

December 4, 2020

PROJECT MANUAL

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**CLAY ELECTRIC COOPERATIVE, INC.**  
**Demolition of Existing** A Touchstone Energy® Cooperative   
**Office Building & One Bay**  
**At Transportation Building**

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10 Citrus Drive  
Keystone Heights, Florida 32656



**Brame Heck**  
ARCHITECTS INC.

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File No. 3702.151

SET NO.

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## **SECTION B - INSTRUCTIONS TO BIDDERS**

### **A-1 PROJECT MANUAL TERMINOLOGY:**

**DEFINITION OF TERMS:** All definitions set forth in the General Conditions of the Contract for Construction, AIA Document A201 or in other Contract Documents are applicable to these Instructions to Bidders. Whenever in this Project Manual the following terms (or pronouns which replace these terms) are used, their intent and meaning shall be interpreted as follows:

**OWNER:** Clay Electric Cooperative, Inc.  
P.O. Box 308  
Keystone Heights, Florida 32656

**ARCHITECT:** The firm of Brame Heck Architects Inc., 606 N.E. First Street, Gainesville, Florida 32601, Phone 352/372-0425, Fax 352/372-0427, acting directly or through a duly authorized representative.

**CONTRACTOR:** Any individual, firm, partnership or corporation entering into an Agreement to furnish materials and labor for the Work specified herein.

**PROJECT REPRESENTATIVE OR INSPECTOR:** An authorized representative of the Architect assigned to assist the Architect in carrying out his responsibilities at the project site.

**SUBCONTRACTOR:** Any individual, firm, partnership or corporation entering into an Agreement to furnish materials and labor for the Work specified herein.

**BIDDER:** Any individual, firm, partnership or corporation submitting a Proposal for the work contemplated.

**BIDDING DOCUMENTS:** Bidding Documents include the Bidding Requirements and the proposed Contract Documents, including any Addenda issued prior to receipt of Bids. The Bidding Requirements consist of the Advertisement and/or Invitation to Bid, Instructions to Bidders, the Bid Form and other sample bidding and contract forms.

**PROPOSAL:** A Bid for the work contemplated which the Bidder shall submit on approved forms.

**DRAWINGS:** Graphic and pictorial documents showing the design, location and dimensions of the elements of a project. When capitalized, Drawings refer to the "Contract Documents" drawings.

**PROJECT MANUAL:** The volume of documents bound together containing the Instructions to Bidders, Schedule of Values Form, General Conditions, Supplementary Conditions, Payment Forms and Technical Specifications, all as listed in the Project Manual Table of Contents.

**CONTRACT:** The "Contract" is composed of the Contract Documents as defined and listed in the Agreement together with the Agreement.

**ADDENDA:** Written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.

**ALTERNATE:** An alternative type of material or system, an alternative method of construction or an increase or decrease in the scope of the project as specifically indicated on the drawings and/or in the Project Manual. An Alternate Bid is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid for the alternate work.

**APPLICATION FOR PAYMENT:** Statement of amounts claimed by Contractor as payments due on account of work performed or materials suitably stored.

**A-2 BIDDER'S REPRESENTATIONS:**

Each Bidder, by making his Bid, represents that:

The Bidder has read and understands the Bidding Documents and the Bid is made in accordance therewith.

The Bidder has visited the site, has become familiar with the local conditions under which the Work is to be performed and has correlated observations with the requirements of the proposed Contract Documents.

The Bid is based upon the materials, systems and equipment required by the Bidding Documents without exception.

**A-3 FAMILIARITY WITH LAWS:**

The Bidder is required to be familiar with all Federal, State and local laws, ordinances, rules and regulations that in any manner affect the work. Ignorance on the part of the Bidder will in no way relieve him from responsibility.

**A-4 SALES TAX:**

The Contractor is required to pay Florida Sales and Use Taxes on all materials purchased for this project.

**A-5 PROGRESS PAYMENTS:**

Based on Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner will make monthly progress payments to the Contractor as provided in the Agreement. Refer to Article 9, AIA General Conditions, Supplementary Conditions and to "Schedules, Reports, Payments" under DIVISION 1 of the specifications.

**A-6 LOCAL LICENSES, PERMITS AND FEES:**

The Contractor shall obtain all licenses, permits, inspections, service connections, etc. necessary for the prosecution of the work; and shall make all work conform to all applicable Codes, ordinances and regulations. The Contractor shall make arrangements for all regulatory agency inspections.

**A-7 ALTERNATES:**

If the Owner wishes to learn the relative or additional construction cost of an alternative method of construction, an alternative use of a type of material or an increase or decrease in the scope of the project, these items will be defined as alternates and will be specifically described by the drawings and/or specifications. Alternates will be listed in the Proposal Form in such a manner that the Bidder shall be able to clearly indicate what sums he will add to (or deduct from) the Base Bid. Refer to the section on ALTERNATES, DIVISION 1, for detailed description of alternates (if any).

**A-8 ADDENDA:**

In case the Architect finds it expedient to supplement, modify or interpret any portion of the Bidding Documents during the Bidding period, such procedure will be accomplished by the issuance of written Addenda to the Bidding Documents, which will be delivered or mailed to all prospective Bidders at the respective addresses furnished for such purposes. Each Bidder shall ascertain prior to submitting a Bid that the Bidder has received all Addenda issued. Receipt of Addenda shall be acknowledged in the Proposal Forms.

**A-9 INTERPRETATION OF BIDDING DOCUMENTS:**

Bidders and sub-bidders shall promptly notify the Architect of any ambiguity, inconsistency or error which they may discover upon examination of the Bidding Documents or of the site and local conditions. No interpretation of the meaning of Drawings, Specifications or other Bidding Documents and no correction of any apparent ambiguity, inconsistency or error therein will be made to any Bidder orally. When possible requests for such interpretation or correction should be in writing, addressed to the Architect. All such interpretations and supplemental instructions will be in the form of written Addenda to the Bidding Documents.

Only the interpretation or correction so given by the Architect in writing shall be binding; and prospective Bidders are advised that no other source is authorized to give information concerning, or to explain or interpret, the Bidding Documents.

**A-10 MATERIALS FIGURED IN BIDS:**

Where a particular system, product or material is specified by name, it will be considered as the standard basis for bidding and as the most satisfactory for its particular purpose in the building. No substitution will be considered unless written request has been submitted to the Architect for approval at least ten days prior to the date for receipt of bids. Each such request shall include a complete description of the proposed substitute, the 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. If the Architect approves a proposed substitution, bidders will be notified of such approval by Addendum. Materials, equipment or products so approved prior to bidding shall be considered equal to and subject to the same conditions as products specified.

Requests for substitutions after the receipt of bids shall be strictly in accordance with the requirements of section on PRODUCT REQUIREMENTS, DIVISION 1.

If the bidder desires to propose an alternative material, product, equipment or method of construction, this may be done under the following conditions:

First: To insure a uniform basis for bidding, base the submitted proposal on the particular system, product or material specified or approved by Addendum prior to bidding. The low Bidder will be determined on this basis.

Second: The Bidder shall include in the space provided in the Form of Proposal at the time of submission, a list of the particular systems, products or materials the Bidder wishes to substitute and, directly opposite each such item, the amount he or she will deduct from the Base Bid if such substitution is approved by the Owner and the Architect prior to the signing of a Contract.

If no deduction from the base estimate is allowed by the Bidder for such substitutions, he or she shall so state, opposite the item involved. Substitutions so submitted shall include any and all adjustments of that or any other work affected thereby.

Such substitutions will be permitted and adopted only upon the authorization of the Owner and the written approval of the Architect.

#### **A-11 TIME OF COMPLETION AND LIQUIDATED DAMAGES:**

The Agreement will require a fixed time for completion of the Work, with provisions for liquidated damages for failure to so complete. Refer to General and Supplementary Conditions for requirements for Time of Completion and Liquidated Damages.

#### **A-12 GENERAL QUALITY AND STANDARDS:**

To facilitate rapid examination, detailed specifications concerning basic requirements for labor, materials, equipment and or incidentals to be used on the project are included under the various divisions in as brief a form as is consistent with clarity. The primary concern of the detailed specifications is for standards of performance expected for the finished Work.

The interests of the Owner, the General Contractor and others concerned with the Work require the inclusion of certain general governing requirements and standards, as a precaution against contingency and to provide for the conditions under which the construction and the administration of the Work will be carried out.

General requirements for the quality of the Work, when not otherwise covered in more specific detail in the specifications, will be governed by certain trade standards as described in the section on "Standards and Quality Control" of the technical specifications.

These specifications consider the project as a whole and assume its completion under a general Contract. Further, the scope of subcontracts and the quantities of materials and labor supplied to the General Contractor by others are assumed to be matters governed by agreement between the General Contractor and his subcontractors and suppliers and not by agreement between the Owner and any subcontractor or supplier.



Various sections of the construction specifications are intended to govern only the quality of Work and/or materials incidental to the particular branch of Work mentioned in the section title. Sections are not intended as itemizations of the Work or materials to be furnished or to limit or define the scope of any subcontract or agreement to furnish material and labor.

The organization of the specifications is for convenience only, and such organization implies no assumption by the Architect of the responsibility of arbitrator in establishing subcontract limits or in allotting portions of the Work to various subcontractors.

The furnishing of all items of material, labor, equipment and/or incidentals necessary to the completion of the Work as a whole will be expected when such items are called for on the drawings by diagram, note or schedule; are listed in the specifications; or are reasonably inferred by either or a combination of both.

END OF SECTION B

### SECTION C - BID (FORM OF PROPOSAL)

(To be copied onto Contractor's business letterhead and submitted in duplicate)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Bid Date

\_\_\_\_\_  
Bid Time

If the Bidder wishes to make last-minute modifications to his proposal, the following spaces may be used:

TO THE BASE BID:  
ADD \$ \_\_\_\_\_  
DEDUCT \$ \_\_\_\_\_  
TO ALTERNATE NO. \_\_\_\_\_  
ADD \$ \_\_\_\_\_  
DEDUCT \$ \_\_\_\_\_

#### BID

#### (FORM OF PROPOSAL)

Clay Electric Cooperative, Inc.  
P.O. Box 308  
Keystone Heights, Florida 32656

The undersigned, having visited the site of the proposed project and having become familiar with local conditions and the nature and extent of the work, and having carefully examined the drawings, specifications, agreement form, bond requirements and other Contract Documents prepared therefore by Brame Heck Architects, Inc., Gainesville, Florida, proposes to furnish all labor, materials, equipment and other items, facilities and services for the proper execution and completion of:

**Clay Electric Cooperative, Inc.  
Demolition of Existing Office Building & One Bay at Transportation Building  
Keystone Heights, Florida  
(3702.151)**

**BASE BID** (including specified Allowances):

\_\_\_\_\_  
\_\_\_\_\_  
(\$ \_\_\_\_\_ )

**TIME OF COMPLETION:** The undersigned further proposes to construct the project within the guidelines set forth below, beginning after the contract has been executed by all parties thereto and Notice to Proceed is given to the Contractor; and states that this period of time is proposed in full understanding of the provisions in Paragraph 9.11, Supplementary Conditions.

A. 90 calendar days after the date of such Notice.

This time frame will begin after the contract has been executed by all parties thereto and Notice to Proceed is given to the Contractor; and the undersigned states that this period of time is proposed in full understanding of the provisions in Paragraph 9.11, Supplementary Conditions.

**SUBSTITUTIONS:** If the following substitutions for specified proprietary products, systems or materials, or of products or materials not meeting all requirements of the specifications, are accepted, in accord with the paragraph of INSTRUCTIONS TO BIDDERS entitled "Materials Figured in Bids," deduct the stated amount from the base bid:

Description, Model No. and Manufacturer of Item to be Substituted	Amount to be Deducted from Base Bid
_____	\$ _____
_____	\$ _____
_____	\$ _____

**NOTE:** If no substitutions are indicated in this proposal, it is presumed that all products, systems and materials included in this bid are those specified or will meet all conditions of the specifications. Substitutions as listed above will not be considered in the determination of the low bid.

**EXAMINATION OF DOCUMENTS:** The undersigned further states that he has examined all contract documents for this Work, including your Invitation to Bid.

**RECEIPT OF ADDENDA:** The undersigned acknowledges receipt of the following Addenda:

Addendum No. \_\_\_\_\_ Dated \_\_\_\_\_  
 Addendum No. \_\_\_\_\_ Dated \_\_\_\_\_  
 Addendum No. \_\_\_\_\_ Dated \_\_\_\_\_

**AGREEMENT:** The bidder has agreed and does hereby agree:

1. That the above proposal shall remain in full force and effect for a period of 45 days after the time of the opening of this proposal; and that the bidder will not revoke or cancel this proposal nor withdraw from competition within the said period.
2. That if the bidder is the apparent low bidder, he will, within five consecutive calendar days after it is submitted, furnish to the Architect all required insurance forms and infor-

mation, Performance Bond and Material and Labor Payment Bond, and proof of license as a general contractor.

3. That in the event the contract is awarded to this bidder, he will, within ten consecutive calendar days after it is submitted, enter into a written contract with the Owner, in accord with the accepted bid.

The undersigned further agrees that this proposal is made with the full understanding that you, as Owner, reserve the right to waive informalities in this bid.

IN WITNESS WHEREOF, the bidder has hereunto set his signature and affixed his seal, this day of \_\_\_\_\_, A.D. 2020.

\_\_\_\_\_(SEAL)  
(Print in ink or Type Contractor's Name)

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

END OF SECTION C

**SECTION D - LIST OF SUBCONTRACTORS**

**LIST OF SUBCONTRACTORS:**

(To be submitted on the Bidder's letterhead, placed in a sealed envelope and attached to Bidder's Proposal)

**Date:** \_\_\_\_\_

This list is attached to, and is an integral part of, the bid submitted by:

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

For the construction of:  
**Clay Electric Cooperative, Inc.  
Demolition of Exist. Office Bldg.  
Keystone Heights, Florida  
(3702.151)**

The undersigned, hereinafter called "Bidder" lists below the name of subcontractors who will perform the segments of the work indicated.

SUBCONTRACT	NAME & ADDRESS OF SUBCONTRACTOR
1. SITEWORK/PAVING	_____
2. LANDSCAPING	_____
3. CONCRETE	_____
4. METALS	_____
5. STUCCO	_____
6. PAINTING	_____
7. PLUMBING	_____
8. ELECTRICAL	_____
9.	_____
10.	_____
11.	_____
12.	_____
13.	_____
14.	_____

END OF SECTION D

**SECTION E - BID BOND**

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State of Florida  
Clay County

KNOW ALL MEN BY THESE PRESENTS, that we

\_\_\_\_\_ (hereinafter called "Principal")

and \_\_\_\_\_

a Corporation chartered and doing business under the law of the State of \_\_\_\_\_ and authorized under the laws of the State of Florida to act as surety on bonds, as "Surety" (hereinafter called "Surety") are held and firmly bound unto the Owner in the sum of \_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_)

lawful money of the United States of America, to be paid to the Owner for which payment well and truly to be made we bind ourselves, our successors and several respective heirs, executors, administrators, and assigns, jointly and severally, firmly by these presents:

WHEREAS, the above bounded Principal contemplates submitting or has submitted a proposal to the said Owner for furnishing all necessary labor, materials, equipment, machinery, tools, apparatus and means of transportation for the furnishing of all materials and labor for the following office facility in Marion County:

**Clay Electric Cooperative, Inc.  
Demolition of Existing Office Building & One Bay at Transportation Building  
Keystone Heights, Florida  
(3702.151)**

AND WHEREAS, it was a condition, precedent to the submission of said bid that a bid bond in the amount of five (5%) of the base bid be submitted with said bid as a guarantee that the bidder would, if awarded the contract, enter into a written contract with the Owner, and furnish a contract price for the performance of said contract within ten (10) consecutive calendar days after written notice having been given of the award of the contract.

NOW THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH, that if the proposal of the Principal herein be accepted and said Principal within ten (10) consecutive calendar days after written notice being given of such acceptance, enter into a written contract with said Owner then this obligation shall be void; otherwise, the sum herein stated shall be due and payable to the Owner and the Surety herein agrees to pay sum immediately upon demand of said Owner in good and lawful money of the United States of America as liquidated damages for failure thereof of said Principal.

IN WITNESS WHEREOF, the Principal and the Surety, respectively, have caused these presents to be duly executed under seal this \_\_\_\_ day of \_\_\_\_\_ A.D., 2020.

Signed, Sealed and Delivered  
In the presence of:

\_\_\_\_\_

\_\_\_\_\_ (SEAL)

\_\_\_\_\_

\_\_\_\_\_ (SEAL)

(Surety's Corporate Seal)

BY: \_\_\_\_\_

\_\_\_\_\_

END OF SECTION E

## SECTION F - OWNER-CONTRACTOR AGREEMENT

### **F-1 FORM OF AGREEMENT**

Contract to be used for construction of this project will be AIA Document A- 101 entitled, "STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR," where the basis of payment is a STIPULATED SUM, 2007 EDITION.

Contract will be furnished in triplicate by the Architect office.

### **F-2 EXECUTION OF AGREEMENT**

The Contractor shall execute all required forms of the Agreement and return within five (5) days of their receipt. Failure to return all forms correctly executed within five (5) days of receipt, without written extension by the Owner otherwise shall constitute an irregularity and deemed grounds, at the Owner's option, for rejection and forfeiture of the bid deposit or at the Owner's option, for the deduction on a day-for-day basis from the time allotted for completion of the work.

If the Contractor is a firm or company owned by an individual, the Agreement shall be executed in the name of the firm or company by the manual signature of the individual or sole proprietor.

If the Contractor is a partnership, the Agreement shall be executed in the name of the partnership by the manual signature of partner or partners.

If the Contractor is a corporation, the Agreement shall be executed in the name of the corporation and shall bear the corporate seal. It may be signed for the corporation by the president and attested by the Secretary; if signed for the corporation by any other officer than the President, the signature of such officer signing shall be attested by the Secretary, and the executed Agreement shall be accompanied by a duly authenticated document bearing the seal of the corporation, quoting the section of the by-laws of the corporation authorizing the Board of Directors to designate such officer and copy of the resolution designating and authorizing him to execute on behalf of the corporation. That document must contain a statement that the authority is in effect on the date of the execution of the Agreement. The same officer may not execute the Agreement and authenticate the document of authority.

If Contract is to be performed under the name of a subsidiary corporation, the Principals of the parent company will be asked to execute a personal guarantee.

END OF SECTION F



**SECTION G - PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND**

The Contractor shall furnish the Owner with a State of Florida 100% Payment Bond (for Labor and Materials) and a Performance Bond written by a Surety Company acceptable to the Owner and authorized to do business in the State of Florida and signed by a Florida Licensed Resident Agent.

The cost of the Bonds shall be borne by the Contractor. The Bonds shall be accompanied by a duly authenticated or certified document, evidencing that the person executing the Bonds in behalf of the Surety had the authority to do so on the date of the Bonds. In the usual case, conferring of that authority has occurred prior to the date of the Bonds, and the document showing the date of appointment and enumeration of the powers of the person executing the Bonds is accompanied by a certification that the appointment and powers have not been revoked and remain in effect. The date of that certification cannot be earlier than the Agreement.

To be acceptable to the Owner as Surety for Bid Bonds, Performance Bond, and Payment Bonds, a Surety company shall comply with the following provisions:

1. The surety company must be admitted to do business in the State of Florida.
2. The surety company shall have been in business and have a record of successful continuous operations for at least five (5) years.
3. The surety company shall have at least the following minimum ratings:

**Policy Holder's Required Financial Rating**

<b>Contract Amount</b>	<b>Rating*</b>	<b>(Best's Financial Rating)*</b>
0 to 100,000	100,000	B Class VII
100,000 to 500,000	500,000	A Class VIII
500,000 to 750,000	750,000	A Class IX
750,000 to 1,000,000	1,000,000	A Class X
1,000,000 to 1,500,000	1,500,000	A Class XI
1,500,000 or more		A Class XII

\*Best's Policyholder's Rating of "A" and "B" (which signifies A=Excellent and B=Good, based upon good underwriting, economic management, adequate reserves for undisclosed liabilities, net resources for unusual stock and sound investment) or an equivalent rating from the Insurance Commissioner if not rated by Best's.

4. The surety company shall not expose itself to any loss on any one risk in the amount exceeding 10% of its surplus to policy holders, except in instances where:
  - (a) Any risk or portion of any risk which shall have been reinsured in which case, these minimum requirements contained herein also apply to the reinsuring carrier. Such excess of ten percent (10%) assumed by the Insurance Commissioner to do such business in this state shall be deducted from the exposed loss on any risk in determining the limitation of risk prescribed in this section.

- (b) In the case of a surety insurance company, there shall be deducted, in addition to the deduction for reinsurance, the amount assumed by any co-surety. The value of any security deposited, pledged or held subject to the consent of the surety and for the protection of the surety.

**EXECUTION OF BONDS**

The Contract Bonds shall be executed on behalf of the Contractor in the same manner and by the same person who executed the Agreement.

END OF SECTION G

**SECTION H - GENERAL CONDITIONS**

**GENERAL CONDITIONS, AIA DOCUMENT A201, 2007 EDITION**

General Conditions of the Contract for Construction, AIA Document A201 of the American Institute of Architects, Sixteenth Edition, 2007, except as eliminated, changed or modified in the basic contract or in other Contract Documents, by this reference are made a part of the Contract for Construction between the Owner and the Contractor. Copies of these AIA General Conditions are on file in the office of the Architect/Engineer and may be examined upon request.

END OF SECTION H

## SECTION I - SUPPLEMENTARY CONDITIONS

**MODIFICATIONS TO AIA GENERAL CONDITIONS:** The following supplements modify, change, delete from or add to the General Conditions of the Contract for Construction, AIA Document A201, Sixteenth Edition, 2007. Where any Article of the General Conditions is modified or any paragraph, subparagraph or clause thereof is modified or deleted by these supplements, the unaltered provisions of that Article, paragraph, subparagraph or clause shall remain in effect.

### **ARTICLE 1 GENERAL PROVISIONS**

#### **1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS**

##### **1.2.1** Add the following to this subparagraph:

In the case of an inconsistency between Drawings and Specifications or within either Document not clarified by addendum, the better quality or greater quantity of Work shall be provided in accordance with the Architect's interpretation.

### **ARTICLE 2 OWNER**

#### **2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER**

##### **2.2.2** Add the following to this subparagraph:

As it relates to sanitary sewer and water utility services, the Owner shall pay any applicable capital facilities fees or front footage fees, tap fees, water meters, or other required equipment items related to services provided by the utility entity.

##### **2.2.5** Delete this subparagraph in its entirety and substitute the following:

Owner will provide Contractor, free of charge, 10 sets of Drawings and Project Manuals. Additional sets are to be paid for by the Contractor.

### **ARTICLE 3 CONTRACTOR**

#### **3.5 WARRANTY**

Add the following subparagraph:

##### **3.5.1** The warranty required by Paragraph 3.5 shall be in addition to and not in limitation of any other warranty required by the Contract Documents or otherwise prescribed by law.

#### **3.14 CUTTING AND PATCHING**

Add the following subparagraph:

##### **3.14.3** Existing structures and facilities, including but not limited to buildings, utilities, topography, streets, curbs, sidewalks, landscape materials and other improvements that are damaged or removed due to Contractor's work, shall be patched, repaired, or replaced by the Contractor to the satisfaction of the Architect and authorities having jurisdiction. In the event that local authorities having jurisdiction require that such repairing and patching be done with their own labor and materials, the Contractor shall abide by such regulations and pay for such work.

**ARTICLE 5 SUBCONTRACTORS**

5.4.2 Delete this subparagraph in its entirety.

**ARTICLE 7 CHANGES IN THE WORK**

**7.3 CONSTRUCTION CHANGE DIRECTIVES**

7.3.7 In the first sentence of this subparagraph, delete the words "a reasonable allowance for overhead and profit" and substitute "an allowance for overhead and profit in accordance with Clauses 7.3.11 .1 through .10 below."

Add the following to the end of Subparagraph 7.3.7:

Costs shall not include any of the following:

- .6 Salaries or other compensation of the Contractor's personnel at the Contractor's office, including the field office, unless direct additional expenses have been incurred exclusively because of the change;
- .7 Expenses of the Contractor's offices, including the field office;
- .8 Any part of the Contractor's capital expenses, including interest on the Contractor's capital;
- .9 Costs due to the negligence of the Contractor, any Subcontractor, any Sub-subcontractor, anyone directly or indirectly employed by them, or for whose acts any of them may be liable, including but not limited to, the correction of defective or non-conforming Work, disposal of materials and equipment wrongly supplied, or making good any damage to property;
- .10 Overhead, general expense, and the cost of any item not specifically or reasonably inferable as included in the items described in 7.3.7.1 through 7.3.7.5.

Add the following Subparagraph 7.3.11 to 7.3:

7.3.11 In Subparagraph 7.3.7, the allowance for the combined overhead and profit included in the total cost to the Owner shall be based on the following schedule:

- .1 For the Contractor, for Work performed by the Contractor's own forces, 15 percent of the cost.
- .2 For the Contractor, for Work performed by the Contractor's Subcontractor, 7-1/2 percent of the amount due the Subcontractor.
- .3 For each Subcontractor or Sub-subcontractor involved, for Work performed by that Subcontractor's or Sub-subcontractor's own forces, 15 percent of the cost.
- .4 For each Subcontractor, for Work performed by the Subcontractor's Sub-subcontractors, 7-1/2 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 Subparagraph 7.3.7.
- .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.

## **ARTICLE 9 PAYMENTS AND COMPLETION**

### **9.11 TIME OF COMPLETION AND LIQUIDATED DAMAGES**

The time of completion of the project is of great importance to the Owner. It is highly desirable that the project be completed and ready for occupancy at the earliest possible time. Work is to commence when the Contractor is given written Notice to Proceed and is to be substantially complete within the following schedule:

- A. 90 calendar days to Substantial Completion and 30 days thereafter for Final Completion after the date of such Notice.

The Contractor is to furnish sufficient forces, construction plant and equipment, and to work such hours, including overtime operations, as may be necessary to insure the prosecution of the work, to allow the substantial completion of the project within the specified time. Normal inclement weather will not be sufficient reason to allow an extension of time on the project. Only exceptional weather conditions, acts of God which might cause delay in the work or other factors outlined in Paragraph 8.3.1 of AIA General Conditions will be considered as justifiable reasons for an extension of time.

Failure on the part of the Contractor to comply with the conditions of the basic Contract concerning the time in which the work is to be completed will be considered by the Owner as a justifiable reason to invoke the conditions of Article 14, Paragraph 14.2, of AIA General Conditions, relating to termination; or, at its sole option, to avail itself of the rights under the following paragraph concerning liquidated damages.

Bidders are informed that the following paragraphs concerning liquidated damages will be inserted in the basic Contract:

Inasmuch as failure to complete the work within the time herein fixed will result in substantial injury to the Owner, and whereas damages arising from such failure cannot be calculated with any degree of certainty, it is hereby agreed that if such work is not substantially completed as herein defined within the time fixed herein or within such further time, if any, as shall be allowed for such performance of completion in accordance with the provisions of this Agreement, the Contractor shall pay to the Owner, as liquidated damages for such delay and not as a penalty, \$175.00 per day for each and every calendar day after the date fixed for such substantial completion for the project, until such substantial completion shall have been fully accomplished.

It is also further agreed that if the work is not finally completed, without justifiable cause and extension of time by the Owner, within 30 days after substantial completion, the Contractor shall pay to the Owner, as liquidated damages for such delay, 50% of the rate indicated above.

This provision for liquidated damages for delay shall in no manner affect the Owner's right to terminate the Contract, as provided in Article 14.2 of AIA General Conditions or elsewhere in the Contract Documents; and the Owner's exercise of the right to terminate shall not release the Contractor from his obligation to pay said liquidated damages, in the amounts hereinbefore set out. Said liquidated damages shall be payable in addition to any excess expenses or costs payable by the Contractor under said Article 14.2 of AIA General Conditions and shall not exclude recovery of damages by the Owner under other provisions of the Contract, except for the Contractor's delays.

**ARTICLE 11 INSURANCE AND BONDS**

**11.1 CONTRACTOR'S LIABILITY INSURANCE**

11.1.1 Add the following sub-subparagraphs:

- .9 Liability Insurance shall include all major divisions of coverage and be on a comprehensive basis including:
  - a. Premises Operations (including X, C and U coverages as applicable).
  - b. Independent Contractors' Protective.
  - c. Products and Completed Operations.
  - d. Personal Injury Liability with Employment Exclusion deleted.
  - e. Contractual, including specified provision for Contractor's obligation under Paragraph 3.18.
  - f. Owned, non-owned and hired motor vehicles.
  - g. Broad Form Property Damage including Completed Operations.
- .10 If the General Liability coverages are provided by a Commercial General Liability Policy on a claims-made basis, the policy date or Retroactive Date shall predate the Contract; the termination date of the policy or applicable extended reporting period shall be no earlier than the termination date of coverages required to be maintained after final payment, certified in accordance with Subparagraph 9.10.2.

Add the following Clause 11.1.2.1 to 11.1.2:

11.1.2.1 The insurance required by Subparagraph 11.1.1 shall be written for not less than the following limits, or greater if required by law.

1. Workers' Compensation:

- (a) State (comply with Chapter 440, Florida Statutes): Statutory
- (b) Applicable Federal (e.g., Longshoremen's): Statutory
- (c) Employer's Liability: \$100,000 per Accident  
\$500,000 Disease, Policy Limit  
\$100,000 Disease, Each Employee

2. Comprehensive or Commercial General Liability (including Premises-Operations; Independent Contractors' Protective; Products and Completed Operations; Broad Form Property Damage):

- (a) Bodily Injury:
  - \$500,000 Each Occurrence
  - \$1,000,000 Aggregate
- (b) Property Damage:
  - \$200,000 Each Occurrence
  - \$400,000 Aggregate
- (c) Products and Completed Operations to be maintained for 2 years after final payment:

\$500,000 Bodily Injury and \$200,000 Property Damage

- (d) Property Damage Liability Insurance shall provide X, C and U coverage.
- (e) Broad Form Property Damage Coverage shall include Completed Operations.

3. Contractual Liability:

(a) Bodily Injury:

\$500,000	Each Occurrence
\$1,000,000	Aggregate

(b) Property Damage:

\$200,000	Each Occurrence
\$400,000	Aggregate

4. Personal Injury, with Employment Exclusion deleted:

\$500,000	Aggregate
-----------	-----------

5. Business Auto Liability (including owned, non-owned and hired vehicles):

(a) Bodily Injury:

\$500,000	Each Person
\$500,000	Each Occurrence

(b) Property Damage:

\$100,000	Each Occurrence
-----------	-----------------

6. If the General Liability coverages are provided by a Commercial Liability policy, the:

- (a) General Aggregate shall be not less than \$1,000,000.
- (b) Fire Damage Limit shall be not less than \$50,000 on any one Fire.
- (c) Medical Expense Limit shall be not less than \$5,000 on any one person.

11.1.3 Add the following sentences to Subparagraph 11.1.3:

If this insurance is written on the Comprehensive General Liability policy form, the Certificates shall be AIA Document G705, Certificate of Insurance. If this insurance is written on a Commercial General Liability policy form, ACORD Form 25S will be acceptable.

The Owner shall be a named insured and so indicated on the Certificate.

**ARTICLE 13 MISCELLANEOUS PROVISIONS**

**13.6 INTEREST**

13.6.1 Add the following sentence to this paragraph:

Interest shall be paid in certain cases as provided by Section 215.422, Florida Statutes.

Add the following subparagraph:



13.6.2 The Contractor shall be required to pay interest to Subcontractors and Suppliers in certain cases where payments are not within the time constraints of Section 287.0585, Florida Statutes.

**ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT**

**14.4 TERMINATION BY THE OWNER FOR CONVENIENCE**

14.4.3 Delete this paragraph and replace with the following:

In case of such termination for the Owner=s convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination.

END OF SECTION I

**SECTION J - PAYMENT FORMS**

**FORM FOR CERTIFICATE FOR PARTIAL PAYMENT**

Date \_\_\_\_\_ For Period Ending \_\_\_\_\_ Payment No. \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

CONTRACT FOR: Clay Electric Cooperative, Inc.  
Demolition of Existing Office Building & One Bay at Transportation Building  
Keystone Heights, Florida

Original Contract Sum	\$ _____	Contract Time	_____	Cal. Days
Additions to Date	_____	Author. Extension	_____	Cal. Days
Total	\$ _____	Pending Requests	_____	Cal. Days
Deductions to Date	_____	Time Lapsed to Date	_____	Cal. Days
Adjusted Contract Sum	\$ _____			

WORK PERFORMED TO DATE		\$ _____
MATERIAL SUITABLY STORED (Itemized list of materials attached)		_____
TOTAL TO DATE		\$ _____
Less Retainage @ 10%	\$ _____	
Less Previous Payments	_____	
TOTAL DEDUCTIONS		_____
DUE THIS PAYMENT		\$ _____

**CERTIFICATION OF CONTRACTOR:** According to the best of my knowledge and belief, I certify that all items and amounts shown on the face of this Certificate are correct and that all Work has been performed and material supplied in full accord with the terms and conditions of the contract. I further certify that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

Date \_\_\_\_\_ Contractor \_\_\_\_\_

**NOTARIZATION:**

State of: \_\_\_\_\_ County of: \_\_\_\_\_  
Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_  
Notary Public:  
My Commission expires: \_\_\_\_\_

**CERTIFICATION OF ARCHITECT/ENGINEER:** I certify that I have checked and verified this Certificate; that, to the best of my knowledge and belief, based on on-site observations and the data comprising the above application, the Work has progressed to the point indicated; the quality of the Work is in accordance with the Contract Documents; and that the Contractor is entitled to payment of the amount certified.

Amount Certified \$ \_\_\_\_\_  
Date \_\_\_\_\_ Architect/Engineer \_\_\_\_\_

**APPROVED FOR PAYMENT:**

Owner \_\_\_\_\_  
Date \_\_\_\_\_ By \_\_\_\_\_

(Use this form as a GUIDE, expanding to show, in detail, each other trade, using appropriate units for each.)

**SCHEDULE OF VALUES**

Project Name Clay Electric Cooperative, Inc. – Demolition of Existing Office Building & One Bay at Transportation Building, Keystone Heights, Florida

Contractor's Name \_\_\_\_\_ Date \_\_\_\_\_

Div. No.	Description of Work	Unit Qty.	Contract Value				Completed to Date
			Material	Labor	Total	%	
1	General Conditions						
	A. Insurance						
	B. Temporary Bldgs.						
	C. Cleanup of Work						
	D. Other						
2	Site Work						
	A. Site Preparation						
	B. Earthwork						
	C. Soil Treatment						
	D. Landscaping						
	E. Paving						
	F. Site Utilities						
	G. Cleanup & Fin. Grading						
3	Concrete						
Etc.	(Give Similar Breakdown)						
15	Mechanical						
	A. Rough-in Plumbing						
	B. Fixtures & Floor Drains						
	C. AC Ducts, Grilles						
	D. AC, Heat. & Cont. Equip.						
16	Electrical						
	A. Panels						
	B. Fixtures						
	C. Wiring Devices						
	D. Conduit & Wire						
	E. Boxes & Fittings						
	F. Alarm & Signal System						
TOTALS							

Subcontractors who have performed on-site labor this month and are included in this request are as follows:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

END OF SECTION J

DOCUMENT 000115 - LIST OF DRAWING SHEETS

1.1 LIST OF DRAWINGS

A. List of Drawings: Drawings consist of the following Contract Drawings and other drawings of type indicated:

1. A0.0 COVER SHEET, INDEX, LOCATION MAP
2. C0.0 SITE GENERAL NOTES
3. C1.0 SITE DEMOLITION PLAN
4. C2.0 SITE GEOMETRY AND MARKING PLAN
5. C3.0 PAVING GRADING AND DRAINAGE PLAN
6. L.001 LANDSCAPE PLAN
7. L.002 LANDSCAPE DETAILS
8. L.003 LANDSCAPE TECHNICAL SPECIFICATIONS
9. D1.0 EXISTING PHOTOS SHOWING DEMO
10. D1.1 DEMOLITION FLOOR PLAN
11. A1.1 FLOOR PLAN
12. A2.1 WALL SECTION DETAILS & BLDG ELEVATIONS

END OF DOCUMENT 000115

## SECTION 011000 - SUMMARY

### 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:

1. Project information.
2. Work covered by Contract Documents.
3. Work performed by Owner.
4. Contractor's use of site and premises.
5. Coordination with occupants.
6. Work restrictions.
7. Specification and Drawing conventions.
8. Miscellaneous provisions.

- B. Related Requirements:

1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.
2. Section 017300 "Execution" for cutting and patching procedures.

#### 1.3 DEFINITIONS

- A. Work Package: A group of specifications, drawings, and schedules prepared by the design team to describe a portion of the Project Work for pricing, permitting, and construction.

#### 1.4 PROJECT INFORMATION

- A. Project Identification: Clay Electric Cooperative, Inc., Demolition of Existing Office Building, Brame Heck Architects, Inc., Project Number 3702.151.

1. Project Location: 10 Citrus Drive, Keystone Heights, Florida, 32656.

- B. Owner: Clay Electric Cooperative, Inc., PO Box 0308, Keystone Heights, Florida, 32656-0308.

1. Owner's Representative: Bryan Gunter, PE, PO Box 0308, Keystone Heights, Florida, 32656-0308.

- C. Architect: Brame Heck Architects, Inc., 606 NE 1 Street, Gainesville, Florida, 32601.
- D. Architect's Consultants: Architect has retained the following design professionals, who have prepared designated portions of the Contract Documents:
  - 1. Civil Engineer: DRMP, Inc., 7525 NW 4<sup>th</sup> Blvd, Suite 70, Gainesville, Florida, 32607.
  - 2. Structural Engineer: Sputo & Lammert Engineering, LLC. 1731 NW 6<sup>th</sup> St, Suite D, Gainesville, Florida, 32609.
  - 3. Landscape Architect: Manley Design, LLC, 224 NW 2<sup>nd</sup> Ave, Suite E, Gainesville, Florida 32601.

#### 1.5 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and includes, but is not limited to, the following:
  - 1. Complete demolition of existing 6,007 sf Type V-B, Unsprinklered Group B-Business office building and partial demolition of one (1) 1,453 sf bay of adjacent metal building Type V-B, Unsprinklered Group S-2- Low Hazard Storage and other Work indicated in the Contract Documents.
  - 2. Office building consist of CMU exterior walls with stucco finish, BUR roofing over steel joists, assume drywall over wood stud interior partitions, concrete loading dock and steps, along with building's MEP systems.
  - 3. Transportation Building consist of metal roofing and wall panels over steel beams/columns, purlins and girts.
- B. Type of Contract:
  - 1. Project will be performed under a single prime contract.

#### 1.6 WORK PERFORMED BY OWNER

- A. Cooperate fully with Owner, so work may be carried out smoothly, without interfering with or delaying Work under this Contract or work by Owner. Coordinate the Work of this Contract with work performed by Owner.
- B. Preceding Work: Owner will perform the following construction operations at Project site. Those operations are scheduled to be substantially complete before Work under this Contract begins.
  - 1. Owner will remove all personnel, furniture, equipment, and any other mobile items of their interest. Any items left on at the time of demolition shall be removed and/or demolished by the contractor.

## 1.7 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Restricted Use of Site: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.
  - 1. Driveways, Walkways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or for storage of materials.
    - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
    - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- B. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.
- C. Condition of Existing Grounds: Maintain portions of existing grounds, landscaping, and hardscaping affected by construction operations throughout construction period. Repair damage caused by construction operations.

## 1.8 COORDINATION WITH OCCUPANTS

- A. Partial Owner Occupancy: Owner will occupy the premises during entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated.
  - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
  - 2. Provide not less than 48 hours' notice to Owner of activities that will affect Owner's operations.

## 1.9 WORK RESTRICTIONS

- A. Comply with restrictions on construction operations.
  - 1. Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction.
- B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging for temporary utility services according to requirements indicated:
  - 1. Notify Owner not less than two days in advance of proposed utility interruptions.

2. Obtain Owner's written permission before proceeding with utility interruptions.
- C. Noise, Vibration, Dust, and Odors: Coordinate operations that may result in high levels of noise and vibration, dust, odors, or other disruption to Owner occupancy with Owner.
  1. Notify Owner not less than two days in advance of proposed disruptive operations.
  2. Obtain Owner's written permission before proceeding with disruptive operations.
- D. Smoking and Controlled Substance Restrictions: Use of tobacco products, alcoholic beverages, and other controlled substances on Owner's property is not permitted.
- E. Employee Identification: Provide identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.
- F. Employee Screening: Comply with Owner's requirements for drug and background screening of Contractor personnel working on Project site.
  1. Maintain list of approved screened personnel with Owner's representative.

#### 1.10 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 00 Contracting Requirements: General provisions of the Contract, including General and Supplementary Conditions, apply to all Sections of the Specifications.
- C. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- D. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
  1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
  2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings.
  3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.



Clay Electric Cooperative Inc  
Demolition

3702.151

SECTION 011000 -  
SUMMARY

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

011000 - 5

## SECTION 012100 - ALLOWANCES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements governing allowances.
  - 1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.
- B. Types of allowances to be included in the Base Bid include the following:
  - 1. Lump-sum allowances.
- C. Related Sections include the following:
  - 1. Division 1 Section "Schedules, Reports, Payments" for procedures for submitting and handling Change Orders for allowances.

#### 1.3 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.

#### 1.4 SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.

- B. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

#### 1.5 COORDINATION

- A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

#### 1.6 ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products, materials, labor and installation ordered under allowance and shall include taxes, freight, and delivery to Project site.

#### PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION

##### 3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

##### 3.2 PREPARATION

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

##### 3.3 SCHEDULE OF ALLOWANCES

- A. Allowance No. 1 – Owner’s Contingency: Include in the Base Bid the sum of \$10,000.00 for use according to Owner’s written instructions. This allowance is to be utilized for changes in the work at the Owner’s discretion and unforeseen conditions that may arise during construction. This allowance shall be shown as an individual line item in the Contractor’s Schedule of Values.

END OF SECTION 01210

## SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Requirements:
  - 1. Section 013100 "Project Management and Coordination" for requirements for forms for contract modifications provided as part of web-based Project management software.

#### 1.3 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710.

#### 1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - 1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
  - 2. Within time specified in Proposal Request after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    - c. Include costs of labor and supervision directly attributable to the change.

- d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.
1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
  2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
  3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  4. Include costs of labor and supervision directly attributable to the change.
  5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
  6. Proposal Request Form: Use form acceptable to Architect.

## 1.5 CHANGE ORDER PROCEDURES

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

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

## SECTION 012900 - PAYMENT PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
  - 1. Section 012600 "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
  - 2. Section 013200 "Construction Progress Documentation" for preparing and submitting Contractor's construction schedule.

#### 1.3 DEFINITIONS

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

#### 1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
  - 1. Coordinate line items in the schedule of values with items required to be indicated as separate activities in Contractor's construction schedule.
  - 2. Submit the schedule of values to Architect at earliest possible date, but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
  - 1. Identification: Include the following Project identification on the schedule of values:
    - a. Project name and location.
    - b. Name of Architect.
    - c. Architect's Project number.

- d. Contractor's name and address.
- e. Date of submittal.
2. Arrange schedule of values consistent with format of AIA Document G703.
3. Overhead Costs, Proportional Distribution: Include total cost and proportionate share of general overhead and profit for each line item.
4. Temporary Facilities: Show cost of temporary facilities and other major cost items that are not direct cost of actual work-in-place as separate line items.
5. Closeout Costs. Include separate line items under Contractor and principal subcontracts for Project closeout requirements in an amount totaling five percent of the Contract Sum and subcontract amount.
6. Schedule of Values Revisions: Revise the schedule of values when Change Orders result in a change in the Contract Sum. Include at least one separate line item for each Change Order.

#### 1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments, as certified by Architect and paid for by Owner.
- B. Payment Application Times: The date for each progress payment is indicated in the Owner/Contractor Agreement. The period of construction work covered by each Application for Payment is the period indicated in the Agreement.
- C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.
  1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
  2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
  3. Include amounts of Change Orders issued before last day of construction period covered by application.
- E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
  1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment for stored materials.
  2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
  3. Provide summary documentation for stored materials indicating the following:

- a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
  - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
  - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- F. Transmittal: Submit three signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.
1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
  2. When an application shows completion of an item, submit conditional final or full waivers.
  3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
  4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
  5. Waiver Forms: Submit executed waivers of lien on forms acceptable to Owner.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. List of subcontractors.
  2. Schedule of values.
  3. Contractor's construction schedule (preliminary if not final).
  4. Submittal schedule (preliminary if not final).
  5. List of Contractor's staff assignments.
  6. List of Contractor's principal consultants.
  7. Copies of building permits.
  8. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
  9. Initial progress report.
  10. Report of preconstruction conference.
  11. Certificates of insurance and insurance policies.
- I. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.



1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
  2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited to, the following:
1. Evidence of completion of Project closeout requirements.
  2. Certification of completion of final punch list items.
  3. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
  4. Updated final statement, accounting for final changes to the Contract Sum.
  5. AIA Document G706.
  6. AIA Document G706A.
  7. Evidence that claims have been settled.
  8. Final liquidated damages settlement statement.
  9. Proof that taxes, fees, and similar obligations are paid.
  10. Waivers and releases.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

## SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project, including, but not limited to, the following:
  - 1. RFIs.
  - 2. Project meetings.
- B. Related Requirements:
  - 1. Section 013200 "Construction Progress Documentation" for preparing and submitting Contractor's construction schedule.
  - 2. Section 017700 "Closeout Procedures" for coordinating closeout of the Contract.

#### 1.3 DEFINITIONS

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

#### 1.4 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation, connection, and operation.
  - 1. Schedule construction operations in sequence required to obtain the best results, where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
  - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.

- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

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

#### 1.5 REQUEST FOR INFORMATION (RFI)

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

1. Architect will return without response those RFIs submitted to Architect by other entities controlled by Contractor.
2. Coordinate and submit RFIs in a prompt manner to avoid delays in Contractor's work or work of subcontractors.

- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:

1. Project name.
2. Name of Architect.
3. Architect's Project number.
4. Date.
5. Name of Contractor.
6. RFI number, numbered sequentially.
7. RFI subject.
8. Specification Section number and title and related paragraphs, as appropriate.
9. Drawing number and detail references, as appropriate.
10. Field dimensions and conditions, as appropriate.
11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
12. Contractor's signature.
13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
  - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.

- C. RFI Forms: Software-generated form with substantially the same content as indicated above, acceptable to Architect.

1. Attachments shall be electronic files in PDF format.
- D. Architect's Action: Architect will review each RFI, determine action required, and respond. Allow three days for Architect's response for each RFI. RFIs received by Architect after 1:00 p.m. will be considered as received the following working day.
1. The following Contractor-generated RFIs will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for approval of Contractor's means and methods.
    - d. Requests for coordination information already indicated in the Contract Documents.
    - e. Requests for adjustments in the Contract Time or the Contract Sum.
    - f. Requests for interpretation of Architect's actions on submittals.
    - g. Incomplete RFIs or inaccurately prepared RFIs.
  2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt by Architect of additional information.
  3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."
    - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 5 days of receipt of the RFI response.
- E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly . Include the following:
1. Project name.
  2. Name and address of Contractor.
  3. Name and address of Architect.
  4. RFI number, including RFIs that were returned without action or withdrawn.
  5. RFI description.
  6. Date the RFI was submitted.
  7. Date Architect's response was received.
  8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
  - 9.
- F. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within three days if Contractor disagrees with response.
- 1.6 PROJECT MEETINGS
- A. General: Schedule and conduct meetings and conferences at Project site unless otherwise indicated.

1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times a minimum of seven days prior to meeting.
  2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three days of the meeting.
- B. Preconstruction Conference: Schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement.
1. Attendees: Authorized representatives of Owner Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  2. Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Responsibilities and personnel assignments.
    - b. Tentative construction schedule.
    - c. Critical work sequencing and long lead items.
    - d. Designation of key personnel and their duties.
    - e. Lines of communications.
    - f. Procedures for processing field decisions and Change Orders.
    - g. Procedures for RFIs.
    - h. Procedures for processing Applications for Payment.
    - i. Distribution of the Contract Documents.
    - j. Submittal procedures.
    - k. Preparation of Record Documents.
    - l. Use of the premises and existing building.
    - m. Work restrictions.
    - n. Working hours.
    - o. Owner's occupancy requirements.
    - p. Responsibility for temporary facilities and controls.
    - q. Procedures for moisture and mold control.
    - r. Procedures for disruptions and shutdowns.
    - s. Construction waste management and recycling.
    - t. Parking availability.
    - u. Office, work, and storage areas.
    - v. Equipment deliveries and priorities.
    - w. First aid.
    - x. Security.
    - y. Progress cleaning.
  3. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Progress Meetings: Conduct progress meetings at weekly intervals.
1. Coordinate dates of meetings with preparation of payment requests.

2. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
  - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
    - 1) Review schedule for next period.
  - b. Review present and future needs of each entity present, including the following:
    - 1) Interface requirements.
    - 2) Sequence of operations.
    - 3) Status of submittals.
    - 4) Deliveries.
    - 5) Off-site fabrication.
    - 6) Access.
    - 7) Site use.
    - 8) Temporary facilities and controls.
    - 9) Progress cleaning.
    - 10) Quality and work standards.
    - 11) Status of correction of deficient items.
    - 12) Field observations.
    - 13) Status of RFIs.
    - 14) Status of Proposal Requests.
    - 15) Pending changes.
    - 16) Status of Change Orders.
    - 17) Pending claims and disputes.
    - 18) Documentation of information for payment requests.
4. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
  - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting, where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

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SECTION 013100 -  
PROJECT MANAGEMENT  
AND COORDINATION

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

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## SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Requirements:
  - 1. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Polyethylene Sheet: Reinforced, fire-resistive sheet, 10-mil minimum thickness, with flame-spread rating of 15 or less in accordance with ASTM E84 and passing NFPA 701 Test Method 2.
- B. Dust-Control Adhesive-Surface Walk-Off Mats: Provide mats, minimum 36 by 60 inches.
- C. Insulation: Unfaced mineral-fiber blanket, manufactured from glass, slag wool, or rock wool; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.

#### 2.2 TEMPORARY FACILITIES

- A. Field Offices: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.

#### 2.3 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.



### PART 3 - EXECUTION

#### 3.1 TEMPORARY FACILITIES, GENERAL

- A. Conservation: Coordinate construction and use of temporary facilities with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.

#### 3.2 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
  - 1. Locate facilities to limit site disturbance as specified in Section 011000 "Summary."
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

#### 3.3 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
  - 1. Arrange with Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.
- C. Water Service: Connect to Owner's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- D. Sanitary Facilities: Provide temporary toilets, wash facilities, safety shower and eyewash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
  - 1. Use of Permanent Toilets: Use of Owner's existing or new toilet facilities is not permitted.
- E. Electric Power Service: Connect to Owner's existing electric power service. Maintain equipment in a condition acceptable to Owner.

### 3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
  - 1. Comply with work restrictions specified in Section 011000 "Summary."
- C. Temporary Erosion and Sedimentation Control: Comply with requirements specified in Section 311000 "Site Clearing."
- D. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- E. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
- F. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- G. Temporary Egress: Provide temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction. Provide signage directing occupants to temporary egress.
- H. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise.
  - 1. Construct dustproof partitions with two layers of 6-mil polyethylene sheet on each side. Cover floor with two layers of 6-mil polyethylene sheet, extending sheets 18 inches up the sidewalls. Overlap and tape full length of joints. Cover floor with fire-retardant-treated plywood.
  - 2. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
  - 3. Insulate partitions to control noise transmission to occupied areas.
  - 4. Seal joints and perimeter. Equip partitions with gasketed dustproof doors and security locks where openings are required.
  - 5. Provide walk-off mats at each entrance through temporary partition.
- I. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.

1. Prohibit smoking in construction areas. Comply with additional limits on smoking specified in other Sections.
2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition in accordance with requirements of authorities having jurisdiction.
3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign, stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

### 3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Maintenance: Maintain facilities in good operating condition until removal.
- B. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- C. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
  1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
  - 2.
  3. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period. Comply with final cleaning requirements specified in Section 017700 "Closeout Procedures."

END OF SECTION 015000

## SECTION 017300 - EXECUTION

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work, including, but not limited to, the following:
  - 1. Cutting and patching.
  - 2. Progress cleaning.
  - 3. Correction of the Work.
- B. Related Requirements:
  - 1. Section 011000 "Summary" for coordination of , Owner-performed work , and limits on use of Project site.
  - 2. Section 024119 "Selective Demolition" for demolition and removal of selected portions of the building.

#### 1.2 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of subsequent work.
- B. Patching: Fitting and repair work required to restore construction to original conditions after installation of subsequent work.

#### 1.3 PREINSTALLATION MEETINGS

- A. Cutting and Patching Conference: Conduct conference at Project site .
  - 1. Prior to commencing work requiring cutting and patching, review extent of cutting and patching anticipated and examine procedures for ensuring satisfactory result from cutting and patching work. Inform Architect of scheduled meeting. Require representatives of each entity directly concerned with cutting and patching to attend, including the following:
    - a. Contractor's superintendent.
    - b. Trade supervisor responsible for cutting operations.
    - c. Trade supervisor(s) responsible for patching of each type of substrate.
    - d. Mechanical, electrical, and utilities subcontractors' supervisors, to the extent each trade is affected by cutting and patching operations.
  - 2. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

#### 1.4 INFORMATIONAL SUBMITTALS

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

#### 1.5 QUALITY ASSURANCE

- A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
  - 1. Structural Elements: When cutting and patching structural elements, or when encountering the need for cutting and patching of elements whose structural function is not known, notify Architect of locations and details of cutting and await directions from Architect before proceeding. Shore, brace, and support structural elements during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection.
  - 2. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
  - 3. Other Construction Elements: Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
  - 4. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
- C. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, and other construction affecting the Work.
1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, gas service piping, and water-service piping; underground electrical services; and other utilities.
  2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
  2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
  3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- C. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

### 3.2 PREPARATION

- A. Existing Utility Information: Furnish information to Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect in accordance with requirements in Section 013100 "Project Management and Coordination."

### 3.3 CUTTING AND PATCHING

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.

1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of Work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching in accordance with requirements in Section 011000 "Summary."
- F. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to minimize interruption to occupied areas.
- G. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
  1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
  3. Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
  4. Excavating and Backfilling: Comply with requirements in applicable Sections where required by cutting and patching operations.
  5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
  6. Proceed with patching after construction operations requiring cutting are complete.
- H. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as practicable, as judged by Architect. Provide materials and comply with installation requirements specified in other Sections, where applicable.
- I. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

### 3.4 PROGRESS CLEANING

- A. Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where Work is in progress to the level of cleanliness necessary for proper execution of the Work.
- D. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- E. Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- F. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Section 015000 "Temporary Facilities and Controls."

### 3.5 CORRECTION OF THE WORK

- A. Repair or remove and replace damaged, defective, or nonconforming Work. Restore damaged substrates and finishes.
- B. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.

END OF SECTION 017300



## SECTION 017700 - CLOSEOUT PROCEDURES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for Contract closeout, including, but not limited to, the following:
  - 1. Substantial Completion procedures.
  - 2. Final completion procedures.
  - 3. Warranties.
  - 4. Final cleaning.
- B. Related Requirements:
  - 1. Section 012900 "Payment Procedures" for requirements for Applications for Payment for Substantial Completion and Final Completion.
  - 2. Section 017839 "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.

#### 1.3 DEFINITIONS

- A. List of Incomplete Items: Contractor-prepared list of items to be completed or corrected, prepared for the Architect's use prior to Architect's inspection, to determine if the Work is substantially complete.

#### 1.4 ACTION SUBMITTALS

- A. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.

## 1.6 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's "punch list"), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction, permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
  - 2. Submit closeout submittals specified in other Division 01 Sections, including Project Record Documents, operation and maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.
  - 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  - 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect. Label with manufacturer's name and model number.
  - 5. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Advise Owner of changeover in utility services.
  - 2. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  - 3. Complete final cleaning requirements.
  - 4. Touch up paint and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 10 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
  - 1. Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
  - 2. Results of completed inspection will form the basis of requirements for Final Completion.

## 1.7 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining Final Completion, complete the following:
  - 1. Submit a final Application for Payment in accordance with Section 012900 "Payment Procedures."
  - 2. List of Incomplete Items: Submit a copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

## 1.8 LIST OF INCOMPLETE ITEMS

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
  - 1. Include the following information at the top of each page:
    - a. Project name.
    - b. Date.
    - c. Name of Architect.
    - d. Name of Contractor.
    - e. Page number.
  - 2. Submit list of incomplete items in the following format:
    - a. PDF Electronic File: Architect will return annotated file.

## PART 2 - PRODUCTS (Not Used)

## PART 3 - EXECUTION

### 3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
  - a. Clean Project site of rubbish, waste material, litter, and other foreign substances.
  - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
  - c. Rake grounds that are not planted, mulched, or paved to a smooth, even-textured surface.
  - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
  - e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
  - f. Vacuum and mop concrete.
  - g. Remove labels that are not permanent.
  - h. Replace disposable air filters and clean permanent air filters.
  - i. Clean luminaires, lamps, globes, and reflectors to function with full efficiency.
  - j. Leave Project clean and ready for occupancy.
  
- C. Construction Waste Disposal: Comply with waste-disposal requirements in Section 015000 "Temporary Facilities and Controls."

### 3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations required by Section 017300 "Execution" before requesting inspection for determination of Substantial Completion.

END OF SECTION 017700

## SECTION 017839 - PROJECT RECORD DOCUMENTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for Project Record Documents, including the following:
  - 1. Record Drawings.
  - 2. Record specifications.
- B. Related Requirements:
  - 1. Section 017700 "Closeout Procedures" for general closeout procedures.

#### 1.3 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
  - 1. Preparation: Mark record prints to show the actual installation, where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
    - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
    - b. Accurately record information in an acceptable drawing technique.
    - c. Record data as soon as possible after obtaining it.
    - d. Record and check the markup before enclosing concealed installations.
    - e. Cross-reference record prints to corresponding photographic documentation.
  - 2. Content: Types of items requiring marking include, but are not limited to, the following:
    - a. Dimensional changes to Drawings.
    - b. Revisions to details shown on Drawings.
    - c. Changes made by Change Order .
    - d. Changes made following Architect's written orders.
    - e. Details not on the original Contract Drawings.

- f. Field records for variable and concealed conditions.
  - g. Record information on the Work that is shown only schematically.
  3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
  4. Mark record prints with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
  5. Mark important additional information that was either shown schematically or omitted from original Drawings.
  6. Note Change Order numbers, and similar identification, where applicable.
- B. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
1. Record Prints: Organize record prints into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
  2. Format: Annotated PDF electronic file with comment function enabled.
  3. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.
  4. Identification: As follows:
    - a. Project name.
    - b. Date.
    - c. Designation "PROJECT RECORD DRAWINGS."
    - d. Name of Architect.
    - e. Name of Contractor.

#### 1.4 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation, where installation varies from that indicated in Specifications, addenda, and Contract modifications.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  2. Note related Change Orders and Record Drawings where applicable.
- B. Format: Submit record specifications as annotated PDF electronic file .

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 017839

## SECTION 024116 - STRUCTURE DEMOLITION

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Demolition and removal of buildings and site improvements.
2. Abandoning in-place and removing below-grade construction.
3. Disconnecting, capping or sealing, and abandoning in-place removing site utilities.
4. Salvaging items for reuse by Owner.

B. Related Requirements:

1. Section 011000 "Summary" for use of the premises and phasing requirements.
2. Section 024119 "Selective Demolition" for partial demolition of buildings, structures, and site improvements.
3. Section 311000 "Site Clearing" for site clearing and removal of above- and below-grade site improvements not part of building demolition.

#### 1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be salvaged.
- B. Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and deliver to Owner ready for reuse. Include fasteners or brackets needed for reattachment elsewhere.

#### 1.3 MATERIALS OWNERSHIP

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

#### 1.4 PREINSTALLATION MEETINGS

- A. Predemolition Conference: Conduct conference at Project site.

1. Inspect and discuss condition of construction to be demolished.
2. Review and finalize building demolition schedule and verify availability of demolition personnel, equipment, and facilities needed to make progress and avoid delays.
3. Review and finalize protection requirements.
4. Review procedures for noise control and dust control.
5. Review procedures for protection of adjacent buildings.
6. Review items to be salvaged and returned to Owner.

### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For refrigerant recovery technician.
- B. Engineering Survey: Submit engineering survey of condition of building.
- C. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, for dust control and, for noise control. Indicate proposed locations and construction of barriers.
- D. Adjacent Buildings: If required, detail special measures proposed to protect adjacent buildings to remain.
- E. Schedule of Building Demolition Activities: Indicate the following:
  - 1. Detailed sequence of demolition work, with starting and ending dates for each activity.
  - 2. Temporary interruption of utility services.
  - 3. Shutoff and capping of utility services.
- F. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.
- G. Landfill Records: Indicate receipt and acceptance of hazardous waste by a landfill facility licensed to accept hazardous waste.

### 1.6 QUALITY ASSURANCE

- A. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Standards: Comply with ANSI A10.6 and NFPA 241.

### 1.7 FIELD CONDITIONS

- A. Buildings to be demolished will be vacated and their use discontinued before start of the Work.
- B. Buildings near demolition site will be occupied. Conduct building demolition so operations of occupied neighboring buildings will not be disrupted.
- C. Owner assumes no responsibility for buildings and structures to be demolished.



1. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- D. Hazardous Materials: Present in buildings and structures to be demolished. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.
1. Hazardous material remediation is required under this contract.
  2. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures acceptable to the authority having jurisdiction.
  3. During demolition or excavation, if hazardous materials or suspected hazardous materials not identified in the report are encountered, immediately notify Architect and Owner.
- E. On-site storage or sale of removed items or materials is not permitted.

## 1.8 COORDINATION

- A. Arrange demolition schedule so as not to interfere with Owner's on-site operations or operations of adjacent occupied buildings.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

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

### 2.2 SOIL MATERIALS

- A. Satisfactory Soils: Comply with requirements in Section 312000 "Earth Moving."

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting demolition operations.
- B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.

- C. Perform an engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during building demolition operations.
- D. Inventory and record the condition of items to be removed and salvaged.

### 3.2 PREPARATION

- A. Refrigerant: Before starting demolition, remove refrigerant from mechanical equipment according to 40 CFR 82 and regulations of authorities having jurisdiction.
- B. Salvaged Items: Comply with the following:
  - 1. Clean salvaged items of dirt and demolition debris.
  - 2. Pack or crate items after cleaning. Identify contents of containers.
  - 3. Store items in a secure area until delivery to Owner.
  - 4. Transport items to storage area designated by Owner.
  - 5. Protect items from damage during transport and storage.

### 3.3 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Utilities to Be Disconnected: Locate, identify, disconnect, and seal or cap off utilities serving buildings and structures to be demolished.
  - 1. Owner will arrange to shut off utilities when requested by Contractor.
  - 2. If removal, relocation, or abandonment of utility services will affect adjacent occupied buildings, then provide temporary utilities that bypass buildings and structures to be demolished and that maintain continuity of service to other buildings and structures.
  - 3. Cut off pipe or conduit a minimum of 24 inches below grade. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing according to requirements of authorities having jurisdiction.
  - 4. Do not start demolition work until utility disconnecting and sealing have been completed and verified in writing.

### 3.4 PROTECTION

- A. Existing Facilities: Protect adjacent walkways, loading docks, building entries, and other building facilities during demolition operations. Maintain exits from existing buildings.
- B. Temporary Shoring: Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent unexpected movement or collapse of construction being demolished.
  - 1. Strengthen or add new supports when required during progress of demolition.
- C. Existing Utilities to Remain: Maintain utility services to remain and protect from damage during demolition operations.

1. Do not interrupt existing utilities serving adjacent occupied or operating facilities unless authorized in writing by Owner and authorities having jurisdiction.
  2. Provide temporary services during interruptions to existing utilities, as acceptable to Owner and authorities having jurisdiction.
    - a. Provide at least 48 hours' notice to occupants of affected buildings if shutdown of service is required during changeover.
- D. Temporary Protection: Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction and as indicated.
1. Protect adjacent buildings and facilities from damage due to demolition activities.
  2. Protect existing site improvements, appurtenances, and landscaping to remain.
  3. Erect a plainly visible fence around drip line of individual trees or around perimeter drip line of groups of trees to remain.
  4. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
  5. Provide protection to ensure safe passage of people around building demolition area and to and from occupied portions of adjacent buildings and structures.
  6. Protect walls, windows, roofs, and other adjacent exterior construction that are to remain and that are exposed to building demolition operations.
  7. Erect and maintain dustproof partitions and temporary enclosures to limit dust, noise, and dirt migration to occupied portions of adjacent buildings.
- E. Remove temporary barriers and protections where hazards no longer exist. Where open excavations or other hazardous conditions remain, leave temporary barriers and protections in place.

### 3.5 DEMOLITION, GENERAL

- A. General: Demolish indicated buildings and site improvements completely. Use methods required to complete the Work within limitations of governing regulations and as follows:
1. Do not use cutting torches until work area is cleared of flammable materials. Maintain portable fire-suppression devices during flame-cutting operations.
  2. Maintain fire watch during and for at least two (2) hours after flame-cutting operations.
  3. Maintain adequate ventilation when using cutting torches.
  4. Locate building demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- B. Site Access and Temporary Controls: Conduct building demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed trafficways if required by authorities having jurisdiction.

2. Use water mist and other suitable methods to limit spread of dust and dirt. Comply with governing environmental-protection regulations. Do not use water when it may damage adjacent construction or create hazardous or objectionable conditions, such as ice, flooding, and pollution.

C. Explosives: Use of explosives is not permitted.

### 3.6 DEMOLITION BY MECHANICAL MEANS

A. Proceed with demolition of structural framing members systematically, from higher to lower level. Complete building demolition operations above each floor or tier before disturbing supporting members on the next lower level.

B. Remove debris from elevated portions of the building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.

1. Remove structural framing members and lower to ground by method suitable to minimize ground impact and dust generation.

C. Salvage: Items to be removed and salvaged are indicated on Drawings and as identified by Owner before demolition.

D. Below-Grade Construction: Demolish foundation walls and other below-grade construction that are within footprint of new construction and extending 5 feet outside footprint indicated for new construction. Abandon below-grade construction outside this area.

1. Remove below-grade construction, including foundation walls, and footings, to at least 6 inches below grade.

E. Existing Utilities: Demolish existing utilities and below-grade utility structures that are within 5 feet outside footprint indicated for new construction. Abandon utilities outside this area.

1. Fill abandoned utility structures with satisfactory soil materials according to backfill requirements in Section 312000 "Earth Moving."

### 3.7 SITE RESTORATION

A. Below-Grade Areas: Completely fill below-grade areas and voids resulting from building demolition operations with satisfactory soil materials according to backfill requirements in Section 312000 "Earth Moving."

B. Site Grading: Uniformly rough grade area of demolished construction to a smooth surface, free from irregular surface changes. Provide a smooth transition between adjacent existing grades and new grades.

3.8 REPAIRS

- A. Promptly repair damage to adjacent buildings caused by demolition operations.

3.9 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site.
  - 1. Do not allow demolished materials to accumulate on-site.
  - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Do not burn demolished materials.

3.10 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.
  - 1. Clean roadways of debris caused by debris transport.

END OF SECTION 024116

## SECTION 024119 - SELECTIVE DEMOLITION

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Demolition and removal of selected portions of building or structure.
2. Demolition and removal of selected site elements.
3. Salvage of existing items to be reused or recycled.

B. Related Requirements:

1. Section 011000 "Summary" for restrictions on use of the premises, Owner-occupancy requirements, and phasing requirements.
2. Section 017300 "Execution" for cutting and patching procedures.
3. Section 311000 "Site Clearing" for site clearing and removal of above- and below-grade improvements not part of selective demolition.

#### 1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be salvaged or reinstalled.
- B. Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and deliver to Owner ready for reuse.

#### 1.3 MATERIALS OWNERSHIP

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

#### 1.4 PREINSTALLATION MEETINGS

- A. Predemolition Conference: Conduct conference at Project site.
1. Inspect and discuss condition of construction to be selectively demolished.
  2. Review structural load limitations of existing structure.
  3. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
  4. Review areas where existing construction is to remain and requires protection.

## 1.5 INFORMATIONAL SUBMITTALS

- A. Engineering Survey: Submit engineering survey of condition of building.
- B. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, for dust control and, for noise control. Indicate proposed locations and construction of barriers.
- C. Schedule of Selective Demolition Activities: Indicate the following:
  - 1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure Owner's on-site operations are uninterrupted.
  - 2. Interruption of utility services. Indicate how long utility services will be interrupted.
  - 3. Coordination for shutoff, capping, and continuation of utility services.
  - 4. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's partial occupancy of completed Work.

## 1.6 CLOSEOUT SUBMITTALS

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

## 1.7 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- C. Owner assumes no responsibility for buildings and structures to be demolished.
  - 1. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
  - 1. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.
- E. Storage or sale of removed items or materials on-site is not permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

## 1.8 COORDINATION

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

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

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

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
- C. Perform an engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective building demolition operations.
  - 1. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.
- D. Survey of Existing Conditions: Record existing conditions by photographs.
  - 1. Inventory and record the condition of items to be removed and salvaged.

### 3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
  - 1. Owner will arrange to shut off indicated services/systems when requested by Contractor.
  - 2. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.



3. Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components indicated on Drawings to be removed.
  - a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
  - b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material and leave in place.
  - c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
  - d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
  - e. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.

### 3.3 PROTECTION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
  1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
  2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
  3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
- B. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
  1. Strengthen or add new supports when required during progress of selective demolition.
- C. Remove temporary barricades and protections where hazards no longer exist.

### 3.4 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
  1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
  2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining

construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.

3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
  5. Maintain fire watch during and for at least 2 hours after flame-cutting operations.
  6. Maintain adequate ventilation when using cutting torches.
  7. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
  8. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
  9. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  10. Legally dispose of demolished items and materials promptly.
- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- C. Removed and Salvaged Items:
1. Clean salvaged items.
  2. Pack or crate items after cleaning. Identify contents of containers.
  3. Store items in a secure area until delivery to Owner.
  4. Transport items to Owner's storage area designated by Owner.
  5. Protect items from damage during transport and storage.
- D. Removed and Reinstalled Items:
1. Clean and repair items to functional condition adequate for intended reuse.
  2. Pack or crate items after cleaning and repairing. Identify contents of containers.
  3. Protect items from damage during transport and storage.
  4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

### 3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain, using power-driven saw, and then remove masonry between saw cuts.

### 3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.

1. Do not allow demolished materials to accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Burning: Do not burn demolished materials.

### 3.7 CLEANING

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

END OF SECTION 024119

## SECTION 033053 – MISCELLANEOUS CAST-IN-PLACE CONCRETE

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Cast-in-place concrete, including concrete materials, mixture design, placement procedures, and finishes.

#### 1.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash, slag cement, other pozzolans, and silica fume; materials subject to compliance with requirements.
- B. Water/Cement Ratio (w/cm): The ratio by weight of water to cementitious materials.

#### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Comply with ASTM C94/C94M and ACI 301.

#### 1.5 FIELD CONDITIONS

- A. Cold-Weather Placement: Comply with ACI 301 and ACI 306.1 and as follows.
  - 1. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
  - 2. When average high and low temperature is expected to fall below 40 deg F for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301.
  - 3. Do not use frozen materials or materials containing ice or snow.
  - 4. Do not place concrete in contact with surfaces less than 35 deg F, other than reinforcing steel.
  - 5. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.

- B. Hot-Weather Placement: Comply with ACI 301 and ACI 305.1, and as follows:
1. Maintain concrete temperature at time of discharge to not exceed 95 deg F.
  2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

## PART 2 - PRODUCTS

### 2.1 CONCRETE, GENERAL

- A. ACI Publications: Comply with ACI 301 unless modified by requirements in the Contract Documents.

### 2.2 CONCRETE MATERIALS

- A. Source Limitations:

1. Obtain all concrete mixtures from a single ready-mixed concrete manufacturer for entire Project.
2. Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant.
3. Obtain aggregate from single source.
4. Obtain each type of admixture from single source from single manufacturer.

- B. Cementitious Materials:

1. Portland Cement: ASTM C150/C150M, Type I , gray .
2. Performance-Based Hydraulic Cement: ASTM C1157/C1157M: Type GU, general use .

- C. Water and Water Used to Make Ice: ASTM C94/C94M, potable

### 2.3 CONCRETE MIXTURES, GENERAL

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, in accordance with ACI 301.

- B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:

1. Fly Ash or Other Pozzolans: 25 percent by mass.
2. Slag Cement: 50 percent by mass.
3. Silica Fume: 10 percent by mass.
4. Total of Fly Ash or Other Pozzolans, Slag Cement, and Silica Fume: 50 percent by mass, with fly ash or pozzolans not exceeding 25 percent by mass and silica fume not exceeding 10 percent by mass.

5. Total of Fly Ash or Other Pozzolans and Silica Fume: 35 percent by mass with fly ash or pozzolans not exceeding 25 percent by mass and silica fume not exceeding 10 percent by mass.

C. Admixtures: Use admixtures in accordance with manufacturer's written instructions.

## 2.4 CONCRETE MIXTURES

A. Class B : Normal-weight concrete used for foundation walls.

1. Exposure Class: ACI 318 F0.
2. Minimum Compressive Strength: 2500 psi at 28 days.
3. Maximum w/cm: 0.50.
4. Air Content:
  - a. Exposure Class F1: 5.0 percent, plus or minus 1.5 percent at point of delivery for concrete containing 3/4-inch nominal maximum aggregate size.
5. Limit water-soluble, chloride-ion content in hardened concrete to 1.00 percent by weight of cement.

## 2.5 CONCRETE MIXING

A. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete in accordance with ASTM C94/C94M. Mix concrete materials in appropriate drum-type batch machine mixer.

1. For mixer capacity of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than five minutes after ingredients are in mixer, before any part of batch is released.
2. For mixer capacity larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd.
3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixture time, quantity, and amount of water added. Record approximate location of final deposit in structure.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

A. Verification of Conditions:

1. Before placing concrete, verify that installation of concrete forms, accessories, and reinforcement, and embedded items is complete and that required inspections have been performed.
2. Do not proceed until unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Provide reasonable auxiliary services to accommodate field testing and inspections, acceptable to testing agency, including the following:
  - 1. Daily access to the Work.
  - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
  - 3. Secure space for storage, initial curing, and field curing of test samples, including source of water and continuous electrical power at Project site during site curing period for test samples.
  - 4. Security and protection for test samples and for testing and inspection equipment at Project site.

### 3.3 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, embedded items, and vapor retarder is complete and that required inspections are completed.
- B. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Architect in writing, but not to exceed the amount indicated on the concrete delivery ticket.
  - 1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.
- C. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of **ACI 301**, but not to exceed the amount indicated on the concrete delivery ticket.
- D. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete is placed on concrete that has hardened enough to cause seams or planes of weakness.
  - 1. Deposit concrete to avoid segregation.

### 3.4 FINISHING FORMED SURFACES

- A. As-Cast Surface Finishes:
  - 1. ACI 301 Surface Finish SF-1.0: As-cast concrete texture imparted by form-facing material.
    - a. Patch voids larger than 1-1/2 inches wide or 1/2 inch deep.
    - b. Remove projections larger than 1 inch.
    - c. Tie holes do not require patching.
    - d. Surface Tolerance: ACI 117 Class D.
    - e. Apply to concrete surfaces not exposed to public view.

### 3.5 CONCRETE CURING

- A. Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
  - 1. Comply with ACI 301 and ACI 306.1 for cold weather protection during curing.
  - 2. Comply with ACI 301 and ACI 305.1 for hot-weather protection during curing.
  - 3. Maintain moisture loss no more than 0.2 lb/sq. ft. x h before and during finishing operations.
  
- B. Curing Unformed Surfaces: Comply with ACI 308.1 as follows:
  - 1. Begin curing immediately after finishing concrete.

END OF SECTION 033000



## SECTION 099113 - EXTERIOR PAINTING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section Includes:
  - 1. Primers.
  - 2. Finish coatings.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include preparation requirements and application instructions.
  - 2. Indicate VOC content.

#### 1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Paint Products: 5 percent, but not less than 1 gal. of each material and color applied.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
  - 1. Maintain containers in clean condition, free of foreign materials and residue.
  - 2. Remove rags and waste from storage areas daily.

#### 1.6 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.

- B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. Benjamin Moore & Co.
  - 2. Coronado Paint; Benjamin Moore & Co.
  - 3. PPG Paints.
  - 4. Sherwin-Williams Company (The).
- B. Source Limitations: Obtain each paint product from single source from single manufacturer.

### 2.2 PAINT PRODUCTS, GENERAL

- A. Material Compatibility:
  - 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer based on testing and field experience.
  - 2. For each coat in a paint system, provide products recommended in writing by topcoat manufacturer for use in paint system and on substrate indicated.
- B. Colors: As selected by Architect from manufacturer's full range.

### 2.3 PRIMERS

- A. Exterior, Alkali-Resistant, Water-Based Primer: Pigmented, water-based primer formulated for use on alkaline surfaces, such as exterior plaster, vertical concrete, and masonry.
  - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Benjamin Moore & Co.
    - b. PPG Paints.
    - c. Sherwin-Williams Company (The).
- B. Water-Based Bonding Primer: Pigmented, water-based-emulsion primer formulated for exterior use and to promote adhesion of subsequent specified coatings.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - a. Benjamin Moore & Co.
  - b. PPG Paints.
  - c. Sherwin-Williams Company (The).

## 2.4 FINISH COATINGS

- A. Exterior Latex Paint, Flat: Water-based, pigmented coating; formulated for alkali, mold, microbial, and water resistance and for use on exterior surfaces, such as portland cement plaster, concrete, and primed wood.
  1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Benjamin Moore & Co.
    - b. Coronado Paint; Benjamin Moore & Co.
    - c. PPG Paints.
    - d. Sherwin-Williams Company (The).
  2. Gloss and Sheen: Manufacturer's standard flat finish.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
  1. Concrete: 12 percent.
  2. Masonry (Clay and Concrete Masonry Units): 12 percent.
  3. Portland Cement Plaster: 12 percent.
- C. Portland Cement Plaster Substrates: Verify that plaster is fully cured.
- D. Verify suitability of substrates, including surface conditions and compatibility, with finishes and primers.
- E. Proceed with coating application only after unsatisfactory conditions have been corrected.
  1. Application of coating indicates acceptance of surfaces and conditions.

### 3.2 PREPARATION

- A. Comply with manufacturer's written instructions applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
  - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
- D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
- E. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceeds that permitted in manufacturer's written instructions.

### 3.3 INSTALLATION

- A. Apply paints in accordance with manufacturer's written instructions.
  - 1. Use applicators and techniques suited for paint and substrate indicated.
  - 2. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
  - 3. Primers specified in the Exterior Painting Schedule may be omitted on items that are factory primed or factory finished if compatible with intermediate and topcoat coatings and acceptable to intermediate and topcoat paint manufacturers.
- B. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- C. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

### 3.4 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.

1. Do not clean equipment with free-draining water and prevent solvents, thinners, cleaners, and other contaminants from entering into waterways, sanitary and storm drain systems, and ground.
  2. Dispose of contaminants in accordance with requirements of authorities having jurisdiction.
  3. Allow empty paint cans to dry before disposal.
  4. Collect waste paint by type and deliver to recycling or collection facility.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

### 3.5 EXTERIOR PAINTING SCHEDULE

A. Concrete Masonry Unit Substrates:

1. Latex System:
  - a. Prime Coat: Exterior, latex block filler.
  - b. Intermediate Coat: Matching topcoat.
  - c. Topcoat: Exterior latex paint, flat.

B. Portland Cement Plaster Substrates:

1. Latex System:
  - a. Prime Coat: Exterior, alkali-resistant, water-based primer.
  - b. Intermediate Coat: Matching topcoat.
  - c. Topcoat: Exterior latex paint, flat.

END OF SECTION 099113

## SECTION 323113 - CHAIN LINK FENCES AND GATES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section Includes:

- 1. Chain-link fences.
- 2. Privacy slats.

- B. Related Requirements:

- 1. Section 033053 "Miscellaneous Cast-in-Place Concrete" for cast-in-place concrete and post footings.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

- 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for the following:
  - a. Fence posts, rails, and fittings.
  - b. Chain-link fabric, reinforcements, and attachments.
  - c. Accessories: Privacy slats.

- B. Shop Drawings: For each type of fence assembly.

- 1. Include plans, elevations, sections, details, and attachments to other work.
- 2. Include accessories, hardware, and operational clearances.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Product Certificates: For each type of chain-link fence.

- B. Sample Warranty: For special warranty.

## 1.5 FIELD CONDITIONS

- A. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

## 1.6 WARRANTY

- A. Special Warranty: Installer agrees to repair or replace components of chain-link fences that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Failure to comply with performance requirements.
    - b. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
  - 2. Warranty Period: Five years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 CHAIN-LINK FENCE FABRIC

- A. General: Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist according to "CLFMI Product Manual" and requirements indicated below:
  - 1. Fabric Height: As indicated on Drawings.
  - 2. Aluminum Wire Fabric: ASTM F 1183, with mill finish, and wire diameter of 0.148 inch.
    - a. Mesh Size: 2 inches.
  - 3. Selvage: Twisted top and knuckled bottom.

### 2.2 FENCE FRAMEWORK

- A. Posts and Rails : ASTM F 1043 for framework, including rails, braces, and line; terminal; and corner posts. Provide members with minimum dimensions and wall thickness according to ASTM F 1043 based on the following:
  - 1. Fence Height: As indicated on Drawings .
  - 2. Light-Industrial-Strength Material: Group IC-L, round steel pipe, electric-resistance-welded pipe .
    - a. Line Post: 2.5 inches in diameter.
  - 3. Horizontal Framework Members: top and bottom rails according to ASTM F 1043.
    - a. Top Rail: 1.66 inches in diameter.
  - 4. Metallic Coating for Steel Framework:
    - a. Type A: Not less than minimum 2.0-oz./sq. ft. average zinc coating according to ASTM A 123/A 123M or 4.0-oz./sq. ft. zinc coating according to ASTM A 653/A 653M.

## 2.3 FITTINGS

- A. Provide fittings according to ASTM F 626.
- B. Tie Wires, Clips, and Fasteners: According to ASTM F 626.
  - 1. Standard Round Wire Ties: For attaching chain-link fabric to posts, rails, and frames, according to the following:
    - a. Hot-Dip Galvanized Steel: 0.106-inch- diameter wire ; galvanized coating thickness matching coating thickness of chain-link fence fabric.
    - b. Aluminum: ASTM B 211; Alloy 1350-H19; 0.148-inch- diameter, mill-finished wire.
- C. Finish:
  - 1. Metallic Coating for Pressed Steel or Cast Iron: Not less than 1.2 oz./sq. ft. of zinc.

## 2.4 PRIVACY SLATS

- A. Fiber-Glass-Reinforced Plastic Slats: UV-light-stabilized fiber-glass-reinforced plastic, not less than 0.06 inch thick, sized to fit mesh specified for direction indicated.
- B. Color: As selected by Architect from manufacturer's full range .

## 2.5 GROUT AND ANCHORING CEMENT

- A. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M. Provide grout, recommended in writing by manufacturer, for exterior applications.

## PART 3 - EXECUTION

### 3.1 CHAIN-LINK FENCE INSTALLATION

- A. Install chain-link fencing according to ASTM F 567 and more stringent requirements specified.
- B. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.
- C. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.
  - 1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
  - 2. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.



- a. Posts Set into Holes in Concrete: Form or core drill holes not less than 5 inches deep and 3/4 inch larger than OD of post. Clean holes of loose material, insert posts, and fill annular space between post and concrete with nonshrink, nonmetallic grout, mixed and placed according to anchoring material manufacturer's written instructions. Finish anchorage joint to slope away from post to drain water.
- D. Line Posts: Space line posts uniformly at 10 feet o.c.
- E. Post Bracing and Intermediate Rails: Install according to ASTM F 567, maintaining plumb position and alignment of fence posts. Diagonally brace terminal posts to adjacent line posts with truss rods and turnbuckles. Install braces at end and gate posts and at both sides of corner and pull posts.
  1. Locate horizontal braces at mid height of fabric 72 inches or higher, on fences with top rail, and at two-third fabric height on fences without top rail. Install so posts are plumb when diagonal rod is under proper tension.
- F. Top Rail: Install according to ASTM F 567, maintaining plumb position and alignment of fence posts. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended in writing by fencing manufacturer.
- G. Intermediate and Bottom Rails: Secure to posts with fittings.
- H. Chain-Link Fabric: Apply fabric to outside of enclosing framework. Leave 1-inch bottom clearance between finish grade or surface and bottom selvage unless otherwise indicated. Pull fabric taut and tie to posts, rails, and tension wires. Anchor to framework so fabric remains under tension after pulling force is released.
- I. Tension or Stretcher Bars: Thread through fabric and secure to end, corner, pull, and gate posts, with tension bands spaced not more than 15 inches o.c.
- J. Tie Wires: Use wire of proper length to firmly secure fabric to line posts and rails. Attach wire at one end to chain-link fabric, wrap wire around post a minimum of 180 degrees, and attach other end to chain-link fabric according to ASTM F 626. Bend ends of wire to minimize hazard to individuals and clothing.
  1. Maximum Spacing: Tie fabric to line posts at 12 inches o.c. and to braces at 24 inches o.c.
- K. Fasteners: Install nuts for tension bands and carriage bolts on the side of fence opposite the fabric side. Peen ends of bolts or score threads to prevent removal of nuts.
- L. Privacy Slats: Install slats in direction indicated, securely locked in place.
  1. Vertically, for privacy factor of 70 to 75.

END OF SECTION 323113