idol/rates/rates.HTM><http://www.state.il.us/agency/idol/rates/rates.HTM>.

13.5.1.2 In case it shall become necessary for the Contractor or any Subcontractor to employ in the Work under this Contract any person in a trade or occupation (except executive, administrative or supervisory workers) for which no wage rates are specified, except in classes of work for which the prevailing rate of wages has been found by the Owner not to be ascertainable, the Contractor shall immediately notify the Owner which will attempt to ascertain and to furnish the Contractor with the general prevailing rate for such trade or occupation. The rate thus furnished shall be applicable for such trade or occupation

from the time of initial employment of persons affected and during the continuance of such employment.

13.5.1.3 Prospective Bidders should make an investigation of existing labor conditions and any negotiated labor agreements which may exist or are contemplated at this time.

#### 13.6 Equal Opportunity

13.6.1 The Contractor shall maintain policies of employment as follows:

13.6.1.1 The contractor and the Contractor's Subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment notices setting forth the policies of non-discrimination.

13.6.1.2 The Contractor and the Contractor's Subcontractors shall, in all solicitations or advertisements for employees placed by them or on their behalf, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex or national origin.

#### 13.7 Smoking, Musical Devices, Language, Dress Code, Noise and Vibration, Employee Background Checks

13.7.1 Owner has certain policies regarding the following:

- .1 Smoking - The Owner prohibits smoking in building and on County property.
- .2 Musical Devices - The Owner has restricted the use of radios, tape players, compact disc players, etc. to the extent that sound generated is not audible in adjacent occupied areas while grounds are in use.
- .3 Dress Code - The Contractor and all employees and subcontractors shall keep shirts on at all times while grounds are in use.
- .4 Noise and Vibration Control - The Contractor shall notify Owner 48 hours in advance of construction activities which might result in excessive noise and/or vibration into the existing grounds while they are in use. Coordinate scheduling of such activities with the Owner to minimize impact on Owner's activities.

#### I. ARTICLE 15: CLAIMS AND DISPUTES

##### 1. 15.1.6 Claims for Additional Time

- a. Add the following Subparagraphs 15.1.6.3 and 15.1.6.4 to Paragraph 15.1.6:

15.1.6.3 Claims for increase in the Contract Time shall set forth in detail the circumstances that form the basis for the Claim, the date upon which each cause of delay began to affect the progress of the Work, the date upon which each cause of delay ceased to affect the progress of the Work and the number of days' increase in the Contract Time claimed as a consequence of each such cause of delay. Contractor shall provide such supporting documentation as Owner may require including, where appropriate, a revised construction schedule indicating all the activities affected by the circumstances forming the basis of the Claim.

15.1.6.4 Contractor shall not be entitled to a separate increase in the Contract Time for each one of the number of causes of delay which may have concurrent or interrelated effects on the progress of the Work, or for concurrent delays due to the fault of Contractor."

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

**END OF SECTION**

**SECTION 01 1000 - SUMMARY****PART 1 GENERAL****1.1. PROJECT**

- A. Project Name: 0211957.00 Livingston County Drive Thru Facility
- B. Owner's Name: Livingston County.
- C. Architect's Name: Farnsworth Group.
- D. The Project consists of the construction of a new Drive Thru Vaccination Building and limited associated site development.
  - 1. New building is single story, slab on grade of 3,248 building gross square feet. Space program includes:
    - a. (2) drive through bays.
    - b. Maintenance room.
    - c. Storage room..
    - d. Entry alcove.
  - 2. The project includes an alternate for a pedestrian covered walkway as shown on the drawings.
  - 3. Site work includes but is not limited to new parking lot and driveway paving, utility work and stormwater management.
    - a. The new building is sited so the existing Health Department building can remain operational during construction.
    - b. Site work will be performed in two work sequences to allow the Owner to occupy and use the new building prior to removal of their existing building. Site work will be completed following the removal of the existing building by others.
  - 4. This work shall include all labor, supervision, materials, transportation and services necessary and required to perform the Drive Thru Building project as set forth in the Contract Documents.

**1.2. CONTRACT DESCRIPTION**

- A. Contract Type: A single prime contract based on a Stipulated Price as described in Document 00 5200 - Agreement Form.

**1.3. WORK BY OWNER**

- A. Existing Building Demolition: Owner will contract for demolition of the existing original Health Department structure on site as a separate project to be performed prior to this project's construction.
- B. Items noted NIC (Not in Contract) will be supplied and installed by Owner before Substantial Completion.

**1.4. OWNER OCCUPANCY**

- A. Owner will utilize the existing Health and Education Building adjacent to this project's site throughout construction.
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.

**1.5. CONTRACTOR USE OF SITE AND PREMISES**

- A. Construction Operations: Limited to areas noted on Drawings.
- B. Arrange use of site and premises to allow:
  - 1. Owner occupancy.



2. Use of site by the public.
    - 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.
  - C. Provide access to and from site as required by law and by Owner:
    1. Emergency building exits from adjacent building during construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
    2. Do not obstruct roadways, sidewalks, or other public ways without permit.
      - a. Do not block public streets at any time.
  - D. Utility Outages and Shutdown:
    1. Prevent accidental disruption of utility services to other facilities.
  - E. Protect existing site improvements and public access ways to remain. If pavements, curbs, , and other site improvements to remain are damaged or defaced during construction operations, repair and restore all to condition at start of construction or better.
  - F. Keep paved driveways on Owner's property, full project site and public streets, alleys and walkways clear of earth and debris spillage from trucking and traffic involved in construction operations.
- 1.6. 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.
    2. On-Site Work Hours: Limit work in the existing building to normal business working hours of 7 a.m. to 5 p.m., Monday through Friday, except as otherwise indicated.
      - a. Weekend Hours: same as workday hours.
      - b. Early Morning Hours: Comply with regulations from authorities having jurisdiction for restrictions on noisy work.
    3. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
      - a. Notify Architect and Owner not less than two business days in advance of proposed utility interruptions.
      - b. Obtain Owner's written permission before proceeding with utility interruptions.
    4. Noise, Vibration, Dust and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner.
      - a. Notify Architect and Owner not less than two days in advance of proposed disruptive operations.
      - b. Obtain Owner's Liaison's written permission before proceeding with disruptive operations.
      - c. Comply with applicable noise control laws, ordinances, and regulations. Where field sound measurements exceed allowable limits cease operating such equipment and repair or replace it with equipment that complies with requirements.
      - d. Dust: Take precautions necessary to keep Work under this contract and adjoining properties free from dust. Perform dust control in compliance with authorities having jurisdiction. Follow procedures and protocol to prevent pollution of land, air, and water.

5. Nonsmoking Site and Building: Smoking or use of any tobacco is not permitted within the building or on the site.
  6. Controlled Substances: Use controlled substances on the Project site are not permitted. Contractor is responsible for maintaining a drug-free work place.
  7. Employee Identification: Provide identification tags for Contractor personnel working on the Project site. Require personnel to utilize identification tags at all times.
- B. Construction and storage trailers shall be located on the site and not on the public streets.
- 1.7. 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. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. 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.
  3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

**END OF SECTION**

**SECTION 01 2000 - PRICE AND PAYMENT PROCEDURES****PART 1 GENERAL****1.1. SECTION INCLUDES**

- A. Procedures for preparation and submittal of applications for progress payments.
- B. Documentation of changes in Contract Sum and Contract Time.
- C. Change procedures.
- D. Correlation of Contractor submittals based on changes.
- E. Procedures for preparation and submittal of application for final payment.

**1.2. RELATED REQUIREMENTS**

- A. Section 00 5000 - Contracting Forms and Supplements: Forms to be used.
- B. Section 00 5200 - Agreement Form: Contract Sum, retainages, payment period, monetary values of unit prices.
- C. Section 00 7200 - General Conditions: Additional requirements for progress payments, final payment, changes in the Work.
- D. Section 00 7300 - Supplementary Conditions: Percentage allowances for Contractor's overhead and profit.

**1.3. SCHEDULE OF VALUES**

- A. Use Schedule of Values Form: AIA G703, edition stipulated in the Agreement.
- B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect for approval.
- C. Forms filled out by hand will not be accepted.
- D. Submit Schedule of Values in electronic format within 15 days after date of Owner-Contractor Agreement.
- E. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the specification section. Identify site mobilization.
- F. Include separately from each line item, a direct proportional amount of Contractor's overhead and profit.
- G. Revise schedule to list approved Change Orders, with each Application For Payment.

**1.4. APPLICATIONS FOR PROGRESS PAYMENTS**

- A. Payment Period: Submit at intervals stipulated in the Agreement.
- B. Use Form AIA G702 and Form AIA G703, edition stipulated in the Agreement.
- C. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect for approval.
- D. Forms filled out by hand will not be accepted.
- E. Execute certification by signature of authorized officer.
- F. Submit one electronic copy of each Application for Payment until Final application. Submit hard-copy of Final Application for Payment.
- G. Include the following with the application:
  - 1. Transmittal letter as specified for submittals in Section 01 3000.
  - 2. Partial release of liens from major subcontractors and vendors.
  - 3. Affidavits attesting to off-site stored products.

- H. When Architect requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

#### 1.5. MODIFICATION PROCEDURES

- A. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Architect will issue instructions directly to Contractor.
- B. For other required changes, Architect will issue a document signed by Owner instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
  - 1. The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
  - 2. Promptly execute the change.
- C. For changes for which advance pricing is desired, Architect will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within 14 days.
- D. Contractor may propose a change by submitting a request for change to Architect, describing the proposed change and its full effect on the work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation. Document any requested substitutions in accordance with Section 01 6000.
- E. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
  - 1. For change requested by Architect for work falling under a fixed price contract, the amount will be based on Contractor's price quotation.
  - 2. For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by Architect.
  - 3. For pre-determined unit prices and quantities, the amount will be based on the fixed unit prices.
  - 4. For change ordered by Architect without a quotation from Contractor, the amount will be determined by Architect based on the Contractor's substantiation of costs as specified for Time and Material work.
- F. Substantiation of Costs: Provide full information required for evaluation.
  - 1. Provide the following data:
    - a. Quantities of products, labor, and equipment.
    - b. Taxes, insurance, and bonds.
    - c. Overhead and profit.
    - d. Justification for any change in Contract Time.
    - e. Credit for deletions from Contract, similarly documented.
  - 2. Support each claim for additional costs with additional information:
    - a. Origin and date of claim.
    - b. Dates and times work was performed, and by whom.
    - c. Time records and wage rates paid.
    - d. Invoices and receipts for products, equipment, and subcontracts, similarly documented.
  - 3. For Time and Material work, submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract.

- G. Execution of Change Orders: Architect will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
  - H. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
  - I. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
  - J. Promptly enter changes in Project Record Documents.
- 1.6. APPLICATION FOR FINAL PAYMENT
- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
  - B. Application for Final Payment will not be considered until the following have been accomplished:
    - 1. All closeout procedures specified in Section 01 7000.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

**END OF SECTION**

**SECTION 01 2100 - ALLOWANCES**

**PART 1 GENERAL**

**1.1. SECTION INCLUDES**

- A. Contingency allowance.

**1.2. CONTINGENCY ALLOWANCE**

- A. Contingency allowance draws shall require prior authorization by the Owner.
- B. Contractor's costs for products, delivery, installation, labor, insurance, payroll, taxes, bonding, equipment rental, overhead and profit will be included in Change Orders authorizing expenditure of funds from this Contingency Allowance.
- C. Funds will be drawn from the Contingency Allowance only by Change Order.
- D. At closeout of Contract, funds remaining in Contingency Allowance will be credited to Owner by Change Order.

**1.3. ALLOWANCES SCHEDULE**

- A. Contingency Allowance: Include the stipulated sum/price of \$25,000.00 for use upon Owner's instructions.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 01 2300 - ALTERNATES**

**PART 1 GENERAL**

**1.1. SECTION INCLUDES**

- A. Description of Alternates.
- B. Description of acceptance of Alternates.

**1.2. ACCEPTANCE OF Alternates**

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option.  
Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

**1.3. SCHEDULE OF Alternates**

- A. Alternate No. 1 - Covered Walkway:
  - 1. Base Bid: No covered walkway.
  - 2. Alternate: Pedestrian covered walkway as shown on the Drawings.

**PART 2 PRODUCTS - NOT USE**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 01 2500 - SUBSTITUTION PROCEDURES****PART 1 GENERAL****1.1. SECTION INCLUDES**

- A. Procedural requirements for proposed substitutions.

**1.2. RELATED REQUIREMENTS**

- A. Section 00 2113 - Instructions to Bidders: Restrictions on timing of substitution requests.
- B. Section 00 4325 - Substitution Request Form - During Procurement: Required form for substitution requests made prior to award of contract (During procurement).
- C. Section 01 2300 - Alternates, for product alternatives affecting this section.
- D. Section 01 3000 - Administrative Requirements: Submittal procedures, coordination.
- E. Section 01 6000 - Product Requirements: Fundamental product requirements, product options, delivery, storage, and handling.

**1.3. DEFINITIONS**

- A. Substitutions: Changes from Contract Documents requirements proposed by Contractor to materials, products, assemblies, and equipment.
  - 1. Substitutions for Cause: Proposed due to changed Project circumstances beyond Contractor's control.
    - a. Unavailability.
    - b. Regulatory changes.
  - 2. Substitutions for Convenience: Proposed due to possibility of offering substantial advantage to the Project.
    - a. Substitution requests offering advantages solely to the Contractor will not be considered.

**1.4. REFERENCE STANDARDS**

- A. CSI/CSC Form 1.5C - Substitution Request (During the Bidding/Negotiating Stage); Current Edition.
- B. CSI/CSC Form 13.1A - Substitution Request (After the Bidding/Negotiating Phase); Current Edition.

**PART 2 PRODUCTS - NOT USED****PART 3 EXECUTION****3.1. GENERAL REQUIREMENTS**

- A. A Substitution Request for products, assemblies, materials, and equipment constitutes a representation that the submitter:
  - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product, equipment, assembly, or system.
  - 2. Agrees to provide the same warranty for the substitution as for the specified product.
  - 3. Agrees to coordinate installation and make changes to other work that may be required for the work to be complete, with no additional cost to Owner.
  - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
  - 5. Agrees to reimburse Owner and Architect for review or redesign services associated with re-approval by authorities.
- B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents. Burden of proof is on proposer.
  - 1. Note explicitly any non-compliant characteristics.



- C. Content: Include information necessary for tracking the status of each Substitution Request, and information necessary to provide an actionable response.
    - 1. Forms indicated in the Project Manual are adequate for this purpose, and must be used.
  - D. Limit each request to a single proposed substitution item.
    - 1. Submit an electronic document, combining the request form with supporting data into single document.
- 3.2. SUBSTITUTION PROCEDURES DURING PROCUREMENT
- A. Instructions to Bidders specifies time restrictions for submitting requests for substitutions during the bidding period, and the documents required.
  - B. Submittal Form (before award of contract):
    - 1. Submit substitution requests by completing CSI/CSC Form 1.5C - Substitution Request (During the Bidding/Negotiating Stage). See this form for additional information and instructions. Use only this form; other forms of submission are unacceptable.
  - C. Owner will consider requests for substitutions only if submitted at least 5 days prior to the date for receipt of bids.
- 3.3. SUBSTITUTION PROCEDURES DURING CONSTRUCTION
- A. Submittal Form (after award of contract):
    - 1. Submit substitution requests by completing CSI/CSC Form 13.1A - Substitution Request. See this form for additional information and instructions. Use only this form; other forms of submission are unacceptable.
  - B. Submit request for Substitution for Cause within 14 days of discovery of need for substitution, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.
  - C. Submit request for Substitution for Convenience immediately upon discovery of its potential advantage to the project, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.
    - 1. In addition to meeting general documentation requirements, document how the requested substitution benefits the Owner through cost savings, time savings, greater energy conservation, or in other specific ways.
    - 2. Document means of coordinating of substitution item with other portions of the work, including work by affected subcontractors.
    - 3. Bear the costs engendered by proposed substitution of:
      - a. Owner's compensation to the Architect for any required redesign, time spent processing and evaluating the request.
      - b. Other construction by Owner.
      - c. Other unanticipated project considerations.
  - D. Substitutions will not be considered under one or more of the following circumstances:
    - 1. When they are indicated or implied on shop drawing or product data submittals, without having received prior approval.
    - 2. Without a separate written request.
    - 3. When acceptance will require revisions to Contract Documents.
- 3.4. RESOLUTION
- A. Architect may request additional information and documentation prior to rendering a decision. Provide this data in an expeditious manner.

B. Architect will notify Contractor in writing of decision to accept or reject request.

1. Architect's decision following review of proposed substitution will be noted on the submitted form.

3.5. ACCEPTANCE

A. Accepted substitutions change the work of the Project. They will be documented and incorporated into work of the project by Change Order, Construction Change Directive, Architectural Supplementary Instructions, or similar instruments provided for in the Conditions of the Contract.

3.6. CLOSEOUT ACTIVITIES

A. See Section 01 7800 - Closeout Submittals, for closeout submittals.

B. Include completed Substitution Request Forms as part of the Project record. Include both approved and rejected Requests.

**END OF SECTION**

**SECTION 01 3000 - ADMINISTRATIVE REQUIREMENTS****PART 1 GENERAL****1.1. SECTION INCLUDES**

- A. General administrative requirements.
- B. Electronic document submittal service.
- C. Preconstruction meeting.
- D. Site mobilization meeting.
- E. Progress meetings.
- F. Construction progress schedule.
- G. Contractor's daily reports.
- H. Progress photographs.
- I. Submittals for review, information, and project closeout.
- J. Number of copies of submittals.
- K. Requests for Information (RFI) procedures.
- L. Submittal procedures.

**1.2. REFERENCE STANDARDS**

- A. AIA G716 - Request for Information; 2004.
- B. AIA G810 - Transmittal Letter; 2001.

**1.3. GENERAL ADMINISTRATIVE REQUIREMENTS**

- A. Comply with requirements of Section 01 7000 - Execution and Closeout Requirements for coordination of execution of administrative tasks with timing of construction activities.
- B. Make the following types of submittals to Architect:
  - 1. Requests for Information (RFI).
  - 2. Requests for substitution.
  - 3. Shop drawings, product data, and samples.
  - 4. Test and inspection reports.
  - 5. Design data.
  - 6. Manufacturer's instructions and field reports.
  - 7. Applications for payment and change order requests.
  - 8. Progress schedules.
  - 9. Coordination drawings.
  - 10. Correction Punch List and Final Correction Punch List for Substantial Completion.
  - 11. Closeout submittals.

**PART 2 PRODUCTS - NOT USED****PART 3 EXECUTION****3.1. ELECTRONIC DOCUMENT SUBMITTAL SERVICE**

- A. All documents transmitted for purposes of administration of the contract are to be in electronic (PDF, MS Word, or MS Excel) format, as appropriate to the document, and transmitted via an Internet-based submittal service that receives, logs and stores documents, provides electronic stamping and signatures, and notifies addressees via email.

1. Besides submittals for review, information, and closeout, this procedure applies to Requests for Information (RFIs), progress documentation, contract modification documents (e.g. supplementary instructions, change proposals, change orders), applications for payment, field reports and meeting minutes, Contractor's correction punchlist, and any other document any participant wishes to make part of the project record.
  2. Contractor and Architect are required to use this service.
  3. It is Contractor's responsibility to submit documents in allowable format.
  4. Subcontractors, suppliers, and Architect's consultants will be permitted to use the service at no extra charge.
  5. Users of the service need an email address, internet access, and PDF review software that includes ability to mark up and apply electronic stamps (such as Adobe Acrobat, [www.adobe.com](http://www.adobe.com), or Bluebeam PDF Revu, [www.bluebeam.com](http://www.bluebeam.com)), unless such software capability is provided by the service provider.
  6. Paper document transmittals will not be reviewed; emailed electronic documents will not be reviewed.
  7. All other specified submittal and document transmission procedures apply, except that electronic document requirements do not apply to samples or color selection charts.
- B. Submittal Service: The selected service is:
1. Newforma ConstructEx: [www.newforma.com/products/constructex/#sle](http://www.newforma.com/products/constructex/#sle).
- C. Project Closeout: Architect will determine when to terminate the service for the project and is responsible for obtaining archive copies of files for Owner.
- 3.2. PRECONSTRUCTION MEETING
- A. Schedule meeting after Notice of Award.
- B. Attendance Required:
1. Owner.
  2. Architect.
  3. Contractor.
- C. Agenda:
1. Execution of Owner-Contractor Agreement.
  2. Submission of executed bonds and insurance certificates.
  3. Distribution of Contract Documents.
  4. Submission of list of subcontractors, list of products, schedule of values, and progress schedule.
  5. Submission of initial Submittal schedule.
  6. Designation of personnel representing the parties to Contract, and Architect.
  7. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
  8. Scheduling.
  9. Materials staging.
  10. Background checks.
- D. Record minutes and distribute copies within two days after meeting to participants, with electronic copies to Architect, Owner, participants, and those affected by decisions made.

### 3.3. SITE MOBILIZATION MEETING

- A. Schedule meeting at the Project site prior to Contractor occupancy.
- B. Attendance Required:
  - 1. Contractor.
  - 2. Owner.
  - 3. Architect.
  - 4. Contractor's superintendent.
  - 5. Major subcontractors.
- C. Agenda:
  - 1. Use of premises by Owner and Contractor.
  - 2. Owner's requirements.
  - 3. Construction facilities and controls provided by Owner.
  - 4. Temporary utilities provided by Owner.
  - 5. Survey and building layout.
  - 6. Security and housekeeping procedures.
  - 7. Schedules.
  - 8. Application for payment procedures.
  - 9. Procedures for maintaining record documents.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

### 3.4. PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the work at maximum bi-monthly intervals.
- B. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Attendance Required:
  - 1. Contractor.
  - 2. Owner.
  - 3. Architect.
  - 4. Contractor's superintendent.
  - 5. Major subcontractors.
- D. Agenda:
  - 1. Review minutes of previous meetings.
  - 2. Review of work progress.
  - 3. Field observations, problems, and decisions.
  - 4. Identification of problems that impede, or will impede, planned progress.
  - 5. Review of submittals schedule and status of submittals.
  - 6. Review of RFIs log and status of responses.
  - 7. Maintenance of progress schedule.
  - 8. Corrective measures to regain projected schedules.
  - 9. Planned progress during succeeding work period.

10. Coordination of projected progress.
  11. Maintenance of quality and work standards.
  12. Effect of proposed changes on progress schedule and coordination.
  13. Other business relating to work.
- E. Record minutes and distribute copies within two days after meeting to participants, with electronic copies to Architect, Owner, participants, and those affected by decisions made.
- 3.5. CONSTRUCTION PROGRESS SCHEDULE
- A. Within 10 days after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of work, with a general outline for remainder of work.
  - B. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
  - C. Within 5 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
    1. Include written certification that major contractors have reviewed and accepted proposed schedule.
  - D. Submit updated schedule with each Application for Payment.
- 3.6. DAILY CONSTRUCTION REPORTS
- A. Include only factual information. Do not include personal remarks or opinions regarding operations and/or personnel.
  - B. Prepare a daily construction report recording the following information concerning events at Project site and project progress:
    1. Date.
    2. High and low temperatures, and general weather conditions.
    3. List of subcontractors at Project site.
    4. Safety, environmental, or industrial relations incidents.
    5. Meetings and significant decisions.
    6. Stoppages, delays, shortages, and losses. Include comparison between scheduled work activities (in Contractor's most recently updated and published schedule) and actual activities. Explain differences, if any. Note days or periods when no work was in progress and explain the reasons why.
    7. Testing and/or inspections performed.
    8. List of verbal instruction given by Owner and/or Architect.
    9. Signature of Contractor's authorized representative.
- 3.7. PROGRESS PHOTOGRAPHS
- A. Submit photographs with each application for payment, taken not more than 3 days prior to submission of application for payment.
  - B. Photography Type: Digital; electronic files.
  - C. Provide photographs of site and construction throughout progress of work produced by an experienced photographer, acceptable to Architect.
- 3.8. REQUESTS FOR INTERPRETATION (RFI)
- A. Definition: A request seeking one of the following:
    1. An interpretation, amplification, or clarification of some requirement of Contract Documents arising from inability to determine from them the exact material, process, or system to be

installed; or when the elements of construction are required to occupy the same space (interference); or when an item of work is described differently at more than one place in Contract Documents.

2. A resolution to an issue which has arisen due to field conditions and affects design intent.
- B. Whenever possible, request clarifications at the next appropriate project progress meeting, with response entered into meeting minutes, rendering unnecessary the issuance of a formal RFI.
- C. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.
  1. Prepare a separate RFI for each specific item.
    - a. Review, coordinate, and comment on requests originating with subcontractors and/or materials suppliers.
    - b. Do not forward requests which solely require internal coordination between subcontractors.
  2. Prepare using software provided by the Electronic Document Submittal Service.
  3. Combine RFI and its attachments into a single electronic file. PDF format is preferred.
- D. Reason for the RFI: Prior to initiation of an RFI, carefully study all Contract Documents to confirm that information sufficient for their interpretation is definitely not included.
  1. Include in each request Contractor's signature attesting to good faith effort to determine from Contract Documents information requiring interpretation.
  2. Unacceptable Uses for RFIs: Do not use RFIs to request the following:
    - a. Approval of submittals (use procedures specified elsewhere in this section).
    - b. Approval of substitutions (see Section - 01 6000 - Product Requirements)
    - c. Changes that entail change in Contract Time and Contract Sum (comply with provisions of the Conditions of the Contract).
  3. Improper RFIs: Requests not prepared in compliance with requirements of this section, and/or missing key information required to render an actionable response. They will be returned without a response, with an explanatory notation.
  4. Frivolous RFIs: Requests regarding information that is clearly indicated on, or reasonably inferable from, Contract Documents, with no additional input required to clarify the question. They will be returned without a response, with an explanatory notation.
    - a. The Owner reserves the right to assess the Contractor for the costs (on time-and-materials basis) incurred by the Architect, and any of its consultants, due to processing of such RFIs.
- E. Content: Include identifiers necessary for tracking the status of each RFI, and information necessary to provide an actionable response.
  1. Official Project name and number, and any additional required identifiers established in Contract Documents.
  2. Owner's, Architect's, and Contractor's names.
  3. Discrete and consecutive RFI number, and descriptive subject/title.
  4. Issue date, and requested reply date.
  5. Reference to particular Contract Document(s) requiring additional information/interpretation. Identify pertinent drawing and detail number and/or specification section number, title, and paragraph(s).
  6. Annotations: Field dimensions and/or description of conditions which have engendered the request.

7. Contractor's suggested resolution: A written and/or a graphic solution, to scale, is required in cases where clarification of coordination issues is involved, for example; routing, clearances, and/or specific locations of work shown diagrammatically in Contract Documents. If applicable, state the likely impact of the suggested resolution on Contract Time or the Contract Sum.
- F. Attachments: Include sketches, coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.
- G. RFI Log: Prepare and maintain a tabular log of RFIs for the duration of the project.
  1. Indicate current status of every RFI. Update log promptly and on a regular basis.
  2. Note dates of when each request is made, and when a response is received.
  3. Highlight items requiring priority or expedited response.
  4. Highlight items for which a timely response has not been received to date.
  5. Identify and include improper or frivolous RFIs.
- H. Review Time: Architect will respond and return RFIs to Contractor within seven calendar days of receipt. For the purpose of establishing the start of the mandated response period, RFIs received after 12:00 noon will be considered as having been received on the following regular working day.
  1. Response period may be shortened or lengthened for specific items, subject to mutual agreement, and recorded in a timely manner in progress meeting minutes.
- I. Responses: Content of answered RFIs will not constitute in any manner a directive or authorization to perform extra work or delay the project. If in Contractor's belief it is likely to lead to a change to Contract Sum or Contract Time, promptly issue a notice to this effect, and follow up with an appropriate Change Order request to Owner.
  1. Response may include a request for additional information, in which case the original RFI will be deemed as having been answered, and an amended one is to be issued forthwith. Identify the amended RFI with an R suffix to the original number.
  2. Do not extend applicability of a response to specific item to encompass other similar conditions, unless specifically so noted in the response.
  3. Upon receipt of a response, promptly review and distribute it to all affected parties, and update the RFI Log.
  4. Notify Architect within seven calendar days if an additional or corrected response is required by submitting an amended version of the original RFI, identified as specified above.

### 3.9. SUBMITTAL SCHEDULE

- A. Submit to Architect for review a schedule for submittals in tabular format.
  1. Submit at the same time as the preliminary schedule specified in Section - 01 3216 - Construction Progress Schedule.
  2. Coordinate with Contractor's construction schedule and schedule of values.
  3. Format schedule to allow tracking of status of submittals throughout duration of construction.
  4. Arrange information to include scheduled date for initial submittal, specification number and title, submittal category (for review or for information), description of item of work covered, and role and name of subcontractor.
  5. Account for time required for preparation, review, manufacturing, fabrication and delivery when establishing submittal delivery and review deadline dates.
    - a. For assemblies, equipment, systems comprised of multiple components and/or requiring detailed coordination with other work, allow for additional time to make corrections or revisions to initial submittals, and time for their review.



**3.10. SUBMITTALS FOR REVIEW**

- A. When the following are specified in individual sections, submit them for review:
  - 1. Product data.
  - 2. Shop drawings.
  - 3. Samples for selection.
  - 4. Samples for verification.
- B. Submit to Architect for review for the limited purpose of checking for compliance with information given and the design concept expressed in Contract Documents.
- C. Samples will be reviewed for aesthetic, color, or finish selection.
- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents purposes described in Section 01 7800 - Closeout Submittals.

**3.11. SUBMITTALS FOR INFORMATION**

- A. When the following are specified in individual sections, submit them for information:
  - 1. Design data.
  - 2. Certificates.
  - 3. Test reports.
  - 4. Inspection reports.
  - 5. Manufacturer's instructions.
  - 6. Manufacturer's field reports.
  - 7. Other types indicated.
- B. Submit for Architect's knowledge as contract administrator or for Owner.

**3.12. SUBMITTALS FOR PROJECT CLOSEOUT**

- A. Submit Correction Punch List for Substantial Completion.
- B. Submit Final Correction Punch List for Substantial Completion.
- C. When the following are specified in individual sections, submit them at project closeout in compliance with requirements of Section 01 7800 - Closeout Submittals:
  - 1. Project record documents.
  - 2. Operation and maintenance data.
  - 3. Warranties.
  - 4. Bonds.
  - 5. Other types as indicated.
- D. Submit for Owner's benefit during and after project completion.

**3.13. NUMBER OF COPIES OF SUBMITTALS**

- A. Electronic Documents: Submit one electronic copy in PDF format; an electronically-marked up file will be returned. Create PDFs at native size and right-side up; illegible files will be rejected.
- B. Samples: Submit the number specified in individual specification sections; one of which will be retained by Architect.
  - 1. After review, produce duplicates.
  - 2. Retained samples will not be returned to Contractor unless specifically so stated.

### 3.14. SUBMITTAL PROCEDURES

#### A. General Requirements:

1. Use a single transmittal for related items.
2. Transmit using approved form.
  - a. Use form generated by Electronic Document Submittal Service software.
3. Sequentially identify each item. For revised submittals use original number and a sequential numerical suffix.
4. Identify: Project; Contractor; subcontractor or supplier; pertinent drawing and detail number; and specification section number and article/paragraph, as appropriate on each copy.
5. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the work and Contract Documents.
  - a. Submittals from sources other than the Contractor, or without Contractor's stamp will not be acknowledged, reviewed, or returned.
6. Schedule submittals to expedite the Project, and coordinate submission of related items.
  - a. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
  - b. For sequential reviews involving Architect's consultants, Owner, or another affected party, allow an additional 7 days.
7. Identify variations from Contract Documents and product or system limitations that may be detrimental to successful performance of the completed work.
8. Provide space for Contractor and Architect review stamps.
9. When revised for resubmission, identify all changes made since previous submission.
10. Distribute reviewed submittals. Instruct parties to promptly report inability to comply with requirements.
11. Incomplete submittals will not be reviewed, unless they are partial submittals for distinct portion(s) of the work, and have received prior approval for their use.
12. Submittals not requested will be recognized, and will be returned "Not Reviewed",

#### B. Product Data Procedures:

1. Submit only information required by individual specification sections.
2. Collect required information into a single submittal.
3. Do not submit (Material) Safety Data Sheets for materials or products.

#### C. Shop Drawing Procedures:

1. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting Contract Documents and coordinating related work.
2. Do not reproduce Contract Documents to create shop drawings.
3. Generic, non-project-specific information submitted as shop drawings do not meet the requirements for shop drawings.

### 3.15. SUBMITTAL REVIEW

- A. Submittals for Review: Architect will review each submittal, and approve, or take other appropriate action.
- B. Submittals for Information: Architect will acknowledge receipt and review. See below for actions to be taken.

- C. Architect's actions will be reflected by marking each returned submittal using virtual stamp on electronic submittals.
  - 1. Notations may be made directly on submitted items and/or listed on appended Submittal Review cover sheet.
- D. Architect's and consultants' actions on items submitted for review:
  - 1. Authorizing purchasing, fabrication, delivery, and installation:
    - a. "No Exceptions Taken", or language with same legal meaning.
    - b. "Furnish as Corrected", or language with same legal meaning.
      - 1) At Contractor's option, submit corrected item, with review notations acknowledged and incorporated.
  - 2. Not Authorizing fabrication, delivery, and installation:
    - a. "Revise and Resubmit".
      - 1) Resubmit revised item, with review notations acknowledged and incorporated.
      - 2) Non-responsive resubmittals may be rejected.
    - b. "Rejected".
      - 1) Submit item complying with requirements of Contract Documents.
- E. Architect's actions on items submitted for information:
  - 1. Items for which no action was taken:
    - a. "Not Reviewed" - to notify the Contractor that the submittal has been received for record only.
  - 2. Items for which action was taken:
    - a. "Reviewed" - no further action is required from Contractor.

**END OF SECTION**

**SECTION 01 3310 - CADD WAIVER OF LIABILITY****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 CADD waiver form.
  - 1. For the Contractor to request CAD files to assist him/her with Shop Drawings, the CADD Waiver form must be completed and emailed to the Architect/Engineer.
- B. Related Requirements:
  - 1. Division 01 Section "Submittal Procedures" for submittal requirements and procedures.
  - 2. Division 01 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.
  - 3. Division 01 Section "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.

**1.3. SUBMITTAL ADMINISTRATIVE REQUIREMENTS**

- 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. Refer to Division 01 Section 01 3000 "Administrative Requirements" for specific information.

**PART 2 - PRODUCTS (NOT USED)****PART 3 - EXECUTION (NOT USED)****END OF SECTION**

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**WAIVER OF LIABILITY AGREEMENT**

(1 Page)

This waiver agreement is made between Farnsworth Group, Inc., of Normal, Illinois, and

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*INSERT COMPANY NAME HERE – WHO IS RECEIVING THE DRAWINGS. Include address & phone contact info.*

hereinafter referred to as SUBCONTRACTOR to \_\_\_\_\_ for the Project.

Specific Intention/Application For Electronic Drawing Request: \_\_\_\_\_

Subcontractor Purchase Order **-OR-** Check Number: \_\_\_\_\_

Sheets Requested: \_\_\_\_\_

Format Requested: PDF \_\_\_\_\_ **-OR-** AutoCAD Version Requested: \_\_\_\_\_

*Options: 2013*

In accepting and utilizing any drawings, reports and data on any form of electronic media generated and furnished by Farnsworth Group, Inc., the SUBCONTRACTOR agrees that all such electronic files are instruments of service of Farnsworth Group, Inc., who shall be deemed the author, and shall retain all common law, statutory law and other rights, without limitation, including copyrights.

The SUBCONTRACTOR, by signing this agreement, acknowledges and shall abide by the following:

- The paper & electronic media provided for the project shall be handled as one package, not to be distributed in part.
- The paper media is an accurate representation of the data furnished within the scope of the named project as of the date shown in the title block of the paper media.
- Farnsworth Group, Inc. does not guarantee the accuracy and does not assume any responsibility or liability for any reproductions produced by the SUBCONTRACTOR or its agents from the Electronic Data of the work.
- Electronic Data is not to be used for purposes other than those associated with the project named below, or outside of its intended scope.
- The SUBCONTRACTOR will at no time make any changes, modifications, deletions, or additions to the Electronic Data provided by Farnsworth Group, Inc. for distribution within or outside of its own organization.
- By your use of these electronic files, you are not relieved of your duty to fully comply with the contract documents, including, and without limitation, the need to check, confirm and coordinate all dimensions and details, take field measurements, verify field conditions and coordinate your work with that of other contractors for the project.
- Farnsworth Group, Inc. makes no representation regarding the accuracy or completeness of the electronic files you receive.
- The Electronic Data provided by Farnsworth Group, Inc. as shown on the paper media is not guaranteed to reproduce on the SUBCONTRACTOR's equipment, either on a computer screen or in a print.
- All reproductions, paper or electronic media, must be obtained from the General Contractor for bidding purposes and Farnsworth Group, Inc. for construction purposes. See information below for Farnsworth Group contact information.
- Subcontractor agrees to pay \$50 per drawing sheet for CADD digital drawing files, payable by check to "Farnsworth Group, Inc." Payment is required prior to release of digital drawing files. Files will be sent to the Subcontractor within 5 business days of payment receipt.

**Project:** Livingston County Drive Thru Facility

**Project Date:** June 27, 2022

**FGI Project Number:** 0211957.00

**Farnsworth Group, Inc.**

By: Samantha Hill, AIA, NCARB, LEED Green Associate

Title Senior Architect

*Subcontractor's Signature/Title*

Submit completed form by Email (pdf format) attention to:

Samantha Hill (email: [shill@f-w.com](mailto:shill@f-w.com))

Farnsworth Group, Inc., 200 West College Ave, Ste 301, Normal IL 61761

Telephone: 309- 663-8436

**SECTION 01 4000 - QUALITY REQUIREMENTS****PART 1 GENERAL****1.1. SECTION INCLUDES**

- A. Submittals.
- B. Quality assurance.
- C. References and standards.
- D. Testing and inspection agencies and services.
- E. Contractor's design-related professional design services.
- F. Control of installation.
- G. Mock-ups.
- H. Tolerances.
- I. Manufacturers' field services.
- J. Defect Assessment.

**1.2. REFERENCE STANDARDS**

- A. ASTM C1021 - Standard Practice for Laboratories Engaged in Testing of Building Sealants; 2008 (Reapproved 2014).
- B. ASTM C1077 - Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation; 2014.
- C. ASTM C1093 - Standard Practice for Accreditation of Testing Agencies for Masonry; 2013.
- D. ASTM D3740 - Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction; 2012a.
- E. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection and/or Testing; 2014a.
- F. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing; 2013.
- G. ASTM E699 - Standard Specification for Agencies Involved in Testing, Quality Assurance, and Evaluating of Manufactured Building Components; 2016.
- H. IAS AC89 - Accreditation Criteria for Testing Laboratories; 2010.

**1.3. DEFINITIONS**

- A. Contractor's Quality Control Plan: Contractor's management plan for executing the Contract for Construction.
- B. Contractor's Professional Design Services: Design of some aspect or portion of the project by party other than the design professional of record. Provide these services as part of the Contract for Construction.
  - 1. Design Services Types Required:
    - a. Construction-Related: Services Contractor needs to provide in order to carry out the Contractor's sole responsibilities for construction means, methods, techniques, sequences, and procedures.
    - b. Design-Related: Design services explicitly required to be performed by another design professional due to highly-technical and/or specialized nature of a portion of the project. Services primarily involve engineering analysis, calculations, and design, and are not intended to alter the aesthetic aspects of the design.



- C. Design Data: Design-related, signed and sealed drawings, calculations, specifications, certifications, shop drawings and other submittals provided by Contractor, and prepared directly by, or under direct supervision of, appropriately licensed design professional.

#### 1.4. CONFLICTING REQUIREMENTS

- A. Referenced Standards: 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 conflicting 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. SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Contractor's Quality-Control Plan: For quality-assurance and quality-control activities and responsibilities.
- C. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility sent to authorities having jurisdiction before starting work on the following systems.
  - 1. Seismic-force resisting system, designated seismic system, or component listed in the designated seismic system quality assurance plan prepared by the Architect.
  - 2. Main wind-force resisting system or a wind-resisting component listed in the wind-force-resisting system quality assurance plan prepared by the Architect.
- D. Test Reports: After each test/inspection, promptly submit two copies of report to Architect and to Contractor.
  - 1. Include:
    - a. Date issued.
    - b. Project title and number.
    - c. Name of inspector.
    - d. Date and time of sampling or inspection.
    - e. Identification of product and specifications section.
    - f. Location in the Project.
    - g. Type of test/inspection.
    - h. Date of test/inspection.
    - i. Results of test/inspection.
    - j. Compliance with Contract Documents.
    - k. When requested by Architect, provide interpretation of results.
  - 2. Test report submittals are for Architect's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents, or for Owner's information.
- E. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect, in quantities specified for Product Data.

1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
  2. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect.
- F. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Owner's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- G. Manufacturer's Field Reports: Submit reports for Architect's benefit as contract administrator or for Owner.
1. Submit report in duplicate within 30 days of observation to Architect for information.
  2. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents.
- H. Erection Drawings: Submit drawings for Architect's benefit as contract administrator or for Owner.
1. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents.
  2. Data indicating inappropriate or unacceptable Work may be subject to action by Architect or Owner.
- 1.6. Quality Assurance
- A. Testing Agency Qualifications:
1. Prior to start of work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
  2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.
  3. Qualification Statement: Provide documentation showing testing laboratory is accredited under IAS AC89.
- B. Designer Qualifications: Where professional engineering design services and design data submittals are specifically required of Contractor by Contract Documents, provide services of a Professional Engineer experienced in design of this type of work and licensed in the State in which the Project is located.
- C. Contractor's Quality Control (CQC) Plan:
1. Quality-Control Plan, General: Submit quality-control plan within 10 days of Notice to Proceed, and not less than five days prior to preconstruction conference. Submit in format acceptable to Architect. Identify personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out Contractor's quality-assurance and quality-control responsibilities. Coordinate with Contractor's construction schedule.
  2. Quality-Control Personnel Qualifications: Engage qualified full-time personnel trained and experienced in managing and executing quality-assurance and quality-control procedures similar in nature and extent to those required for Project.
  3. Project quality-control manager may also serve as Project superintendent .
  4. Submittal Procedure: Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.
  5. Quality Issue Log: Maintain a project quality issue tracking matrix. This should include quality issues identified by the Owner, Architect/Engineer, Subcontractors, Material supplier/distributor

personnel, Authorities having Jurisdiction, utilities, etc. This matrix should continue throughout construction and become the project punchlist. After Final Completion, the log should be maintained for any warranty items that arise.

6. Testing and Inspection: Include in quality-control plan a comprehensive schedule of Work requiring testing or inspection, including the following:
  - a. Contractor-performed tests and inspections including subcontractor-performed tests and inspections. Include required tests and inspections and Contractor-elected tests and inspections.
  - b. Special inspections required by authorities having jurisdiction and indicated on the "Statement of Special Inspections."
  - c. Owner-performed tests and inspections indicated in the Contract Documents.
- D. Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.
- E. Monitoring and Documentation: Maintain testing and inspection reports including log of approved and rejected results. Include work Architect has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

#### 1.7. REFERENCES AND STANDARDS

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Comply with reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- C. Obtain copies of standards where required by product specification sections.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from Contract Documents by mention or inference otherwise in any reference document.

#### 1.8. TESTING AND INSPECTION AGENCIES AND SERVICES

- A. Owner will employ and pay for services of an independent testing agency to perform other specified testing.
- B. Contractor shall employ and pay for services of an independent testing agency to perform other specified testing.
- C. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- D. Contractor Employed Agency:
  1. Testing agency: Comply with requirements of ASTM E329, ASTM E543, ASTM E699, ASTM C1021, ASTM C1077, ASTM C1093, and ASTM D3740.
  2. Inspection agency: Comply with requirements of ASTM D3740 and ASTM E329.
  3. Laboratory Qualifications: Accredited by IAS according to IAS AC89.

4. Laboratory: Authorized to operate in the State in which the Project is located.
5. Laboratory Staff: Maintain a full time registered Engineer on staff to review services.
6. Testing Equipment: Calibrated at reasonable intervals either by NIST or using an NIST established Measurement Assurance Program, under a laboratory measurement quality assurance program.

## PART 2 PRODUCTS - NOT USED

## PART 3 EXECUTION

### 3.1. CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

### 3.2. TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

### 3.3. TESTING AND INSPECTION

- A. Testing Agency Duties:
  1. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
  2. Perform specified sampling and testing of products in accordance with specified standards.
  3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
  4. Promptly notify Architect and Contractor of observed irregularities or non-compliance of Work or products.
  5. Perform additional tests and inspections required by Architect.
  6. Submit reports of all tests/inspections specified.
- B. Limits on Testing/Inspection Agency Authority:
  1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
  2. Agency may not approve or accept any portion of the Work.
  3. Agency may not assume any duties of Contractor.
  4. Agency has no authority to stop the Work.
- C. Contractor Responsibilities:

1. Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.
2. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
3. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
4. Provide incidental labor and facilities:
  - a. To provide access to Work to be tested/inspected.
  - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
  - c. To facilitate tests/inspections.
  - d. To provide storage and curing of test samples.
5. Notify Architect and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
6. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
7. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
8. Perform field inspections through the duration of installation of roofing, glass/glazing, and exterior skin systems. Field Inspections and associated services shall include the following:
  - a. Monthly field visits to collect data using the established, project specific protocol developed in above.
  - b. Documentation of reasonable compliance with construction documents using project specific inspection guidelines prepared as noted above.
  - c. Provide written reports (including photos) to summarize findings of each inspection and includes discussions with designated project field personnel to assure an understanding of the findings.
  - d. Confirm correction of noted nonconforming items by photographic confirmation by the Contractor.
  - e. Provide a draft summary of the field observations on the day of each inspection to the site representatives.
- D. Re-testing required because of non-compliance with specified requirements shall be performed by the same agency on instructions by Architect.
- E. Re-testing required because of non-compliance with specified requirements shall be paid for by Contractor.

#### 3.4. TEST AND INSPECTION LOG

- A. Prepare a record of tests and inspections. Include the following:
  1. Date test or inspection was conducted.
  2. Description of the Work tested or inspected.
  3. Date test or inspection results were transmitted to Architect.
  4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.

**3.5. MANUFACTURERS' FIELD SERVICES**

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, as applicable, and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

**3.6. DEFECT ASSESSMENT**

- A. Replace Work or portions of the Work not complying with specified requirements.

**3.7. REPAIR AND PROTECTION**

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
  - 1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Division 01 Section "Execution."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

**3.8. PROJECT CLOSEOUT**

- A. Warranties: Ensure a Warranty and Maintenance Schedule for distribution to the Project Team and Owner. This Warranty and Maintenance Schedule shall identify warranty periods, maintenance activities and other requirements as recommended by the manufacturer for each major system/material.
  - 1. Facilitate at least one training seminar with the Owner to review the Warranty and Maintenance Schedule. Review the entire building envelope system in an effort to orientate the Owner with their new facility.

**END OF SECTION**

**SECTION 01 4533 - CODE-REQUIRED SPECIAL INSPECTIONS AND PROCEDURES****PART 1 GENERAL****1.1. SECTION INCLUDES**

- A. Code-required special inspections.
- B. Testing services incidental to special inspections.

**1.2. ABBREVIATIONS AND ACRONYMS**

- A. AHJ: Authority having jurisdiction.
- B. NIST: National Institute of Standards and Technology.

**1.3. DEFINITIONS**

- A. Code or Building Code: ICC (IBC)-2012 Edition of the International Building Code and specifically, Chapter 17 - Special Inspections and Tests.
- B. Authority Having Jurisdiction (AHJ): Agency or individual officially empowered to enforce the building, fire and life safety code requirements of the permitting jurisdiction in which the Project is located.
- C. Special Inspection:
  - 1. Special inspections are inspections and testing of materials, installation, fabrication, erection or placement of components and connections mandated by the AHJ that also require special expertise to ensure compliance with the approved Contract Documents and the referenced standards.
  - 2. Special inspections are separate from and independent of tests and inspections conducted by Owner or Contractor for the purposes of quality assurance and contract administration.

**1.4. REFERENCE STANDARDS**

- A. ACI 318 - Building Code Requirements for Structural Concrete and Commentary; 2011.
- B. AISC 360 - Specification for Structural Steel Buildings; 2016.
- C. ASTM C31/C31M - Standard Practice for Making and Curing Concrete Test Specimens in the Field; 2018b.
- D. ASTM C172/C172M - Standard Practice for Sampling Freshly Mixed Concrete; 2014a.
- E. ASTM D3740 - Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction; 2012a.
- F. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection and/or Testing; 2014a.
- G. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing; 2013.
- H. AWS D1.1/D1.1M - Structural Welding Code - Steel; 2015, with Errata (2016).
- I. AWS D1.3/D1.3M - Structural Welding Code - Sheet Steel; 2008.
- J. AWS D1.4/D1.4M - Structural Welding Code - Reinforcing Steel; 2011.
- K. IAS AC89 - Accreditation Criteria for Testing Laboratories; 2010.
- L. IAS AC291 - Accreditation Criteria for Special Inspection Agencies; 2017.
- M. ICC (IBC)-2012 - International Building Code; 2012.

**1.5. SPECIAL INSPECTION AGENCY**

- A. Owner or Architect will employ services of a Special Inspection Agency to perform inspections and associated testing and sampling in accordance with ASTM E329 and required by the building code.
- B. The Special Inspection Agency may employ and pay for services of an independent testing agency to perform testing and sampling associated with special inspections and required by the building code.

- C. Employment of agency in no way relieves Contractor of obligation to perform work in accordance with requirements of Contract Documents.

#### 1.6. TESTING AND INSPECTION AGENCIES

- A. Owner or Architect may employ services of an independent testing agency to perform additional testing and sampling associated with special inspections but not required by the building code.
- B. Employment of agency in no way relieves Contractor of obligation to perform work in accordance with requirements of Contract Documents.

#### 1.7. QUALITY ASSURANCE

- A. Special Inspection Agency Qualifications:
  - 1. Independent firm specializing in performing testing and inspections of the type specified in this section.
  - 2. Accredited by IAS according to IAS AC291.
- B. Testing Agency Qualifications:
  - 1. Independent firm specializing in performing testing and inspections of the type specified in this section.
  - 2. Accredited by IAS according to IAS AC89.
- C. Copies of Documents at Project Site: Maintain at the project site a copy of each referenced document.

### PART 2 PRODUCTS - NOT USED

### PART 3 EXECUTION

#### 3.1. SCHEDULE OF SPECIAL INSPECTIONS, GENERAL

- A. Frequency of Special Inspections: Special Inspections are indicated as continuous or periodic.
  - 1. Continuous Special Inspection: Special Inspection Agency is required to be present in the area where the work is being performed and observe the work at all times the work is in progress.
  - 2. Periodic Special Inspection: Special Inspection Agency is required to be present in the area where work is being performed and observe the work part-time or intermittently and at the completion of the work.

#### 3.2. SPECIAL INSPECTIONS FOR CONCRETE CONSTRUCTION

- A. Reinforcing Steel, Including Prestressing of Tendons and Placement: Verify compliance with approved Contract Documents and ACI 318, Sections 3.5 and 7.1 through 7.7; periodic.
- B. Reinforcing Steel Welding: Verify compliance with AWS D1.4/D1.4M and ACI 318, Section 3.5.2; periodic.
- C. Anchors Post-Installed in Hardened Concrete: Verify compliance with ACI 318.
- D. Design Mix: Verify plastic concrete complies with the design mix in approved Contract Documents and with ACI 318, Chapter 4 and 5.2; periodic.
- E. Concrete Sampling Concurrent with Strength Test Sampling: Each time fresh concrete is sampled for strength tests, verify compliance with ASTM C172/C172M, ASTM C31/C31M and ACI 318, Chapter 26.5, 26.12, and record the following, continuous:
  - 1. Slump.
  - 2. Air content.
- F. Specified Curing Temperature and Techniques: Verify compliance with approved Contract Documents and ACI 318, Sections 5.11 through 5.13; periodic.



- G. Formwork Shape, Location and Dimensions: Verify compliance with approved Contract Documents and ACI 318, Section 6.1.1; periodic.

### 3.3. SPECIAL INSPECTIONS FOR Prefabricated and Site-Built WOOD CONSTRUCTION

- A. High Load Diaphragms: Verify compliance of each item below with approved Contract Documents.
  - 1. Grade and thickness of sheathing.
  - 2. Nominal size of framing members at adjacent panel edges.
  - 3. Nail or staple diameter and length.
  - 4. Number of fastener lines.
  - 5. Fastener spacing at lines and at edges.

### 3.4. SPECIAL INSPECTIONS FOR SOILS

- A. Materials and Placement: Verify each item below complies with approved construction documents and approved geotechnical report.
  - 1. Design bearing capacity of material below shallow foundations; periodic.
  - 2. Design depth of excavations and suitability of material at bottom of excavations; periodic.
  - 3. Materials, densities, lift thicknesses; placement and compaction of backfill: continuous.
  - 4. Subgrade, prior to placement of compacted fill verify proper preparation; periodic.
- B. Testing: Classify and test excavated material; periodic.

### 3.5. SPECIAL INSPECTION AGENCY DUTIES AND RESPONSIBILITIES

- A. Special Inspection Agency shall:
  - 1. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
  - 2. Perform specified sampling and testing of products in accordance with specified reference standards.
  - 3. Ascertain compliance of materials and products with requirements of Contract Documents.
  - 4. Promptly notify Architect and Contractor of observed irregularities or non-compliance of work or products.
  - 5. Perform additional tests and inspections required by Architect.
  - 6. Submit reports of all tests or inspections specified.
- B. Re-testing required because of non-compliance with specified requirements shall be performed by the same agency on instructions by Architect.
- C. Re-testing required because of non-compliance with specified requirements shall be paid for by Contractor.

### 3.6. TESTING AGENCY DUTIES AND RESPONSIBILITIES

- A. Testing Agency Duties:
  - 1. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
  - 2. Perform specified sampling and testing of products in accordance with specified standards.
  - 3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
  - 4. Promptly notify Architect and Contractor of observed irregularities or non-compliance of work or products.
  - 5. Perform additional tests and inspections required by Architect.

6. Submit reports of all tests or inspections specified.
  - B. Limits on Testing or Inspection Agency Authority:
    1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
    2. Agency may not approve or accept any portion of the work.
    3. Agency may not assume any duties of Contractor.
    4. Agency has no authority to stop the work.
  - C. On instructions by Architect, perform re-testing required because of non-compliance with specified requirements, using the same agency.
  - D. Contractor will pay for re-testing required because of non-compliance with specified requirements.
- 3.7. CONTRACTOR DUTIES AND RESPONSIBILITIES
- A. Contractor Responsibilities, General:
    1. Deliver to agency at designated location, adequate samples of materials for special inspections that require material verification.
    2. Cooperate with agency and laboratory personnel; provide access to approved documents at project site, to the work, to manufacturers' facilities, and to fabricators' facilities.
    3. Provide incidental labor and facilities:
      - a. To provide access to work to be tested or inspected.
      - b. To obtain and handle samples at the site or at source of Products to be tested or inspected.
      - c. To facilitate tests or inspections.
      - d. To provide storage and curing of test samples.
    4. Notify Architect and laboratory 24 hours prior to expected time for operations requiring testing or inspection services.
    5. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.

**END OF SECTION**

**SECTION 01 5000 - TEMPORARY FACILITIES AND CONTROLS****PART 1 GENERAL****1.1. SECTION INCLUDES**

- A. Dewatering
- B. Temporary utilities.
- C. Temporary sanitary facilities.
- D. Temporary Controls: Barriers, enclosures, and fencing.
- E. Vehicular access and parking.
- F. Waste removal facilities and services.
- G. Project identification sign.

**1.2. RELATED REQUIREMENTS**

- A. Section 01 5500 - Vehicular Access and Parking.

**1.3. REFERENCE STANDARDS**

- A. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2018b.
- B. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements; 2009 (Reapproved 2016).

**1.4. Dewatering**

- A. Provide temporary means and methods for dewatering all temporary facilities and controls.
- B. Maintain temporary facilities in operable condition.

**1.5. TEMPORARY SANITARY FACILITIES**

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. Maintain daily in clean and sanitary condition.

**1.6. BARRIERS**

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building.
- C. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

**1.7. FENCING**

- A. Provide 6 foot high fence around construction site; equip with vehicular and pedestrian gates with locks.

**1.8. EXTERIOR ENCLOSURES**

- A. Provide temporary insulated weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.

**1.9. VEHICULAR ACCESS AND PARKING**

- A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.
- B. Coordinate access and haul routes with governing authorities and Owner.

- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.

#### 1.10. WASTE REMOVAL

- A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- B. Provide containers with lids. Remove trash from site periodically.
- C. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.

#### 1.11. PROJECT IDENTIFICATION

- A. Erect on site at location indicated.
- B. Provide project identification sign of design, construction, and location approved by Owner.
- C. No other signs are allowed without Owner permission except those required by law.

#### 1.12. REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Date of Substantial Completion inspection.
- B. Remove underground installations to a minimum depth of 2 feet. Grade site as indicated.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing facilities used during construction to original condition.
- E. Restore new permanent facilities used during construction to specified condition.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

**END OF SECTION**

**SECTION 01 5500 - VEHICULAR ACCESS AND PARKING****PART 1 GENERAL****1.1. SECTION INCLUDES**

- A. Parking.
- B. Construction parking controls.
- C. Maintenance.
- D. Removal, repair.
- E. Mud from site vehicles.

**PART 2 PRODUCTS****2.1. SIGNS, SIGNALS, AND DEVICES**

- A. Traffic Cones and Drums, Flares and Lights: As approved by local jurisdictions.

**PART 3 EXECUTION****3.1. PARKING**

- A. Use of existing parking facilities by construction personnel is permitted.

**3.2. CONSTRUCTION PARKING CONTROL**

- A. Control vehicular parking to prevent interference with public traffic and parking, access by emergency vehicles, and Owner's operations.

**3.3. MAINTENANCE**

- A. Maintain traffic and parking areas in a sound condition.
- B. Maintain existing paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.

**3.4. REMOVAL, REPAIR**

- A. Repair existing facilities damaged by use, to original condition.
- B. Remove equipment and devices when no longer required.
- C. Repair damage caused by installation.

**3.5. MUD FROM SITE VEHICLES**

- A. Provide means of removing mud from vehicle wheels before entering streets.

**END OF SECTION**

**SECTION 01 6000 - PRODUCT REQUIREMENTS****PART 1 GENERAL****1.1. SECTION INCLUDES**

- A. General product requirements.
- B. Transportation, handling, storage and protection.
- C. Product option requirements.
- D. Substitution limitations.
- E. Procedures for Owner-supplied products.
- F. Maintenance materials, including extra materials, spare parts, tools, and software.

**1.2. SUBMITTALS**

- A. Proposed Products List: Submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
  - 1. Submit within 15 days after date of Agreement.
  - 2. For products specified only by reference standards, list applicable reference standards.
- B. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- C. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- D. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
  - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

**PART 2 PRODUCTS****2.1. EXISTING PRODUCTS**

- A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by Contract Documents.
- B. Unforeseen historic items encountered remain the property of the Owner; notify Owner promptly upon discovery; protect, remove, handle, and store as directed by Owner.

**2.2. NEW PRODUCTS**

- A. Provide new products unless specifically required or permitted by Contract Documents.
- B. Use of products having any of the following characteristics is not permitted:
  - 1. Containing lead, cadmium, or asbestos.
- C. Where other criteria are met, Contractor shall give preference to products that:
  - 1. Have longer documented life span under normal use.
  - 2. Have a published GreenScreen Chemical Hazard Analysis.

**2.3. PRODUCT OPTIONS**

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.

- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

#### 2.4. MAINTENANCE MATERIALS

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- B. Deliver and place in location as directed; obtain receipt prior to final payment.

### PART 3 EXECUTION

#### 3.1. SUBSTITUTION LIMITATIONS

- A. See Section 01 2500 - Substitution Procedures.
- B. Instructions to Bidders specifies time restrictions for submitting requests for substitutions during the bidding period and the documents required. Comply with requirements specified in Section 00 2100.

#### 3.2. OWNER-SUPPLIED PRODUCTS

- A. See Section 01 1000 - Summary for identification of Owner-supplied products.
- B. Owner's Responsibilities:
  - 1. Arrange for and deliver Owner reviewed shop drawings, product data, and samples, to Contractor.
  - 2. Arrange and pay for product delivery to site.
  - 3. On delivery, inspect products jointly with Contractor.
  - 4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
  - 5. Arrange for manufacturers' warranties, inspections, and service.
- C. Contractor's Responsibilities:
  - 1. Review Owner reviewed shop drawings, product data, and samples.
  - 2. Receive and unload products at site; inspect for completeness or damage jointly with Owner.
  - 3. Handle, store, install and finish products.
  - 4. Repair or replace items damaged after receipt.

#### 3.3. TRANSPORTATION AND HANDLING

- A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.
- B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.
- C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- D. Transport and handle products in accordance with manufacturer's instructions.
- E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
- H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

**3.4. STORAGE AND PROTECTION**

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication. See Section 01 7419.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weathertight, climate-controlled enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Provide off-site storage and protection when site does not permit on-site storage or protection.
- G. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- H. Comply with manufacturer's warranty conditions, if any.
- I. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- J. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- K. Prevent contact with material that may cause corrosion, discoloration, or staining.
- L. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- M. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

**END OF SECTION**



**SECTION 01 7000 - EXECUTION AND CLOSEOUT REQUIREMENTS****PART 1 GENERAL****1.1. SECTION INCLUDES**

- A. Examination, preparation, and general installation procedures.
- B. Pre-installation meetings.
- C. Cutting and patching.
- D. Cleaning and protection.
- E. Starting of systems and equipment.
- F. Demonstration and instruction of Owner personnel.
- G. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.
- H. General requirements for maintenance service.

**1.2. RELATED REQUIREMENTS**

- A. Section 01 3000 - Administrative Requirements: Submittals procedures, Electronic document submittal service.
- B. Section 01 4000 - Quality Requirements: Testing and inspection procedures.
- C. Section 01 5000 - Temporary Facilities and Controls: Temporary exterior enclosures.
- D. Section 01 7800 - Closeout Submittals: Project record documents, operation and maintenance data, warranties, and bonds.
- E. Section 01 7900 - Demonstration and Training: Demonstration of products and systems to be commissioned and where indicated in specific specification sections

**1.3. SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Survey work: Submit name, address, and telephone number of Surveyor before starting survey work.
  - 1. On request, submit documentation verifying accuracy of survey work.
  - 2. Submit a copy of site drawing signed by the Land Surveyor, that the elevations and locations of the work are in compliance with Contract Documents.
  - 3. Submit surveys and survey logs for the project record.
- C. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
  - 1. Structural integrity of any element of Project.
  - 2. Integrity of weather exposed or moisture resistant element.
  - 3. Efficiency, maintenance, or safety of any operational element.
  - 4. Visual qualities of sight exposed elements.
  - 5. Work of Owner or separate Contractor.
  - 6. Include in request:
    - a. Identification of Project.
    - b. Location and description of affected work.
    - c. Necessity for cutting or alteration.
    - d. Description of proposed work and products to be used.
    - e. Effect on work of Owner or separate Contractor.
    - f. Written permission of affected separate Contractor.

- D. Project Record Documents: Accurately record actual locations of capped and active utilities.

#### 1.4. QUALIFICATIONS

- A. For surveying work, employ a land surveyor registered in the State in which the Project is located and acceptable to Architect. Submit evidence of surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate. Employ only individual(s) trained and experienced in collecting and recording accurate data relevant to ongoing construction activities,

#### 1.5. PROJECT CONDITIONS

- A. Use of explosives is not permitted.
- B. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- C. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.
- D. Perform dewatering activities, as required, for the duration of the project.
- E. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- F. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
- G. Erosion and Sediment Control: Plan and execute work by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
  - 1. Minimize amount of bare soil exposed at one time.
  - 2. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.
  - 3. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
  - 4. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- H. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
- I. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
- J. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

#### 1.6. COORDINATION

- A. See Section 01 1000 for occupancy-related requirements.
- B. Each contractor shall coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
  - 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 performance and accessibility for required maintenance, service, and repair.
- C. Notify affected utility companies and comply with their requirements.

- D. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- E. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on drawings. Follow routing indicated for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- F. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- G. Coordinate completion and clean-up of work of separate sections.
- H. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

## PART 2 PRODUCTS

### 2.1. PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 6000 - Product Requirements.

## PART 3 EXECUTION

### 3.1. EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

### 3.2. PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

### 3.3. PREINSTALLATION MEETINGS

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Architect and Owner four days minimum in advance of meeting dates.

- D. Prepare agenda and preside at meeting:
  - 1. Review conditions of examination, preparation and installation procedures.
  - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with electronic copies to Architect, Owner, participants, and those affected by decisions made.

### 3.4. LAYING OUT THE WORK

- A. Verify locations of survey control points prior to starting work.
- B. Promptly notify Architect of any discrepancies discovered.
- C. Contractor shall locate and protect survey control and reference points.
- D. Control datum for survey is that indicated on drawings.
- E. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- F. Promptly report to Architect the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- G. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect.
- H. Utilize recognized engineering survey practices.
- I. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
  - 1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
  - 2. Grid or axis for structures.
  - 3. Building foundation, column locations, ground floor elevations.
- J. Periodically verify layouts by same means.
- K. Maintain a complete and accurate log of control and survey work as it progresses.

### 3.5. GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

### 3.6. CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
  - 1. Complete the work.
  - 2. Fit products together to integrate with other work.
  - 3. Provide openings for penetration of mechanical, electrical, and other services.
  - 4. Match work that has been cut to adjacent work.

5. Repair areas adjacent to cuts to required condition.
  6. Repair new work damaged by subsequent work.
  7. Remove samples of installed work for testing when requested.
  8. Remove and replace defective and non-complying work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
  - E. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
  - F. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
  - G. Restore work with new products in accordance with requirements of Contract Documents.
  - H. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
  - I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 8400, to full thickness of the penetrated element.
  - J. Patching:
    1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
    2. Match color, texture, and appearance.
    3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.
- 3.7. PROGRESS CLEANING
- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
  - B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
  - C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
  - D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.
- 3.8. PROTECTION OF INSTALLED WORK
- A. Protect installed work from damage by construction operations.
  - B. Provide special protection where specified in individual specification sections.
  - C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
  - D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
  - E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
  - F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
  - G. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.
- 3.9. SYSTEM STARTUP
- A. Coordinate schedule for start-up of various equipment and systems.

- B. Notify Architect and Owner seven days prior to start-up of each item.
- C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- D. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- E. Verify that wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- G. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- H. Submit a written report that equipment or system has been properly installed and is functioning correctly.

### 3.10. DEMONSTRATION AND INSTRUCTION

- A. See Section 01 7900 - Demonstration and Training.

### 3.11. ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

### 3.12. FINAL CLEANING

- A. Execute final cleaning prior to Substantial Completion.
- B. Use cleaning materials that are nonhazardous.
- C. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- D. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- E. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- F. Replace filters of operating equipment.
- G. Clean debris from roofs, gutters, downspouts, scuppers, overflow drains, area drains, and drainage systems.
- H. Clean site; sweep paved areas, rake clean landscaped surfaces.
- I. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

### 3.13. CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
  - 1. Provide copies to Architect and Owner.
- B. Warranties: Ensure a Warranty and Maintenance Schedule for distribution to the Project Team and Owner. This Warranty and Maintenance Schedule shall identify warranty periods, maintenance activities and other requirements as recommended by the manufacturer for each major system/material.
  - 1. Facilitate at least one training seminar with the Owner to review the Warranty and Maintenance Schedule. Review the entire building envelope system in an effort to orientate the Owner with their new facility.

- C. Accompany Project Coordinator on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's Notice of Substantial Completion.
- D. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.
- E. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's Substantial Completion inspection.
- F. Conduct Substantial Completion inspection and create Final Correction Punch List containing Architect's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Architect.
- G. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
- H. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection.
- I. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.

#### 3.14. MAINTENANCE

- A. Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than one year from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.
- C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Owner.

#### END OF SECTION

**SECTION 01 7419 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL****PART 1 GENERAL****1.1. WASTE MANAGEMENT REQUIREMENTS**

- A. Owner requires that this project generate the least amount of trash and waste possible.
- B. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- C. Minimize trash/waste disposal in landfills; reuse, salvage, or recycle as much waste as economically feasible.
- D. Owner may decide to pay for additional recycling, salvage, and/or reuse based on Landfill Alternatives Proposal specified below.
- E. Contractor shall submit periodic Waste Disposal Reports; all landfill disposal, incineration, recycling, salvage, and reuse must be reported regardless of to whom the cost or savings accrues; use the same units of measure on all reports.
- F. Contractor shall develop and follow a Waste Management Plan designed to implement these requirements.
- G. The following sources may be useful in developing the Waste Management Plan:
  - 1. Illinois Department of Central Management Services, at <https://www.illinois.gov/cms/agency/recycling/Pages/default.aspx>.
  - 2. Illinois Environmental Protection Agency, at <http://www.epa.illinois.gov/topics/waste-management/>.
- H. Methods of trash/waste disposal that are not acceptable are:
  - 1. Burning on the project site.
  - 2. Burying on the project site.
  - 3. Dumping or burying on other property, public or private.
  - 4. Other illegal dumping or burying.
- I. Regulatory Requirements: Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, state and local requirements, pertaining to legal disposal of all construction and demolition waste materials.

**1.2. DEFINITIONS**

- A. Clean: Untreated and unpainted; not contaminated with oils, solvents, caulk, or the like.
- B. Construction and Demolition Waste: Solid wastes typically including building materials, packaging, trash, debris, and rubble resulting from construction, remodeling, repair and demolition operations.
- C. Hazardous: Exhibiting the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity or reactivity.
- D. Nonhazardous: Exhibiting none of the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity, or reactivity.
- E. Nontoxic: Neither immediately poisonous to humans nor poisonous after a long period of exposure.
- F. Recyclable: The ability of a product or material to be recovered at the end of its life cycle and remanufactured into a new product for reuse by others.
- G. Recycle: To remove a waste material from the project site to another site for remanufacture into a new product for reuse by others.



- H. Recycling: The process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- I. Return: To give back reusable items or unused products to vendors for credit.
- J. Reuse: To reuse a construction waste material in some manner on the project site.
- K. Salvage: To remove a waste material from the project site to another site for resale or reuse by others.
- L. Sediment: Soil and other debris that has been eroded and transported by storm or well production run-off water.
- M. Source Separation: The act of keeping different types of waste materials separate beginning from the first time they become waste.
- N. Toxic: Poisonous to humans either immediately or after a long period of exposure.
- O. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.
- P. Waste: Extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable, returnable, recyclable, and reusable material.

### 1.3. SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Waste Management Plan: Include the following information:
  - 1. Analysis of the trash and waste projected to be generated during the entire project construction cycle, including types and quantities.
  - 2. Landfill Options: The name, address, and telephone number of the landfill(s) where trash/waste will be disposed of, the applicable landfill tipping fee(s), and the projected cost of disposing of all project trash/waste in the landfill(s).
  - 3. Landfill Alternatives: List all waste materials that will be diverted from landfills by reuse, salvage, or recycling.
    - a. List each material proposed to be salvaged, reused, or recycled.
    - b. List the local market for each material.
    - c. State the estimated net cost, versus landfill disposal.
  - 4. Meetings: Describe regular meetings to be held to address waste prevention, reduction, recycling, salvage, reuse, and disposal.
  - 5. Materials Handling Procedures: Describe the means by which materials to be diverted from landfills will be protected from contamination and prepared for acceptance by designated facilities; include separation procedures for recyclables, storage, and packaging.
  - 6. Transportation: Identify the destination and means of transportation of materials to be recycled; i.e. whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler.
  - 7. Recycling Incentives: Describe procedures required to obtain credits, rebates, or similar incentives.
- C. Waste Disposal Reports: Submit at specified intervals, with details of quantities of trash and waste, means of disposal or reuse, and costs; show both totals to date and since last report.
  - 1. Submit updated Report with each Application for Progress Payment; failure to submit Report will delay payment.
  - 2. Submit Report on a form acceptable to Owner.
  - 3. Landfill Disposal: Include the following information:

- a. Identification of material.
    - b. Amount, in tons or cubic yards, of trash/waste material from the project disposed of in landfills.
    - c. State the identity of landfills, total amount of tipping fees paid to landfill, and total disposal cost.
    - d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
  4. Incinerator Disposal: Include the following information:
    - a. Identification of material.
    - b. Amount, in tons or cubic yards, of trash/waste material from the project delivered to incinerators.
    - c. State the identity of incinerators, total amount of fees paid to incinerator, and total disposal cost.
    - d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
  5. Recycled and Salvaged Materials: Include the following information for each:
    - a. Identification of material, including those retrieved by installer for use on other projects.
    - b. Amount, in tons or cubic yards, date removed from the project site, and receiving party.
    - c. Transportation cost, amount paid or received for the material, and the net total cost or savings of salvage or recycling each material.
    - d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
    - e. Certification by receiving party that materials will not be disposed of in landfills or by incineration.
  6. Other Disposal Methods: Include information similar to that described above, as appropriate to disposal method.
- D. Recycling Incentive Programs:
1. Where revenue accrues to Contractor, submit copies of documentation required to qualify for incentive.
  2. Where revenue accrues to Owner, submit any additional documentation required by Owner in addition to information provided in periodic Waste Disposal Report.

## PART 2 PRODUCTS

### 2.1. PRODUCT SUBSTITUTIONS

- A. See Section 01 6000 - Product Requirements for substitution submission procedures.
- B. For each proposed product substitution, submit the following information in addition to requirements specified in Section 01 6000:
  1. Relative amount of waste produced, compared to specified product.
  2. Cost savings on waste disposal, compared to specified product, to be deducted from the Contract Sum.
  3. Proposed disposal method for waste product.
  4. Markets for recycled waste product.

## PART 3 EXECUTION

### 3.1. WASTE MANAGEMENT PROCEDURES

- A. See Section 01 3000 for additional requirements for project meetings, reports, submittal procedures, and project documentation.

- B. See Section 01 5000 for additional requirements related to trash/waste collection and removal facilities and services.
- C. See Section 01 6000 for waste prevention requirements related to delivery, storage, and handling.
- D. See Section 01 7000 for trash/waste prevention procedures related to cutting and patching, installation, protection, and cleaning.

### 3.2. WASTE MANAGEMENT PLAN IMPLEMENTATION

- A. Manager: Designate an on-site person or persons responsible for instructing workers and overseeing and documenting results of the Waste Management Plan.
- B. Communication: Distribute copies of the Waste Management Plan to job site foreman, each subcontractor, Owner, and Architect.
- C. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.
- D. Meetings: Discuss trash/waste management goals and issues at project meetings.
  - 1. Prebid meeting.
  - 2. Preconstruction meeting.
  - 3. Regular job-site meetings.
- E. Facilities: Provide specific facilities for separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, for use by all contractors and installers.
  - 1. Provide containers as required.
  - 2. Provide adequate space for pick-up and delivery and convenience to subcontractors.
  - 3. Keep recycling and trash/waste bin areas neat and clean and clearly marked in order to avoid contamination of materials.
- F. Hazardous Wastes: Separate, store, and dispose of hazardous wastes according to applicable regulations.
- G. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.
- H. Reuse of Materials On-Site: Set aside, sort, and protect separated products in preparation for reuse.
- I. Salvage: Set aside, sort, and protect products to be salvaged for reuse off-site.

**END OF SECTION**

**SECTION 01 7800 - CLOSEOUT SUBMITTALS****PART 1 GENERAL****1.1. SECTION INCLUDES**

- A. Project Record Documents.
- B. Operation and Maintenance Data.
- C. Warranties and bonds.

**1.2. RELATED REQUIREMENTS**

- A. Section 00 7200 - General Conditions and 00 7300 - Supplementary Conditions: Performance bond and labor and material payment bonds, warranty, and correction of work.
- B. Section 01 3000 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- C. Section 01 7000 - Execution and Closeout Requirements: Contract closeout procedures.
- D. Individual Product Sections: Specific requirements for operation and maintenance data.
- E. Individual Product Sections: Warranties required for specific products or Work.

**1.3. SUBMITTALS**

- A. Project Record Documents: Submit documents to Architect prior to claim for final Application for Payment.
- B. Operation and Maintenance Data:
  - 1. Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Architect will review draft and return one copy with comments.
  - 2. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents within ten days after acceptance.
  - 3. Submit one copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Architect comments. Revise content of all document sets as required prior to final submission.
  - 4. Submit two sets of revised final documents in final form within 10 days after final inspection.
- C. Warranties and Bonds:
  - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.
  - 2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
  - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

**PART 2 PRODUCTS - NOT USED****PART 3 EXECUTION****3.1. PROJECT RECORD DOCUMENTS**

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
  - 1. Drawings.
  - 2. Specifications.
  - 3. Addenda.
  - 4. Change Orders and other modifications to the Contract.

5. Reviewed shop drawings, product data, and samples.
  6. Manufacturer's instruction for assembly, installation, and adjusting.
  - B. Ensure entries are complete and accurate, enabling future reference by Owner.
  - C. Store record documents separate from documents used for construction.
  - D. Record information concurrent with construction progress.
  - E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
    1. Manufacturer's name and product model and number.
    2. Product substitutions or alternates utilized.
    3. Changes made by Addenda and modifications.
  - F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
    1. Measured depths of foundations in relation to finish first floor datum.
    2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
    3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
    4. Field changes of dimension and detail.
    5. Details not on original Contract drawings.
- 3.2. OPERATION AND MAINTENANCE DATA
- A. Source Data: For each product or system, list names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
  - B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
  - C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
  - D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.
- 3.3. OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES
- A. For Each Product, Applied Material, and Finish:
    1. Product data, with catalog number, size, composition, and color and texture designations.
    2. Information for re-ordering custom manufactured products.
  - B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
  - C. Moisture protection and weather-exposed products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
  - D. Additional information as specified in individual product specification sections.
  - E. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.

**3.4. OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS**

- A. For Each Item of Equipment and Each System:
  - 1. Description of unit or system, and component parts.
  - 2. Identify function, normal operating characteristics, and limiting conditions.
  - 3. Include performance curves, with engineering data and tests.
  - 4. Complete nomenclature and model number of replaceable parts.
- B. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.
- C. Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications; typed.
- D. Include color coded wiring diagrams as installed.
- E. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- F. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- G. Provide servicing and lubrication schedule, and list of lubricants required.
- H. Include manufacturer's printed operation and maintenance instructions.
- I. Include sequence of operation by controls manufacturer.
- J. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- K. Provide control diagrams by controls manufacturer as installed.
- L. Provide Contractor's coordination drawings, with color coded piping diagrams as installed.
- M. Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- N. Include test and balancing reports.
- O. Additional Requirements: As specified in individual product specification sections.

**3.5. ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS**

- A. Assemble operation and maintenance data into durable manuals for Owner's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
- B. Where systems involve more than one specification section, provide separate tabbed divider for each system.
- C. Binders: Commercial quality, 8-1/2 by 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- D. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- E. Project Directory: Title and address of Project; names, addresses, and telephone numbers of Architect, Consultants, Contractor and subcontractors, with names of responsible parties.

- F. Tables of Contents: List every item separated by a divider, using the same identification as on the divider tab; where multiple volumes are required, include all volumes Tables of Contents in each volume, with the current volume clearly identified.
- G. Dividers: Provide tabbed dividers for each separate product and system; identify the contents on the divider tab; immediately following the divider tab include a description of product and major component parts of equipment.
- H. Text: Manufacturer's printed data, or typewritten data on 20 pound paper.
- I. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- J. Arrangement of Contents: Organize each volume in parts as follows:
  - 1. Project Directory.
  - 2. Table of Contents, of all volumes, and of this volume.
  - 3. Operation and Maintenance Data: Arranged by system, then by product category.
    - a. Source data.
    - b. Product data, shop drawings, and other submittals.
    - c. Operation and maintenance data.
    - d. Field quality control data.
    - e. Photocopies of warranties and bonds.

### 3.6. WARRANTIES AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.
- E. Manual: Bind in commercial quality 8-1/2 by 11 inch three D side ring binders with durable plastic covers.
- F. Cover: Identify each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor and equipment supplier; and name of responsible company principal.
- G. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of product or work item.
- H. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.
- I. Include additional copies of each warranty in operation and maintenance manuals, indexed within respective sections.

### END OF SECTION

**SECTION 01 7900 - DEMONSTRATION AND TRAINING****PART 1 GENERAL****1.1. SUMMARY**

- A. Demonstration of products and systems where indicated in specific specification sections.
- B. Training of Owner personnel in operation and maintenance is required for:
  - 1. All software-operated systems.
  - 2. HVAC systems and equipment.
  - 3. Plumbing equipment.
  - 4. Electrical systems and equipment.
  - 5. Items specified in individual product Sections.
- C. Training of Owner personnel in care, cleaning, maintenance, and repair is required for:
  - 1. Roofing, waterproofing, and other weather-exposed or moisture protection products.
  - 2. Finishes, including flooring, wall finishes, ceiling finishes.
  - 3. Fixtures and fittings.
  - 4. Items specified in individual product Sections.

**1.2. SUBMITTALS**

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Training Plan: Owner will designate personnel to be trained; tailor training to needs and skill-level of attendees.
  - 1. Submit to Architect for transmittal to Owner.
  - 2. Submit not less than two weeks prior to start of training.
  - 3. Revise and resubmit until acceptable.
  - 4. Provide an overall schedule showing all training sessions.
  - 5. Include at least the following for each training session:
    - a. Identification, date, time, and duration.
    - b. Description of products and/or systems to be covered.
    - c. Name of firm and person conducting training; include qualifications.
    - d. Intended audience, such as job description.
    - e. Objectives of training and suggested methods of ensuring adequate training.
    - f. Methods to be used, such as classroom lecture, live demonstrations, hands-on, etc.
    - g. Media to be used, such as slides, hand-outs, etc.
    - h. Training equipment required, such as projector, projection screen, etc., to be provided by Contractor.
- C. Training Manuals: Provide training manual for each attendee; allow for minimum of two attendees per training session.
  - 1. Include applicable portion of O&M manuals.
  - 2. Include copies of all hand-outs, slides, overheads, video presentations, etc., that are not included in O&M manuals.
  - 3. Provide one extra copy of each training manual to be included with operation and maintenance data.



## D. Training Reports:

1. Identification of each training session, date, time, and duration.
2. Sign-in sheet showing names and job titles of attendees.
3. List of attendee questions and written answers given, including copies of and references to supporting documentation required for clarification; include answers to questions that could not be answered in original training session.

## E. Video Recordings: Submit digital video recording of each demonstration and training session for Owner's subsequent use.

1. Format: DVD Disc or USB flash drive.
2. Label each disc and container with session identification and date.

## 1.3. QUALITY ASSURANCE

## A. Instructor Qualifications: Familiar with design, operation, maintenance and troubleshooting of the relevant products and systems.

1. Provide as instructors the most qualified trainer of those contractors and/or installers who actually supplied and installed the systems and equipment.
2. Where a single person is not familiar with all aspects, provide specialists with necessary qualifications.

## PART 2 PRODUCTS - NOT USED

## PART 3 EXECUTION

## 3.1. DEMONSTRATION - GENERAL

- A. Demonstrations conducted during system start-up do not qualify as demonstrations for the purposes of this section, unless approved in advance by Owner.
- B. Demonstration may be combined with Owner personnel training if applicable.
- C. Operating Equipment and Systems: Demonstrate operation in all modes, including start-up, shut-down, seasonal changeover, emergency conditions, and troubleshooting, and maintenance procedures, including scheduled and preventive maintenance.
  1. Perform demonstrations not less than two weeks prior to Substantial Completion.
  2. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- D. Non-Operating Products: Demonstrate cleaning, scheduled and preventive maintenance, and repair procedures.
  1. Perform demonstrations not less than two weeks prior to Substantial Completion.

## 3.2. TRAINING - GENERAL

- A. Conduct training on-site unless otherwise indicated.
- B. Owner will provide classroom and seating at no cost to Contractor.
- C. Provide training in minimum two hour segments.
- D. Training schedule will be subject to availability of Owner's personnel to be trained; re-schedule training sessions as required by Owner; once schedule has been approved by Owner failure to conduct sessions according to schedule will be cause for Owner to charge Contractor for personnel "show-up" time.
- E. Review of Facility Policy on Operation and Maintenance Data: During training discuss:
  1. The location of the O&M manuals and procedures for use and preservation; backup copies.

2. Typical contents and organization of all manuals, including explanatory information, system narratives, and product specific information.
  3. Typical uses of the O&M manuals.
- F. Product- and System-Specific Training:
1. Review the applicable O&M manuals.
  2. For systems, provide an overview of system operation, design parameters and constraints, and operational strategies.
  3. Review instructions for proper operation in all modes, including start-up, shut-down, seasonal changeover and emergency procedures, and for maintenance, including preventative maintenance.
  4. Provide hands-on training on all operational modes possible and preventive maintenance.
  5. Emphasize safe and proper operating requirements; discuss relevant health and safety issues and emergency procedures.
  6. Discuss common troubleshooting problems and solutions.
  7. Discuss any peculiarities of equipment installation or operation.
  8. Discuss warranties and guarantees, including procedures necessary to avoid voiding coverage.
  9. Review recommended tools and spare parts inventory suggestions of manufacturers.
  10. Review spare parts and tools required to be furnished by Contractor.
  11. Review spare parts suppliers and sources and procurement procedures.
- G. Be prepared to answer questions raised by training attendees; if unable to answer during training session, provide written response within three days.

**END OF SECTION**

**SECTION 01 9100 - GENERAL COMMISSIONING REQUIREMENTS****GENERAL****1.1. RELATED DOCUMENTS**

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

**1.2. SUMMARY**

- A. Section Includes:
  - 1. Contractor's Cx Submittal Requirements
  - 2. Included Systems
  - 3. Schedule Requirements
  - 4. Commissioning Team
  - 5. Commissioning Meetings
  - 6. Commissioning Plan
  - 7. Notifications
  - 8. Field Observation and Issues Log
  - 9. O&M Manuals
  - 10. Test, Adjust, and Balance Verification
  - 11. Functional Performance Testing
  - 12. Related Sections
    - a. Division 01, 23, and 26 specifications as determined by the "Included Systems" section of this specification.
    - b. Section 23 0593, Testing, Adjusting, and Balancing For HVAC

**1.3. CONTRACTOR'S CX SUBMITTAL REQUIREMENTS**

- A. See Division 01 for submittal procedures.
- B. TAB Plan, Initial TAB report (prior to TAB verification), Final TAB report. As indicated in section "Test, Adjust, and Balance Verification" of this specification.
- C. Systems and Equipment Submittals: as identified in "Included Systems" of this specification.
- D. Contractor's Construction Schedule: Submit to team with regular updates, incorporating Cx procedures as indicated in section "Schedule" of this specification.
- E. Submit response to CxP's issues log within 7 days of receipt (occurs concurrent with CxP's field observations through-out Construction and Acceptance phase). See section "Field Observation and Issues Log" of this specification.
- F. O&M Manuals: Contractor shall submit an O&M Manual outline at 50% construction and must have this outline approved by the A/E, Owner, and CxP. O&M Manual shall be submitted a minimum of 90 days prior to scheduled Owner Training to allow for review and correction prior to Owner training. O&M manual shall include all requirements from equipment and division 01 specifications plus the items identified herein section "O&M Manuals" of this specification.

**1.4. DEFINITIONS**

- A. Commissioning Plan: A document, prepared by CxP, that outlines the organization, schedule, allocation of resources, and documentation requirements of the commissioning process.
- B. CxP: Commissioning Provider. An entity identified by the Owner who leads, plans, schedules, and coordinates the commissioning team to implement the commissioning process

- C. Systems, Assemblies, Equipment, and Components: Where these terms are used together or separately, they shall mean "as-built" systems, assemblies, equipment, and components.
- D. TAB: Testing, Adjusting, and Balancing.

#### 1.5. DESCRIPTION

- A. The commissioning process described in this section is intended to meet the requirements of the 2015 International Energy Conservation Code. As with any quality process, Commissioning provides tools to ensure the final building meets the original intent of the Design.
- B. A key component of Commissioning is the verification of the operation of heating and cooling systems in all modes of operation to ensure the building is ready for year-round occupancy.
- C. The commissioning scope of work shall encompass mechanical and lighting control systems indicated in "Included Systems".

#### 1.6. INCLUDED SYSTEMS

- A. The following systems and their components are the focus of the Commissioning Process due to their complexity and the need to have coordination among the various subcontractors. Not all sections listed will be included in all Commissioning activities, but at minimum a sample will be reviewed during construction:
  - 1. Division 23 - Heating, Ventilating and Air Conditioning
    - a. HVAC Power Ventilators
    - b. Packaged Outdoor Central-Station Air-Handling Units
    - c. Small Split System Heating and Cooling
    - d. Variable Refrigerant Volume (VRV) HVAC System
    - e. Division 26 - Electrical
      - 1) Lighting Control Devices
      - 2) Relay-Based Lighting Controls
      - 3) Interior Lighting
      - 4) Exterior Lighting

#### 1.7. SCHEDULE REQUIREMENTS

- A. The Contractor shall provide the Commissioning Provider (CxP) with a detailed construction schedule within 30 days of the commencement of work. The Contractor shall also provide the Commissioning Provider (CxP) with construction schedule updates throughout the construction period. The CxP will provide the Contractor with commissioning activities into the overall project schedule.
- B. Contractor shall notify CxP 14-days minimum prior to related construction activities identified in the overall project schedule.
- C. TAB contractor shall be responsible for 10% TAB Verification with CxP and Cx Team. TAB contractor shall provide final report for review to CxP prior TAB Verification.
- D. FPT (Functional Performance Test) procedures will be developed by the CxP. The contractor shall return consolidated comments from all subcontractors within 14 days of receipt from the CxP.
- E. Contractor shall be responsible for participating in and performing functional performance testing at end of construction.
- F. Contractor shall submit O&M Manuals and warranties within 30 days of receiving approved product submittals and shop drawings. O&M Manuals to be submitted to CxP a minimum of 90 days prior to training.

**1.8. COMMISSIONING TEAM**

- A. The General Contractor and each subcontractor shall designate a single individual to be responsible for coordinating CX activities with Owner and CxP.
- B. The members of the commissioning team consist of Owner, Owner O&M personnel, General Contractor (GC), Mechanical Contractor (MC), Electrical Subcontractor(s) (ES), Testing Adjusting and Balancing (TAB) subcontractor, Controls Subcontractor (CS), and Commissioning Provider (CxP).

**1.9. COMMISSIONING MEETINGS**

- A. All commissioning team members shall attend preconstruction Cx meeting. The meeting will be to discuss the Cx process, scheduled activities, and Cx team responsibilities.
- B. Commissioning meetings/discussions will be held throughout the duration of construction and will typically be part of or follow a scheduled project coordination meeting. Commissioning meetings may be separate from other meetings and will have their own agenda and meeting minutes. The CxP will lead, distribute agendas, and record meeting minutes for specific Cx meetings, otherwise these items will be completed by parties responsible for leading the meetings.

**1.10. COMMISSIONING PLAN**

- A. A detailed commissioning plan will be provided and reviewed with the subcontractors during the pre-construction meeting.
- B. The commissioning plan is intended only as a guide for commissioning activities on the project. The specifications are the contract requirements and shall be considered the extent of the subcontractor's responsibilities.
- C. The commissioning plan will be updated periodically throughout the project process.

**1.11. NOTIFICATION**

- A. Contractor shall notify CxP 14-days minimum prior to related construction activities identified in the overall project schedule.

**1.12. FIELD OBSERVATION AND ISSUES LOG**

- A. The CxP will perform routine field observations during the construction period.
- B. The CxP will maintain an Issues Log that will include construction issues, access and maintenance issues, or other issues.
- C. The CxP Issue Logs are not "punch lists" in that they focus on systemic problems. Where an issue is identified, not all of the same components will have been verified by the CxP.
- D. Issue Logs shall be responded to within 7-days of issuance by CxP.

**1.13. O&M MANUALS**

- A. Refer to 017823 OPERATIONS AND MAINTENANCE DATA.
- B. CxP will review the Operations and Maintenance Data and provide comments back to the EOR for inclusion in their review. This review will focus on the items noted in the 2015 IECC section C408.2.5.5 Manuals.

**1.14. TEST, ADJUST, AND BALANCE REVIEW**

- A. CxP will review TAB deficiencies report with Owner to evaluate existing conditions and repairs that may be required.
- B. Review of TAB procedures documented in TAB Plan. TAB Contractor shall verify accessibility of equipment and components required for TAB work, adequate number and placement of duct balancing dampers to allow proper balancing while minimizing sound levels in occupied spaces, adequate number and placement of balancing valves to allow proper balancing and recording of water flow, adequate number and placement of test ports and test instrumentation to allow reading

and compilation of system and equipment performance data needed to conduct both tab and commissioning testing.

- C. Review of TAB report after TAB work is complete. See submittal review section for review process.
- D. The TAB verification will be done while the system is under the same conditions and control setup as the original readings.

#### 1.15. FUNCTIONAL PERFORMANCE TESTING

- A. The CxP will witness tests performed by the Contractor that are intended to document achievement of the Design. The specific activities expected include:
  - 1. The CxP will provide to all commissioning team members, and others as required, the functional performance test plan 14 days prior to the scheduled testing.
  - 2. Review of test procedures: the contractor shall review the FPT procedures developed by the CxP. The contractor shall return consolidated comments from all subcontractors within 14 days of receipt from the CxP.
  - 3. FPT's shall be accomplished prior to submitting the initial request for substantial completion and after all construction checklists have been accepted by the CxP and after acceptance of all startup and performance test reports (e.g., TAB report) by the CxP.
  - 4. Contractor shall assign adequate personnel and tools for the following FPT's and any required retests:
    - a. HVAC Systems - all modes of operation, including emergency, efficiency, performance, and consistency tests - expected duration to be 1-2 days of hands on tests. This does not include setup, preparation recording, or data downloading time.
    - b. Electrical - Review of Lighting and Lighting Control equipment in all modes of operation, - expected duration to be 1 day of hands on tests. This does not include setup, preparation recording, or data downloading time.
  - 5. Each subcontractor will be responsible, as required, to assist the CxP by witnessing the testing, putting the system in various modes of operation, and fixing minor problems found during the test. Manufacturer's representatives may be required to access and override controls as necessary to conduct the testing if control is not provided by the controls contractor.
  - 6. Control system set-up, calibration and operation shall be completed and verified prior to system Adjusting and Balancing as defined in Section 23 05 93. System functional performance testing shall not be completed until the Adjusting and Balancing report has been verified and accepted by the A/E.
  - 7. Skilled technicians shall be provided by the appropriate Contractor familiar with the system and building to execute the functional performance testing of the control system and perform functional performance testing of equipment. The Owner reserves the right to reject any technician who is not qualified to perform the required testing. Qualifications of technicians include site-specific expert knowledge relative to tested equipment and adequate documentation and tools to service and operate the systems.
  - 8. If major problems are discovered during the test, the responsible subcontractors and General Contractor will fix the problem and the test shall be redone. If more than one functional performance test is required, the responsible subcontractor will be back-charged for the CxP's time and expenses.
  - 9. Re-testing Procedure:
    - a. Any requirement for a re-test for a given test shall constitute the back charge to the responsible Contractor by the Owner for the attendance of CxP. A re-test shall be defined in this context as any time where a test defined under this section for the project cannot be fully executed due to any of the following conditions:

- 1) Date and time of test changed without a minimum of 14 days notice to CxP.
  - 2) Improper or insufficient personnel and/or tools on site at time of test.
  - 3) Deficiencies or discrepancies present at time of test that have been previously noted by CxP and remain unresolved.
  - 4) Any issues that require a re-test or stoppage of tests in progress.
  - 5) Failure of test for reason under responsibility of Contractor and/or Contractor responsible for sub or feed system (i.e. controls, electrical, etc.).
  - 6) Failure due to manufacturer defect.
- b. The Contractor is responsible for all costs associated with re-testing, including costs incurred by Owner.
  - c. Re-testing by Contractor shall not be considered a reason for a claim of delay or for a time extension by the Contractor.
  - d. If any sample selected has more than a 10% failure rate an additional sample equal to the number of units that failed shall be selected and treated as a re-test in accordance with re-testing guidelines provided under this section. This shall be in addition to the requirement to re-test the failed units.

**END OF SECTION**