

Specifications Handbook for Facade Restoration Improvements to 711- 713 North Main Street Columbia, Tennessee

May 26th, 2017



05/26/2017



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SITEWORK

NOT APPLICABLE

DIVISION 3

CONCRETE

NOT APPLICABLE

DIVISION 4

MASONRY

FOR REPOINTING REQUIREMENTS IMPLEMENTED THIS PROJECT AND AREAS SPECIFICALLY NOTED ON THE DRAWINGS, THE CONTRACTOR IS TO FAMILIARIZE THEMSELVES WITH THE NATIONAL PARK SERVICE WEBSITE PRESERVATION CIRCULAR WHICH SPECIFICALLY ADDRESSES REPOINTING MORTAR JOINTS. REFERENCE THE FOLLOWING LINK FOR SPECIFICS BY WHICH THIS PROJECT WILL BE REQUIRED TO BE REPAIRED: <https://www.nps.gov/tps/how-to-preserve/briefs/2-repoint-mortar-joints.htm>

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SECTION 00020 - FORM OF PROPOSAL

The work to be included in this proposal shall include all the work required for the FACADE RESTORATION IMPROVEMENTS TO 711-713 NORTH MAIN STREET, COLUMBIA, TENNESSEE as set out in the plans and specifications and as described herein.

Bids will be received by the Office of City Engineer, Conference Room A, 700 North Garden Street, Columbia, TN 38401 until and no later than 2:30 PM, CST, Tuesday, June 20, 2017. Each bid shall be in a sealed envelope which is plainly marked "FACADE RESTORATION IMPROVEMENTS TO 711-713 NORTH MAIN STREET". The bidder's name, address, Contractor's and all Subcontractor's license numbers shall appear on the envelope per State of Tennessee laws and regulations. All bids must be submitted on the forms hereto. Qualifications of any bid are unacceptable. Any bid qualified will be considered null and void.

Invited Contractors will each receive a digital copy of the plans and specifications from Nuber Architecture at no charge. Contractor's wishing to inspect drawings locally may set up an appointment with George Nuber at (931) 540-8045, extension #3. Additionally, a drop box link will be e-mailed to each bidding Contractor which contains existing photographs in addition to the bid documents photos. These photographs are at a higher resolution for the Contractor's convenience.

In accordance with the Instructions to Bidders upon submitting bids equal to or greater than twenty-five thousand dollars (\$25,000.00) in value are required to be licensed in accordance with Tennessee State laws.

The Owner reserves the right to waive formalities and to reject any or all bids whenever it is deemed to be in the best interest of the Owner.

END OF SECTION 00020

SECTION 00100 - INSTRUCTIONS TO BIDDERS

1. RECEIPT AND OPENING OF PROPOSALS

"CITY OF COLUMBIA", herein called the Owner, invites bids of the form attached hereto, all blanks of which must be appropriately filled in. Bids will be received by the Owner and privately opened. The envelopes containing the bids must be sealed, addressed to the Owner, and must bear the following information on the outside:

Name of Bidder and Bidder's Major Subcontractor(s)
Addresses
Tennessee License Numbers
License Classifications
License Expiration Dates
Names of Project and Contract for which Bid is submitted
Date

The Bidder shall be licensed in the State of Tennessee, with proper classification, technical competence and experience to perform the work.

The Owner may consider informally any bid not prepared and submitted in accordance with the provisions hereof, and waive any formalities or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of the bids or authorized postponement thereof. Any bid received after the time and date specified, shall not be considered. The contractor may alter their bid prior to the scheduled time of the amount stated on the attached bid form by clearly indicating on the envelope "Add" or "Deduct" followed by the adjusted amount.

2. PREPARATION OF PROPOSAL

The Bidder must submit his proposal on the forms furnished herein. PROPOSAL FORMS CAN BE DETACHED FROM THIS PROJECT MANUAL BOOK. ALL BLANK SPACES IN THE PROPOSAL FORMS MUST BE FILLED IN. The bid price must be written in numerals in ink. The words, unless obviously incorrect, will govern. No qualifying letters or statements attached to the bid form will be considered.

3. QUALIFICATIONS OF BIDDER

The Owner may make such investigations is deemed necessary to determine the quality of the Bidder to perform the work, and the Bidder shall furnish the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigations of such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein.

4. BID BOND

Each proposal must be accompanied by a bidder's bond from a Surety company acceptable to the Owner, or a cashier's check made payable to the Owner for not less

than five percent (5%) of the total amount of the bid. Checks will be returned to all except the three lowest bidders within three days after the opening of the bids, and the remaining checks will be returned promptly after the Owner and the accepted Bidder have executed the Contract, or if no award has been made within sixty (60) days after the date of the opening bids, upon demand of the bidder at any time thereafter, so long as Bidder has not been notified of bid acceptance.

5. CONDITIONS OF WORK

Each Bidder must inform himself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful Bidder of obligations to furnish all material and labor necessary to carry out the provisions of the Contract. Insofar as possible, the contractor, in carrying out the work, must employ such methods or means as will not cause any interruptions of or interference with the work of another contractor.

6. ADDENDA AND INTERPRETATION

- A. If any person contemplating submitting a bid for construction of the work is in doubt as to the true meaning of any part of the proposed Contract Documents, or find discrepancies in or omission from any part of the proposed Contract Documents, said person may submit to the Architect a written request for interpretation thereof not later than five (5) business days before bids will be opened. The person submitting the request shall be responsible for its prompt delivery.
- B. Interpretation or correction of proposed Contract Documents will be made only by Addendum and will be mailed, E-mailed, faxed or hand delivered to each general contractor bidder of record. The Owner will not be responsible for any other explanations or interpretations of the proposed Contract Documents.

7. PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND

The Contractor shall furnish a Surety Bond or cashier's check of the Contract Price covering faithful performance of the Contract and the payment of all obligations arising thereunder in such form as the Owner may prescribe. The premium for these securities shall be paid by the Contractor.

These Bonds shall remain in effect at least until one (1) year after the date when final payment becomes due, except as otherwise provided by Law or Regulation or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Supplementary Conditions. All Bonds shall be in the forms prescribed by Law or Regulation or by the Contract Documents and be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department.

8. POWER OF ATTORNEY

Attorneys-in-fact who sign Bid Bonds and Contract bonds must file with each bond a certified and effectively dated copy of their Power-of-Attorney.

9. LAWS AND OBLIGATIONS

The Bidder's attention is directed to the fact that all applicable State Laws, Municipal Ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as through herein written out in full.

10. OBLIGATION OF BIDDER

At the time of the opening of bids, each Bidder will be required to have thoroughly familiarized themselves with the Plans and Contract documents (including acknowledgement of all addendum numbers on the bid form). The failure or omission of any Bidder to examine any form, instrument, or document shall in no way relieve the Bidder from obligation in respect to their bid. No allowance will be made any Bidder because of lack of such examination or knowledge. The submission of a bid will be construed as conclusive evidence that the Bidder has made such examination. No bids can contain substitutions without written approval from the Architect that the product substitutions have been accepted as an equal to that specified.

11. PLANS

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12. LIQUIDATED DAMAGES

Liquidated damages and time conditions for liquidated damages are established in Supplementary Conditions 00810. Time for completion is identified in Bid Forms. Amount of liquidated damages will be determined by the Owner and the Contractor and shall be established prior to signing the Owner/Contractor Agreement.

END OF SECTION 00100

BID FORM

DATE

COUNTY

STATE

The undersigned, having examined the site and examined all Plans, Specifications and applicable addenda for the FACADE RESTORATION IMPROVEMENTS TO 711-713 NORTH MAIN STREET, COLUMBIA, TENNESSEE as prepared by Nuber Architecture LLC, submit the following proposal:

BASE BID

The undersigned, having visited the site and examined the conditions affecting the work, hereby propose to furnish all labor and materials and do all work complete as called for in the Plans and Specifications for the FACADE RESTORATION IMPROVEMENTS TO 711-713 NORTH MAIN STREET, COLUMBIA, TENNESSEE for the sum of:

Dollars (\$ _____).

Addendum Acknowledged

No. 1 _____

No. 2 _____

No. 3 _____

No. 4 _____

CONTRACTOR:

BY:

ADDRESS:

LICENSE NO.:

Bid Dated this _____ day of _____, 20____.

LINE ITEM BIDS FOR OWNER EVALUATION

The Owner has requested that the following line items be included for the purpose of grant funding procurement and determination of city of Columbia funding. **To clarify, the below line items bids are understood to be included in the base bid.**

I. PAINTING OF EXTERIOR BRICK, CONDUCTOR HEAD, AND DOWN SPOUT

The below bid amount reflects labor and materials to prepare and paint the exterior “red” brick, the existing conductor head, and existing down spout as called for in the drawings and specifications.

Dollars (\$ _____).

II. REPOINTING BRICKWORK

The below bid amount reflects labor and materials to remove and replace water damaged mortar joints where specifically requested to address in the drawings. This bid below should not reflect other requested work in the project and assumes that the Owner will request the building be painted.

Dollars (\$ _____).

III. REPAINT METAL CORNICE (TOP OF BUILDING)

The below bid amount reflects labor and materials to prepare and paint the existing metal cornice work at the top of building. All work associated with the repair of the upper left and right ornaments, flashing rework at the ornament caps, and sealing of the ornaments against water infiltration are included in this bid. This bid below should not reflect other requested work not specifically mentioned in this bid scope line item.

Dollars (\$ _____).

IV. REPAINT METAL EYEBROW WINDOW FEATURE (7 TOTAL)

The below bid amount reflects labor and materials to prepare and paint the existing metal painted metal eyebrow features at the top of the upper single hung window units. All work associated with the metal repair of eyebrow caps specifically mentioned in the drawings, sealing of the eyebrow metalwork against water infiltration, and leveling compound applied to properly drain water off the top of the metalwork is to be included in this bid. This bid below should not reflect other requested work not specifically mentioned in this bid scope line item.

Dollars (\$ _____).

V. PROVIDE NEW PAINTED METAL CORNICE ABOVE LOWER STOREFRONT

The below bid amount reflects labor and materials to provide, install, prepare, paint a new metal cornice to be located above the existing lower storefront as directed in the drawings. All work associated with the preparation, installation, and painting of this specifically mentioned metal cornice is to be included in this bid. This bid below should not reflect other requested work not specifically mentioned in this bid scope line item.

Dollars (\$ _____).

VI. REPAIR, SAND, AND REPAINT EXTERIOR "WHITE" WOOD COLUMNS AND "WHITE" JAMBS

The below bid amount reflects labor and materials to repair wood damaged exterior columns, sand, and paint columns as directed in the drawings. All work associated with the preparation and painting of these specifically mentioned wood components is to be included in this bid. This bid below should not reflect other requested work not specifically mentioned in this bid scope line item.

Dollars (\$ _____).

VII. REPAIR, SAND, AND REPAINT WOOD STOREFRONT EXTERIOR INCLUDING THE REPLACEMENT OF TWO NEW DOUBLE DOORS AND HARDWARE. THIS SCOPE OF WORK INCLUDES REPAIR AND PAINTING OF THE INTERIOR STOREFRONT UNITS CURRENTLY PAINTED "WHITE"

The below bid amount reflects labor and materials to repair and repaint all lower exterior storefront fixed framed window units (painted "green"), door assemblies to remain, and the replacement of two double doors as specifically mentioned in the drawings. This work includes the repair and painting of the interior wood components painted "white". All work associated with the preparation and painting of these specifically mentioned wood component items is to be included in this bid. This bid below should not reflect other requested work not specifically mentioned in this bid scope line item.

Dollars (\$ _____).

VIII. REPAIR, SAND, AND REPAINT EXTERIOR WOOD UPPER SINGLE HUNG WINDOW UNITS AND INTERIOR ASSEMBLY FROM THE REPLACED WOOD STOP OUTWARD (INTERIOR JAMB, HEAD, AND SILLS WILL BE RESTORED AT A LATER DATE AND NOT INCLUDED IN THIS WORK SCOPE)

The below bid amount reflects labor and materials to repair, rebuild as noted in the drawings, and repaint all upper exterior single hung window units as specifically mentioned in the drawings. This work includes the interior repair and painting of the replaced wood stop, interior sashes, weatherstripping, and interior low-e film. All work associated with the preparation and painting of these specifically mentioned wood component items is to be included in this bid. This bid below should not reflect other requested work not specifically mentioned in this bid scope line item.

Dollars (\$ _____).

IX. PROVIDE NEW PAINTED METAL CORNICE ABOVE LOWER STOREFRONT

The below bid amount reflects labor and materials to provide, install, prepare, paint a new metal cornice to be located above the existing lower storefront as directed in the drawings. All work associated with the preparation, installation, and painting of this specifically mentioned metal cornice is to be included in this bid. This bid below should not reflect other requested work not specifically mentioned in this bid scope line item.

Dollars (\$ _____).

END OF SECTION 00300

AGREEMENT FORM

The Contract for this project shall be AIA Document A101, "Standard Form of Agreement Between Owner and Contractor", Stipulated Sum, 2007 edition as printed by the American Institute of Architects, 1735 New York Avenue, N.W., Washington, D.C. 20006, is hereby made a part of this agreement.

A copy of the referenced AIA Document is on file at the office of Nuber Architecture, LLC, 1069 Rolling Fields Circle, Columbia, TN 38401. All persons intending to provide goods or services in Connection with Work as applicable are advised to read and understand the referenced AIA Document before proceeding. GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

The Owner has indicated an intention to use AIA Document A201, "General Conditions of the Contract for Construction", 2007, as part of the Contract Documents for this Work.

A copy of the referenced AIA Document is on file at the office of Nuber Architecture, LLC, 1069 Rolling Fields Circle, Columbia, TN 38401. All persons intending to provide goods or services in connection with Work as applicable are advised to read and understand the referenced AIA Document before proceeding.

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SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The General Conditions of the Contract for Construction, AIA Documents A201, Sixteenth Edition, 2007, Articles 1 through 15 inclusive, is a part of this Contract, and is incorporated herein as fully as if here set forth.
- B. 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 or clause shall remain in effect. In the case of conflict between these supplements and the General Conditions identified above, the more stringent clause, as determined by the Owner, shall govern.

1.02 MODIFICATIONS/HEADING TO ARTICLE 1 GENERAL PROVISIONS

A. 1.1 BASIC DEFINITIONS

1. Subparagraph 1.1.1 THE CONTRACT DOCUMENTS

Add the following subparagraphs:

- a. The Contract Documents shall apply to the Contractor and all subcontractors, and it is their responsibility to become familiar with these Documents. In the case of conflict among these Documents, the more stringent requirement, as determined by the Owner, shall govern.

2. Add Subparagraph 1.1.9 THE SURETY

Add the following subparagraphs:

- a. The Surety shall be defined as the corporate body which is bound with and for the Contractor and which engages to be responsible for his acceptable performance of the Work and for his payment of all debts pertaining to the Work, and which body is licensed to do business within the State in which the Project is located.

The Surety shall be listed with the United States Department of the Treasury.

b. 1.1.10 APPROVED

The word "approved" shall be defined as the written approval by the Owner, except as otherwise modified. The terms "directed," "required," "permitted," or words of like import, shall be considered as similarly

defined as to the party directing, requiring, permitting, or similarly instructing the Contractor.

c. 1.1.11 PROVIDE OR PROVIDED

The words "provide" or "Provided" shall be defined as both furnishing and installing a thing, product, system, assembly, material, or the like.

d. 1.1.12 ALL

"All" is implied throughout the Trade Sections of the Specifications and shall mean to do or accomplish all things under the contract, except where other provisions are specified. Hence, the use of the word "All" is limited, in general, to the general parts of the Work, and the work included in the Scope of each and every Trade Section, or to residuary legate clauses requiring the doing of the things expect those sequentially listed as excluded.

e. 1.1.13 PRODUCT

Wherever the word "product" appears within the Contract Documents, it shall be understood to mean materials, equipment, assembly, manufacturers, brands, trade names, items of similar description as applicable.

f. 1.1.14 TRADE

The word "Trade" (with initial capital letter) is used herein to designate a Section title and not a trade or craft as set up for labor jurisdiction in an area.

B. Paragraph 1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

1. Subparagraph 1.2.2

Add the Following:

- a. Extra payments will not be authorized for work that could have been reasonably inferred from the contract documents. Coordination of the respective trades to perform the complete scope of the Work will be the responsibility of the General Contractor.

2. At the end of Paragraph 1.2.

Add the following Subparagraphs:

- a. 1.2.4 Scope paragraphs of the Sections present a brief indication of the principal work included primarily in that Section, but do not limit work

to subjects specifically mentioned nor do they purport to itemize all work that may be included.

- b. 1.2.5 Large scale details shall, in general, govern and take precedence over small scale details, which they are intended to amplify. Do not obtain dimensions by scaling. In cases of discrepancy between Drawings and Specifications, consult the Architect before proceeding with the work. Should the Architect fail to be notified prior to commencement of the work, the responsibility for the work shall be that of the Contractor.

1.03 MODIFICATIONS TO ARTICLE 3 CONTRACTOR

A. Paragraph 3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

- 1. Add the following subparagraphs:
 - a. 3.3.4 The Contractor shall layout all the Work as required by the Drawings and be held responsible for damage, if any is incurred, due to incorrect layout of Work. The Contractor shall establish all building lines, bench marks, and labels from which all trades can work, and take necessary measures to keep the marks in visible evidence throughout all stages of the Work.
 - b. 3.3.5 In order to insure proper progress to Work, the Contractor shall be prepared to guarantee to each of his Subcontractors the dimensions which they may require for proper fitting of their work to all adjacent or adjoining work.
 - c. 3.3.6 The Contractor shall verify all measurements at buildings and premises, and where necessary, measurements cannot be secured at the Project when required, the matter shall be referred to the Architect.
- 2. Subparagraph 3.12.5
 - a. In the first line, delete the word, "approve" and substitute "stamp with his approval".

1.04 MODIFICATIONS TO ARTICLE 5 SUBCONTRACTORS

1. Subparagraph 5.2.1

At the end of the subparagraph, add the following:

- a. No work shall be commenced until the names of the Subcontractors have been given in writing to the Owners. If required, the Contractor shall furnish evidence satisfactory to the Owners showing that any or all proposed Subcontractors are competent to execute the various parts of the Work covered by their subcontract.

1.05 MODIFICATIONS TO ARTICLE 9 PAYMENTS AND COMPLETION

1. Subparagraph 9.2

After this subparagraph, add the following:

- a. The schedule of values of the various portions of the Work shall be submitted on AIA form G703 shall be filled out in full as directed.

2. Subparagraph 9.3.3

After this subparagraph, add the following subparagraphs:

- a. 9.3.3.4 Unless otherwise stated in the Agreement, the Owner will retain 5% of the amount due the Contractor on account of progress payments.
- b. 9.3.3.5 Starting with the second Application for Payment, the Contractor shall verify that he has paid all Subcontractors and major material suppliers that amount drawn on the previous payment for their respective areas.

3. Subparagraph 9.10.2

Ad the end of this subparagraph, add the following:

- a. Forms for release shall be AIA G706 and G706A.

1.06 MODIFICATIONS TO ARTICLE 11 INSURANCE AND BONDS

1. Subparagraph 11.1.2

After this subparagraph, add the following:

- a. 11.1.2.1 The contractor shall maintain, throughout the life of the Contract, insurance satisfactory to the Owner providing not less than the following minimum coverage:

Workmen's Compensation Insurance: Workmen's Compensation as required by Statutory law and including Employer's Liability (Coverage B) with limits not less that \$500,000.00.

- b. Public Liability Insurance:

- 1. Comprehensive General Liability Insurance - This is the basic insurance which covers the Contractor for is negligent acts, errors, and omissions.

2. Contractor's Protective Liability Insurance - This insurance protects a contractor from Liability arising from the negligent acts of his subcontractors.
3. Blanket Contractual Liability Insurance - This is an extension of the regular general liability policy to cover any written contract entered into by the insured contractor.
4. Completed Operations Liability Insurance - This form of insurance extends the time limit of the general liability policy to cover claims that may arise after work has been completed and turned over to the Owner.

Contractor's Comprehensive Liability Insurance including Automobile. Combined single limit or equivalent split limits:

Bodily Injury: Each person	\$1,000,000.00
Each occurrence	\$1,000,000.00
Annual Aggregate	\$2,000,000.00

Property Damage including completed Operations Broad Form

Each occurrence	\$1,000,000.00
Annual Aggregate	\$2,000,000.00

Automobile Liability - Owned, no-owned and hired:

Bodily injury each person	\$ 500,000.00
Bodily injury each occurrence	\$1,000,000.00
Property damage each occurrence	\$ 500,000.00

XCU coverage: The certificate of insurance shall state that the XCU exclusions have been eliminated.

2. Subparagraph 11.1.3

Delete the first two sentences and add the following:

- a. 11.1.5 Each policy shall provide EITHER IN THE BODY OF THE POLICY OR BY APPROPRIATE ENDORSEMENT (RIDER) TO THE POLICY, that such policy cannot be altered or canceled in less than twenty (20) consecutive calendar days after receipt by the Owner of such written notice.
- b. 11.1.6 The Contractor shall furnish a certificate of Insurance certifying that the insurance requirements, as set forth herein, have been included in the insurance policies. This Certificate of Insurance shall state the amounts of insurance and shall contain the clauses set forth herein. The Certificate of

Insurance must be approved by the Owner prior to the commencement of the Work.

END OF SECTION 00800

SECTION 00810 - SUPPLEMENTARY CONDITIONS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. The specifications entitled SUPPLEMENTARY CONDITIONS OF THE CONTRACT FOR CONSTRUCTION are intended to amend or supplement the Supplementary General Conditions. Where any variance or discrepancy occurs, the Supplemental Conditions shall take precedence over the General Conditions.

1.02 BIDS

- A. Before submitting a proposal, each bidder shall carefully examine the plans and specifications, visit the site of work, inform themselves fully concerning the existing conditions, and shall make a proposal to carry out the work or construction in strict accord with the plans and specifications. Should a bidder find discrepancies or omissions from the plans and specifications or be in doubt as to their meaning, bidder shall at once notify the Architect, who will send out written instructions to all bidders on the point(s) in questions.
- B. Neither the Owner nor the Architect will be responsible for any oral instructions or statements.
- C. Addenda may be issued during the time of the preparation of the bids. Such addenda shall be covered in the proposals and will become part of the contract.
- D. A bidder to whom this contract is awarded, and who fails to execute the contract documents properly and furnish the required performance bond for the faithful performance of their contract and for the payment of all persons performing labor on the project under this contract, shall forfeit their cashier's check or be liable to the action on their bid bond.
- E. The surety company must be licensed to do business in the State of Tennessee. Any bond signed by an attorney-in-fact must have Power of Attorney attached and the agent signing the bond may or may not be a resident of the State of Tennessee.

1.03 GENERAL CONTRACTORS LICENSE

- A. All bidders must be licensed contractors as required by Public Chapter 6 of the Contractor's Licensing Act of 1991 and subsequent amendments thereto. The Contractor's name, license number, expiration date, description of license classification and limit must be shown on the outside of the envelope containing his bid. Any bid not meeting this requirement will be rejected and returned to the bidder unopened.
- B. A subcontractor doing work in HVAC, Plumbing or Electrical classifications where the subcontract is equal to or exceeds \$25,000.00, must be licensed in accord with the Contractor's Licensing Act of 1991, Chapter 6 and amendments thereto, and the same

information required for the General Contractor above must be shown on the outside of the envelope containing the General Contractor's bid.

1.04 PAYMENTS

- A. Payments to the Contractor will be made on the basis of monthly estimates submitted to the Architect on or before the fifth day of each calendar month during the execution of the contract and shall cover the period up to the first day of that month. Five percent (5%) of the amount of each estimate will be retained by the Owner as a guarantee until time of payment of the final estimate. Payment to the Contractor will be made by the Owner by the fifteenth day of the month in which the estimate is made. Final settlement will be made within fifteen (15) days after final acceptance of the contract by the Owner, complete, as covered by and provided for in these specifications and plans. Estimates shall include all labor and materials delivered and stored at the site, but shall not include materials or equipment stored elsewhere, except as described in Article 9.3.2 of the General Conditions.

1.05 INSURANCE

- A. The Contractor shall obtain at least five (5) days prior to starting work all insurance required under this paragraph and such insurance must be approved by the Owner, and the Contractor shall not allow any Subcontractor to commence work on his subcontract until the insurance required of the Subcontractor has been so obtained and approved.
- B. COMPENSATION INSURANCE: The Contractor shall procure and shall maintain during the life of this contract Workmen's Compensation Insurance as required by the applicable State of Territorial Law for all employees to be engaged in work at the site of the project under this contract and, in case of any such work sublet, the Contract for all of the latter's employees to be engaged in such work, unless such employees are covered by the protection afforded by the Contractor's Workmen's Compensation Insurance. In case any class of employees engaged in hazardous work on the project under this contract shall provide and shall cause each subcontractor to provide adequate Employer's Liability Insurance for the protection of such employees not otherwise protected.
- C. BUILDERS RISK INSURANCE (FIRE AND EXTENDED COVERAGE): Until the project is completed and accepted by the Owner, the Owner will maintain Builder's Risk Insurance (fire and extended coverage) on a 100% completed value basis on the insurable portion of the project.
- D. PROOF OF CARRIAGE OF INSURANCE: The Contractor shall furnish the Owner with certificates showing the type, amount, class of operations covered, effective dates and following statements: "The insurance covered by this certificate will not be canceled or materially altered, except after twenty (20) days written notice has been received by the Owner.

1.06 OMISSIONS

- A. The drawings and specifications are intended to cooperate. Anything shown on the drawings, but not mentioned in the specifications or vice versa, or anything not expressly set forth in either, but which is reasonably implied, shall be furnished as though specifically shown or mentioned in both, without extra charge.

1.07 INTERPRETATIONS, DIMENSIONS, ETC.

- A. These specifications and the accompanying drawings are to be interpreted according to their full intent, meaning and spirit whether taken together or separately. Taken together, they shall be deemed to mutually explain each other and to be descriptive of the work to be performed under the contract, but should there be any discrepancy between the drawings and the specifications or between the figures on the drawings and the scale set forth on the drawings designating the materials, the work of the specifications shall take precedence in all cases.
- B. The figures on the drawings shall take precedence over the scale. The details or large-scale drawings shall take precedence over the smaller-scale drawings.
- C. All dimensions and conditions of existing work shown on drawings are for the design. The Contractor shall verify them at job site before proceeding with the work. Any variations that would materially affect the work shall be called to the Architect's attention.
- D. The Contractor is not to make alterations or corrections in the drawings or specifications, but should any error appear, it shall be referred to the Architect for corrections before bids are submitted or the work proceeded with.

1.08 "OR EQUAL" CLAUSE

- A. Whenever a material or article is specified or shown on plans by using the name of the proprietary product of a vendor, any material or article of similar quality, workmanship, and materials which will perform adequately the duties imposed by the general design and requirements will be considered satisfactory or equal upon approval of the Architect in writing. Any substitutions used without Architect's prior approval will be at the Contractor's own risk, and cost of changes will be borne by the Contractor.
- B. The Contractor shall furnish sufficient data to fully describe material proposed by substitution. All substitution requests may be made no later than five (5) calendar days prior to the bid date and no substitution requests will be permitted after the bid unless the specified products are no longer available.

1.09 AWARDS OF SUBCONTRACTS

- A. As soon as practicable after bids are received, and not later than ten (10) days after award of the contract, the General Contractor shall furnish to the Architect, in writing for acceptance by the Owner and Architect, a list of the names of any Subcontractors and Material Vendors proposed for the work. The Architect and Owner reserve the right to

disqualify a proposed Subcontractor or other person or Material Vendor for insufficient proof of ability of compliance with the work. In the event of disqualification by the Architect or Owner, the Contractor shall submit an acceptable substitute without increase in the contract sum. This paragraph supersedes Article 5.2.1, 5.2.2, 5.2.3, & 5.2.4 of the General Conditions.

- B. The Contractor may utilize the services of specialty subcontractors on those parts of work which, under normal contracting practices, are performed by specialty subcontractors.
- C. The Contractor shall not award any work to any subcontractor without prior written approval of the Owner, which approval will not be given until the Contractor submits to the Owner a written statement concerning the proposed award to the subcontractor which statement shall contain such information as the Owner may require.
- D. The Contractor shall be as fully responsible to the Owner for the acts and omissions of their Subcontractors, and of persons either directly or indirectly employed by them, as the Contractor is for the acts and omissions of persons directly employed by said Contractor.
- E. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind Subcontractors to the contract by the terms of the General Conditions and other contract documents insofar as applicable to the work of Subcontractors, and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provision of the contract documents.
- F. Nothing contained in this contract shall create any contractual relation between Subcontractor and the Owner.

1.10 DRAWINGS

- A. The general character of the detailed work is shown on the drawings, but minor modifications may be made in the large scale details. The Contractor shall notify the Architect if additional drawings will be necessary and the date when such drawings are required. The architect will endeavor to supply these drawings so as not to delay the construction. The Contractor shall not attempt to execute any part of the work requiring such drawings until he has received them. All drawings changes must be approved and signed by the Architect and/or Owner.

1.11 ARCHITECT'S AUTHORITY

- A. The Architect shall determine the amount, quality, acceptability and fitness of the several kinds of work and materials which are to be paid for under this contract and shall decide all questions which may arise in relation to said work and the construction thereof. The Architect's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any questions shall arise between the parties hereto relative to said contract or specifications, the determination or decision of the Architect shall be a condition precedent to the right of the Contractor to receive any

money or payment for such work under this contract affected in any manner or to any extent by such question.

- B. The Architect shall, at his sole discretion, decide the meaning and intent of any portion of the specifications, plans or drawings where the same may be found obscure or may be in dispute. Any differences of conflicts in regard to their work may arise between the Contractor under the contract and other contractors performing work for the Owner shall be adjusted and determined by the Architect.

1.12 CONTRACTOR

- A. Only one (1) contractor is recognized as a party to the contract, and where the term "Contractor" is used, the General Contractor is referred to as deemed practical to this project.
- B. For convenience, the specifications have been divided into separate headings and divisions to cover the various trades represented in the work, and where other subcontractors are referred to, it has been for convenience only.
- C. It is understood that, except as otherwise specifically stated in the contract documents, the Contractor shall provide any pay for all materials, labor, permits, fees, tools, equipment, transportation, superintendence, temporary construction of every nature, all other services, facilities, and cost of every other nature whatsoever necessary to execute and complete the entire work to be done under the contract documents and deliver complete in every respect.

1.13 SEQUENCE OF CONSTRUCTION

- A. The Contractor shall start construction of the work immediately after award of the contract, but shall do no work on the premises that would cause any interruption to the Owner's activities except under the direct instructions or approval of the Owner or Architect. The Contractor shall notify the Architect in writing when they determine that an interruption in services or adjustments to the Owner's activities is necessary. The Owner shall approve such interruption prior to the Contractor's execution in writing.

1.14 CONSTRUCTION SCHEDULE

- A. The Contractor shall submit to the Architect and Owner, as soon after award of contract as possible, a progress schedule of construction in form as approved by the Architect. The schedule shall show the proposed dates of starting and completion of each branch of the work, and the estimated delivery date of materials and equipment.

1.15 GENERAL GUARANTEE

- A. Neither the final certificate of payment nor any provision in the contract documents nor partial or entire occupancy of the premises by the Owner shall constitute an acceptance of work not done in accordance with the contract documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall remedy any defects in the work and pay for all

damage to other work resulting therefrom, which shall appear within a period of one (1) year from the date of final acceptance of the work unless a longer period is specified. The Owner will give notice of observed defects with reasonable promptness.

1.16 CONSTRUCTION TIME AND LIQUIDATED DAMAGES

- A. Bidder must agree to commence work on or before a date to be specified in a written "Notice To Proceed" by the Owner and to fully complete the project within forty-five (45) consecutive calendar days.
- B. The agreement shall include a stipulated amount that will be determined by the Owner and the Contractor prior to signing the Owner/Contractor Agreement, that the Contractor shall pay to the Owner as liquidated damages, and not as a penalty. The agreed amount will be per calendar day for each calendar day after the agreed completion date that the Work is not fully certified by the Architect as being Substantially Complete as that stage of completion is defined in the Conditions of the Contract.

END OF SECTION 00810

SECTION 00850 - INDEX OF DRAWINGS

A1	Cover Sheet
A2	Existing Facility Facade Overall Photograph
A3	General Notes and Keynote Requirements
A4	Enlarged Photographs/Keynote Callouts
A5	Enlarged Photographs/Keynote Callouts
A6	Enlarged Photographs/Keynote Callouts
A7	Enlarged Photographs/Keynote Callouts
A8	Record Document Elevation / Demolition Requirements
A9	Proposed Facade Elevation / Painting Scheme
A10	Replacement Door Elevations / Cornice Profile Section
A11	Enlarged Photographs/Keynote Callouts
A12	Enlarged Photographs/Keynote Callouts
A13	Enlarged Photographs/Keynote Callouts/Weatherstripping Details

END OF INDEX OF DRAWINGS

SECTION 00890 - NOTICE TO PROCEED

DATE: _____

TO: _____

PROJECT: _____

You are hereby notified to commence WORK in accordance with the Agreement dated _____, 20__, on or before _____, 20__, and you are to complete the project within forty-five (45) consecutive calendar days. The date of completion of all WORK is therefore _____, 20__.

OWNER:

BY:

TITLE:

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by _____ this the _____ day of _____, 20__.

BY: _____

TITLE: _____

SECTION 01010 - SUMMARY OF WORK

PART 1 - GENERAL

1.01 WORK UNDER THIS CONTRACT

- A. The work included under these specifications and the accompanying drawings consist of providing all items, articles, materials, operations, or methods listed, mentioned, or scheduled on the drawings and/or herein, including all labor, materials, services, equipment, and incidentals necessary for their completion.
 - 1. To provide all materials, systems, labor and equipment as called out on the Plans and Specifications for the FACADE RESTORATION IMPROVEMENTS FOR 711-713 NORTH MAIN STREET, COLUMBIA, TENNESSEE.

1.02 WORK PERFORMED UNDER SEPARATE CONTRACTS (AS APPLICABLE)

- A. Work denoted as "Not in Contract" (NIC) will be furnished by the Owner or by others under separate contract(s) as applicable. Regardless, The Contractor will install Owner provided items as directed in the drawings. Contractor shall rough-in and make connections of mechanical and electrical services as required for work not in contract.

1.03 WORK BY OTHERS

- A. Cooperate with other contractors or Owner's work crews for work on this project in the arrangement for storage of materials and the detailed work of these separate contractors and notify the Architect immediately of lack of progress or defective workmanship on their part where such delay or such defective workmanship will interfere with Contractor's own operations. Contractor's failure to give notice of lack of progress or defective workmanship by others shall be construed as acceptance by the Contractor of the status of work as being satisfactory for proper coordination with Contractor's own work.

1.04 APPLICABLE CODES

- A. Major codes to date governing this project are:
 - 2012 International Building Code with Local Amendments.
 - 2009 International Energy Conservation Code.
 - 2012 International Plumbing Code with Local Amendments.
 - 2012 International Mechanical Code with Local Amendments.
 - 2012 International Fuel Gas Code with Local Amendments.
 - 2012 National Electrical Code with Local Amendments.
 - 2010 ADA Disability Act
- B. In Case of conflict, the most stringent requirements shall apply.

- C. All references to codes, specifications, and standards in the specification sections and on the drawings shall mean, and are intended to be, the latest edition, amendment to revisions of such reference standard in effect as of the date of these contract documents.

1.05 COORDINATION OF WORK

- A. As applicable, the General Contractor and Subcontractors shall review other sections of work applicable to their work and ascertain requirements in other sections applicable to their own work. Each shall be held responsible for coordination and inclusion of the work indicated as if it were in the particular subcontractor's section. The Architect shall be advised of any discrepancies or conflicts at the earliest moment.
- B. All subcontractors, suppliers, etc., shall be responsible for knowing what information is given on all sheets of the plans and specifications concerning his particular work. If an item or piece of work is shown on the architectural and not on the mechanical, electrical or structural drawing, it shall be included in the contract. The reverse condition shall also apply.

1.06 CONTRACTOR'S USE OF PREMISES

- A. Before construction is started, the Contractor shall confer with the Architect and the Owner and arrange for available trucking and storage space for the delivery of materials, storage space for materials and equipment, and parking space for his workmen.
- B. Construction operations and storage of materials and equipment shall be restricted to areas of the site mutually agreed upon and in such a manner as not to block access of fire fighting equipment to the building.

1.07 SCAFFOLDING, STAGING, ETC.

- A. As required, provide, install and maintain for the duration of the work, all scaffolds, staging, trestles, and planking necessary for the work in strict conformity with applicable laws and ordinances, and so as not to interfere with or obstruct the work of others. Provide all forms of protection necessary to keep the work of other trades free from damage. **Scaffolding required to be installed on the property of adjacent landowners must be coordinated through the Architect and the Owner prior to installing said equipment.**

1.08 WEATHER PROTECTION

- A. Provide protection to building and site as may be required to allow the work to continue without interruption due to weather or temperature, so as to allow completion and occupancy by the contract completion and occupancy by the contract completion date. Extras for heating, housing, and any other form of weather protection will not be honored.

1.09 GENERAL BUILDING PERMIT

- A. The Contractor will make Application for the building permit as required to facilitate the project's construction. **As this is a public project, the Contractor will be provided the building permit free of charge. Do not include this fee in your bid.**

1.10 WARRANTY AND CORRECTION OF WORK

- A. The Contractor shall, prior to final inspection, deliver the Owner, all written guarantees and warranties called for in the specifications.

1.11 ASBESTOS

- A. Do not incorporate asbestos bearing materials in any of the work of this contract.

END OF SECTION 01010

SECTION 01025 - PAYMENT AND CHANGE ORDER PROCEDURE

PART 1 - GENERAL

1.01 APPLICATION FOR PROGRESS PAYMENT

A. Form:

1. The form for application for payment shall be AIA Document G702 Application and Certificate for Payment, accompanied by AIA Document G703 Continuation Sheet.
2. Itemize the continuation sheets with the line items and values of the Schedule of Values accepted by the Architect.

B. Submittal:

1. Submit the original and five (5) copies of each application to the Architect with required attachments and accompanying submittals, in accordance with the schedule established by the Agreement.

C. Stored Materials:

1. Materials stored on-site but not yet incorporated into the work may be claimed for payment.
2. Materials suitable stored off-site may be claimed for payment provided that the following is attached to each copy of the application:
 - a. A statement identifying where the materials are stored and that the materials are tagged to identify them for use in the project.
 - b. Copies of bills of sale for materials claimed.
 - c. A certificate of insurance covering materials claimed.

D. Retainage:

1. Attach to each copy of each application wherein retainage, as a percentage of the total completed and stored to date, is less than was provided in the previous application, shall have attached a copy of the Consent of Surety, using AIA Document G707A or a similarly formed letter, attaching the original of which to the original of the application.

E. Attachments and Accompanying submittals:

1. Attach the following to each copy of each application:
 - a. Continuation Sheets
 - b. Consent of Surety, if applicable, for reduction in the retainage.
 - c. Documents required for materials stored off-site.

2. Submit three (3) copies of the following with the application as deemed necessary by the Architect:
 - a. Visitor Log for the period covered by the application.
 - b. Progress Schedule, updated and current indicating the progress through the period covered by the application and the schedule progress through completion of the work.
 - c. Shop Drawing Log for the entire project through the period covered by the application, if required.

F. Approval and Payment:

1. If the Architect agrees with the amounts claimed in an application, he may, at his discretion, either return the application to the Contractor for revision and re-submittal or mark-up the application indicating the corrections he considers appropriate.
2. When the Architect finds the application complete and correct he will certify the application forwarding one copy to the Contractor indicating his action.

1.02 APPLICATION FOR PAYMENT AFTER SUBSTANTIAL COMPLETION:

- A. After the Architect has certified that the work is Substantially complete, Contractor shall submit application for payment, including appropriate reduction in retainage, with the following attachments:
 1. Continuation sheets described in 1.01.A.2.
 2. Consent of Surety to Reduction in Retainage, using AIA Document G707A or a similarly formed letter, with the original of the Consent attached to the original of the application, and a copy of the consent attached to each copy of the application.

1.03 APPLICATION FOR FINAL PAYMENT:

- A. Upon completion of the entire work, and submittal of the Contract Close-Out Package, the Contractor may submit an application with the following attachments:
 1. Contractor's Affidavit of Payment of Debts and Claims, using AIA Documents G706.
 2. Contractor's Affidavit of Release of Liens, using AIA Document A706A.
 3. Consent of Surety Company to Final Payment, using AIA Document G707 or a similarly formed letter.

1.04 CHANGE ORDER:

A. Form:

1. The form shall be AIA Document G701 Change Order.

B. Submittal:

1. Change Orders will be prepared by the Architect and will be submitted to the Contractor for signing and attachment of supporting documentation, if any is needed.

C. Attachments and Accompanying Submittals:

1. Attached to each copy of each change order shall be the following:
 - a. Referenced documentation describing and justifying the change in the work, the Contract Sum and the Contract Time.
 - b. Itemization of values of direct cost to the Contractor or Subcontractors, as apply, citing:
 - (1) Materials: units, costs, quantities, totals
 - (2) Equipment: hours, rates, totals
 - (3) Labor: hours, rates, totals
 - c. If a weather related delay, comparative data by the National Oceanic and Atmospheric Administration, obtained by the Contractor as an impartial basis for determining justifiable extensions, or daily work logs which describe actual local weather conditions and impact, subject to approval by the Architect.

END OF SECTION 01025

SECTION 01026 - SCHEDULE OF VALUES

PART 1 - GENERAL

1.01 FORM AND APPROVAL

- A. The form for schedule of values shall be AIA Document G703 Continuation Sheet.
- B. If objected to by Architect, revise and resubmit to Architect's satisfaction prior to submitting application for payment.

1.02 ALLOCATION OF VALUES

- A. Provide a single line item to account for mobilization and general administration, and fulfilling General Requirements of Project.
- B. Account for Modifications with a line item for each.

END OF SECTION 01026

SECTION 01035 - MODIFICATION PROCEDURES

PART 1 - GENERAL

1.01 SUPPORTING DOCUMENTATION FOR PROPOSALS OR CLAIMS

- A. Propose changes to work in writing, specifically describing proposed change, or briefly describing the proposed change with specific reference to a completely descriptive attachment.
- B. Propose changes in Contract sum in writing, stating briefly the reason for change, and summarizing material, equipment, labor, overhead, and profit factors for Contractor, Subcontractors, and Sub-subcontractors. The Contractor will be allowed 10% for profit and overhead for changes for work by Contractor's work force and 5% for work by Subcontractor and sub-subcontractor. Attach itemization of values of direct cost on form which provides information citing:
 - 1. Materials: units, costs, quantities, totals
 - 2. Equipment: hours, rates, totals
 - 3. Labor: hours, rates, totals
- C. Propose changes in Contract Time in writing: fully describe the reasons for the change and effect of the change on the construction schedule, and attach a revised Progress Schedule.

1.02 FORM FOR CHANGE ORDERS AND CONSTRUCTION CHANGE DIRECTIVES

- A. The form shall be AIA Document G701. Complete description of change in work shall be included in the body of the form or in referenced attachment. Change in Contract Sum and Contract Time shall be expressed in the body of the form.

1.03 SIGNATURES:

- A. Form shall be signed by authorized representatives of each of the entities required by Conditions of the Contract.
- B. At the request of the Architect, the proposed Change Orders will be prepared by Contractor and submitted to the Architect. Contractor shall be first to sign an acceptable proposed Change Order, and shall deliver proposed Change Order to the Architect. Architect shall sign an acceptable proposed Change Order second, and deliver to Owner. Owner shall sign an acceptable proposed Change Order last, and deliver to Architect for further transmittal to Contractor and Architect.

END OF SECTION 01035

SECTION 01037 - WEATHER DELAYS

PART 1 - GENERAL

1.01 EXTENSIONS OF CONTRACT TIME

- A. If the basis exists for an extension of time in accordance with **Paragraph 8.3 of the General Conditions**, an extension of time on the basis of weather may be granted only for the number of Weather Delay Days in excess of the number of days listed as the Standard Baseline for that month.

1.02 STANDARD BASELINE FOR AVERAGE CLIMATIC RANGE

- A. The Owner has reviewed weather data available from the National Oceanic and Atmospheric Administration and determined a Standard Baseline of average climatic range for the **State of Tennessee**.
- B. Standard Baseline shall be regarded as the normal and anticipatable number of calendar days for each month during which construction activity shall be expected to be prevented and suspended by cause of adverse weather. suspension of construction activity for the number of days each month as listed in the Standard Baseline is included in the Work and is not eligible for extension of Contract time.
- C. Standard Baseline is as follows:

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
12	11	8	7	7	6	7	5	4	5	6	11

1.03 ADVERSE WEATHER AND WEATHER DELAY DAYS

- A. Adverse Weather is defined as the occurrence of one or more of the following conditions which prevents exterior construction activity or access to the site within twenty-four(24) hours:
1. Precipitation (rain, snow, or ice) in excess of one-tenth inch (0.10") liquid measure.
 2. Temperatures which do not rise above 32 degrees F by 10:00 a.m.
 3. Temperatures which do not rise above that specified for the days construction activity by 10:00 a.m., if any is specified.
 4. Sustained wind in excess of twenty-five (25) m.p.h.
 5. Standing snow in excess of one inch (1.00").
- B. Adverse Weather may include, if appropriate, "dry-out" or "mud" days when all the following conditions are met:

1. For rain days above the standard baseline.
 2. Only if there is a hindrance to site access or site work, such as excavation, backfill, and footings.
 3. At a rate no greater than 1 make-up day each day or consecutive days of rain beyond the standard baseline that total 1.0 inch or more, liquid measure, unless specifically recommended otherwise by the Architect.
- C. A Weather Delay Day may be counted if adverse weather prevents work on the project for fifty percent (50%) or more of the contractor's scheduled work day, including a weekend day or holiday if Contractor has scheduled construction activity that day.

1.04 DOCUMENTATION AND SUBMITTALS

- A. Submit daily job site work logs showing which and to what extent construction activities have been affected by weather on a monthly basis.
- B. Submit actual weather data to support claim for time extension obtained from nearest NOAA weather station or other independently verified source approved by Architect at beginning of project.
- C. Use Standard Baseline data provided in this Section when documenting actual delays due to weather in excess of the average climatic range.
- D. Organize claim and documentation to facilitate evaluation on a a basis of calendar month periods, and submit in accordance with the procedure for Claims established in paragraph 4.3 of the Conditions.
- E. If an extension of the Contract Time is appropriate, it shall be effected in accordance with the provision of **Article 7 of the Conditions**, and the applicable General Requirements.

END OF SECTION 01037

SECTION 01045 - CUTTING AND PATCHING

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. This Section establishes general requirements pertaining to cutting (including excavating), fitting and patching of the work required to:
 - 1. Make the several parts fit properly.
 - 2. Uncover work to provide for installation, inspection, or both, of ill-times work.
 - 3. Remove and replace work not conforming to requirements of the Contract Documents.
 - 4. Remove and replace defective work.

1.02 RELATED WORK

- A. In addition to other requirements specified, upon the Architect's request, uncover work to provide for inspection by the Architect of covered work, and remove samples of installed materials for testing.
- B. Do not cut or alter work performed under separate contract without the Architect's written permission.

1.03 QUALITY ASSURANCE

- A. Perform all cutting and patching in strict accordance with pertinent requirements of these Specifications, and in the event no such requirements are determined, in conformance with the Architect's written direction.

1.04 SUBMITTALS

- A. Prior to cutting which affects structural safety, submit written request to the Architect for permission to proceed with cutting.
- B. Should conditions of the work, or schedule, indicate a required change of materials or methods for cutting and patching, so notify the Architect and secure written permission to proceed.
- C. Prior to cutting and patching performed pursuant to the Architect's instructions, submit cost estimate to the Architect. Secure the Architect's approval of cost estimates and type of cost reimbursement before proceeding with cutting and patching.
- D. Submit written notice to the Architect designating time the work will be uncovered, to provide for the Architect's observation.

PART 2 - PRODUCTS

2.01 CONDITIONS

- A. Inspect existing condition, including elements subject to movement or damage during cutting, excavating, backfilling, and patching.
- B. After uncovering the work, inspect conditions affecting installation of the new work.
- C. If uncovered conditions are not as anticipated, immediately notify the Architect and secure needed directions.
- D. Do not proceed in areas of discrepancy until all such discrepancies have been fully resolved.
- E. Provide all required protection including, but not necessarily limited to, shoring, bracing, and support to maintain structural integrity of the work.

END OF SECTION 01045

SECTION 01060 - REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.01 CODES AND REGULATIONS

- A. The Regulatory Requirements that are to be used for this project are listed below. Other codes and regulations may also apply. This list is provided as a convenience to the Contractor and is not to be considered all inclusive of codes and regulations that may apply. The Contractor shall comply with all pertinent codes, standards, regulations and laws.

2012 International Building Code with Local Amendments.

2009 International Energy Conservation Code.

2012 International Plumbing Code with Local Amendments.

2012 International Mechanical Code with Local Amendments.

2012 International Fuel Gas Code with Local Amendments.

2012 National Electrical Code with Local Amendments.

2010 ADA Disability Act

END OF SECTION 01060

SECTION 01200 - PROJECT MEETINGS

PART 1 - GENERAL

1.01 SCHEDULING AND ATTENDANCE

- A. The Architect, in cooperation with the Owner and the Contractor, will schedule and administer a Pre-construction Conference, periodic Progress Meetings, and other specially called or required meetings.
- B. Representatives of the Owner, Contractor and Architect will attend.
- C. Representatives of the Contractor, subcontractors, and suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.

1.02 PRE-CONSTRUCTION CONFERENCE

- A. A Pre-Construction Conference will be scheduled and conducted at the project site prior to the issuance of the Notice to Proceed.
- B. The Pre-Construction Conference shall be attended by the Contractor's:
 - 1. (Office) Job Manager
 - 2. (Field) Job Superintendent
 - 3. Major subcontractors' representatives (as applicable)
 - 4. Major suppliers' representatives
 - 5. Others, as desired

The Pre-Construction Conference is intended to be an opportunity for the Contractor to review administrative, and procedural requirements of the Contract documents, and to ask questions concerning the work. At least one English speaking representative from each company desiring to attend must be present.

1.03 PROGRESS MEETINGS

- A. Progress meetings will be scheduled and conducted at the project site prior to the Contractor's submittal of an application for payment, or when deemed advisable by the Architect.
- B. Progress Meeting shall be attended by the Contractor's:
 - 1. (Office) Job Manager
 - 2. (Field) Job superintendent
 - 3. Subcontractors' representatives, as befits the agenda
 - 4. Suppliers' representatives, as befits the agenda
 - 5. Others, as appropriate

- C. Progress Meetings are intended to be a monthly opportunity for the Contractor to review and submit applications for payment, and attachments, and for a general review of the progress of the work, aimed at identifying and mitigating impediments to timely completions. At least one English speaking representative from each company desiring to attend must be present.

END OF SECTION 01200

SECTION 01300 - SUBMITTALS

PART 1 - GENERAL

1.01 CONSTRUCTION SCHEDULES

- A. See General Conditions, Paragraph 5, for submission of a progress schedule.

1.02 PROGRESS REPORTS (NOT APPLICABLE THIS PROJECT)

- A. Daily Reports: Progress reports shall be kept on a daily basis to cover each facet of the work. These reports shall be kept on file at the field office, and shall be made available to the Architect's or Architect Representative's review upon request.
- B. Monthly Reports: Submit a monthly report to the Architect in which the progress is reported on each area of work being undertaken.

1.03 SURVEY DATA

- A. Be responsible for properly laying out the work, and for lines and measurements for the work executed under the contract documents. Verify the figures shown on the drawings before laying out the work, and report errors or inaccuracies in writing to the Architect before commencing work. The Architect or Architect Representative will in no case assume the responsibility for laying out the work.
- B. Establish necessary reference lines and permanent bench marks from which building lines and elevations shall be established. Engage a registered land surveyor for this purpose to layout the work. Establish not less than two (2) such bench marks in widely separated locations. Be responsible for the proper location and level of the work and for the maintenance of the reference lines and bench marks. Establish bench marks and axis lines at each floor showing exact floor elevations and other lines and dimensional reference points as required for the information and guidance of all trades; field checking of the structure and surveys thereof as may be required by the technical sections of the specifications; the marking and layout of walls and partitions; and the taking of settlement readings as hereinafter specified.
- C. The mechanical and electrical trades shall be responsible for the layout of the ductwork, piping and conduit based on the reference lines and bench marks established.

1.04 SHOP DRAWINGS

- A. The Contractor shall submit shop drawings and samples for all items called for in the detail specifications. At initial submittal, provide shop drawings in digital PDF format to include drawings, technical information, and supply physical color samples of product where applicable, unless specified otherwise. Shop drawings will be returned to the Contractor in a digital format with any comments/instructions. No shop drawing or sample, other than those stamped "Approved" shall be on the job for any purpose whatsoever, and work installed incorrectly shall not change the contract price.

- B. In checking shop drawings and samples, the Architect shall not be required to check dimensions, quantities, electrical characteristics, specific capacities, or coordination with other trades, these being the responsibility of the Contractor. The Contractor shall attest, either in writing or by stamp or signature, that all shop drawings and specifications prior to submission to the Architect, otherwise, they will be returned unchecked. No shop drawing or sample shall be submitted directly to the Architect from a manufacturer, jobber or subcontractor.
- C. The stamp of the Architect on returned shop drawings and samples shall be interpreted as follows:
 - 1. Reviewed: No correction, proceed with the work.
 - 2. Furnish as Corrected: Items noted for correction must be fabricated or furnished with corrections as noted.
 - 3. Rejected: The item is rejected as not in accordance with the contract requirements or for other justified cause.
 - 4. Revise and Resubmit: Items noted for correction must be fabricated or furnished with correction as noted. All items bearing this stamp must be resubmitted for further checking and approval.
 - 5. Submit Specified Items: Items are in accordance with the contract requirements. Submit further documentation to clarify the intent as specifically noted in the review submittal.

1.05 SCHEDULE OF VALUES

- A. Submit schedule of values as required by Section 01026.

1.06 LIST OF SUBCONTRACTORS

- A. Submit list of subcontractors as required by the General Conditions.

1.07 PROJECT RECORD DOCUMENTS

- A. Submit project record documents as required by the General Conditions and Specifications.

1.08 OTHER SUBMITTALS

- A. Submit all other information required by the contract documents.

END OF SECTION 01300

SECTION 01400 - QUALITY CONTROL

PART 1 - GENERAL

1.01 STANDARD AND INDUSTRY SPECIFICATIONS

- A. Material or operations specified by reference to the published specifications of a manufacturer, testing agency, society association, or other published standards shall comply with the requirements in the latest revision thereof and amendments or supplements thereto in effect on the date of Invitation to Bidders.
- B. Discrepancies between referenced specifications and contract documents shall be governed by the latter unless written interpretation is obtained from the Architect. Discrepancies between referenced specifications or standards shall be governed by the most stringent.
- C. Material or work, specified by reference to conform to a standard, code, law or regulation shall be governed by contract drawings and specifications when they exceed the requirements of such references; referenced standards shall govern when they exceed the contract drawings and specifications.

1.02 MANUFACTURER'S DIRECTIONS

- A. Manufactured articles, materials and equipment shall be utilized as directed by the manufacturer unless herein specified to the contrary. Discrepancy between an installation required by the contract drawings and specifications and the manufacturer's instructions and recommendations shall be resolved by the Architect before the work may proceed.
- B. The Contractor shall, if required, furnish an affidavit from the manufacturer certifying that materials or products being furnished meet specified requirements. Such certification, however, shall not relieve Contractor from responsibility of complying with other requirements of contract documents.

1.03 APPLICABILITY

- A. Standard referred to, except as modified in specifications, shall have full force and effect as though recited in full in specifications. These standards are not furnished to bidders for the reason that manufacturers and trades involved are assumed to be familiar with their requirements. Architect will furnish, upon request, information as to how copies of referenced standards may be obtained.

1.04 PAYMENT FOR TESTING (WHERE APPLICABLE)

- A. Testing specified to be done by independent laboratories will be at the Contractor's expense, unless otherwise indicated and as applicable for this project.
- B. All other testing shall be at the Contractor's expense.

END OF SECTION 01400

SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. General provisions of the contract, and General and Supplementary Conditions apply to this section.

1.02 DESCRIPTION OF WORK

- A. The Contractor will arrange for and provide temporary facilities and controls as necessary for the proper and expeditious prosecution of the work. The Contractor will pay all cost, except as otherwise specified, until final acceptance of the work unless the Owner makes arrangement for the use of completed portions of the work after substantial completion in accordance with the provisions of the General Conditions.

1.03 TEMPORARY OFFICE

- A. The Contractor may work out of the existing structure as needed for a temporary office, otherwise no temporary office will be required for this project.

1.04 TEMPORARY SHEDS (NOT APPLICABLE)

- A. Provide watertight and secure storage sheds as necessary to hold materials to be protected while stored on the site.

1.05 TEMPORARY TOILET FACILITIES (PROVIDED BY OWNER IN ADJACENT BUILDING)

- A. The Owner will provide adequate temporary toilet and hand washing facilities for the use of all workmen, conforming to all applicable laws, ordinances and regulations. Maintain these facilities in sanitary condition.

1.06 TEMPORARY ENCLOSURES (AS APPLICABLE)

- A. Provide temporary weather tight enclosures or coverings for exterior openings in the building when required to permit the use of temporary heat or to protect the finished work from damage by the elements, and when necessary for security or safety protection.

1.07 PROTECTION

- A. Provide and maintain all fencing, planking, bridges, bracing, shoring, sheet piling, lights, barricades, warning signs, and guards as necessary for the protection of streets, sidewalks, landscaping, bridges, piers, buildings, and property, both on and off the site, from construction damage.
- B. Should any damage occur, the Contractor shall restore such to its original condition in a

manner acceptable to the Owner.

- C. Take adequate precautions against fire; keep flammable material at an absolute minimum, and ensure that such material is properly handled and stored. Except as otherwise provided herein, do not permit fires to be built or open salamanders to be used in any part of the work.

1.08 WATER AND SNOW CONTROL (NOT APPLICABLE THIS PROJECT)

- A. Keep the site and the project area free from accumulation of water, and supply, maintain, and operate all necessary pumping and bailing equipment.
- B. Remove snow and ice as necessary for the protection and prosecution of the work, and protect the work against weather damage.

1.09 EXISTING AND TEMPORARY FACILITIES

- A. Water and electric power required for construction purposes will be paid by the Owner. Coordinate temporary electric service provision with the Owner's Representative prior to the bid.
- B. Furnish and install all temporary piping and wiring required or the use of water and electric power for construction and other purposes, and upon completion of work remove all temporary piping and wiring. Temporary utility lines are not specifically shown on the drawings, but shall be routed as required by conditions at the site.
- C. Existing utility lines which are to remain permanently or temporarily in service shall be carefully protected from damage or dislocation and any damage to these lines shall be made good at no additional cost to the Owner. Existing utility lines that are shown or noted shall be abandoned and removed, removed and relocated, or abandoned and replaced with new lines, as specifically shown on the drawings or noted in the specifications.
- D. The term "Utility Lines" shall be understood to include but not limited to: water lines, gas lines, power lines, communications lines and appurtenances such as manholes, catch basins, fire hydrants, valves, junction boxes, and switches.
- E. In general, all work outlines in this sub-section shall be performed by the trade in which jurisdiction it falls, but each trade shall fully cooperate and all work shall be carefully coordinated by the Contractor so that the work involved will be performed at the proper time and completed in accordance with the intent of the contract.

1.10 TEMPORARY TELEPHONES

- A. The Contractor will furnish at least one telephone for the use of the job superintendent. Telephone service shall be maintained from start to completion of work. The cost of the telephone service shall be paid per the written Owner/Contractor agreement.

1.11 TEMPORARY HEATING (AS APPLICABLE)

- A. Provide heat, fuel and services as necessary to protect all work and materials against injury from damages and cold until final acceptance of all work and material in the contract. The Contractor shall provide heat as follows:
 - 1. At all times during the placing, setting and curing of concrete, provide sufficient heat to insure the heating of the space involved to not less than 50 degrees Fahrenheit.
 - 2. For a period of ten (10) days previous to the installation of interior finishing, varnishing, painting, spackling, etc., and until final acceptance of the work or until full occupancy by Owner, provide sufficient heat to produce a temperature of not less than 70 degrees Fahrenheit.
- B. Provide temporary heat by approved heating apparatus which will not endanger or damage work in place. Do not use unvented open flame heaters to heat or dry out freshly placed concrete.

1.12 MAINTENANCE OF TRAFFIC AND CIRCULATION

- A. Maintain circulation of traffic, both pedestrian and vehicular, and access to all parts of the site by fire fighting apparatus during construction.

1.13 VERMIN CONTROL

- A. During construction, the Contractor shall keep the building and the area of the construction free from food scraps and similar organic matter that would attract vermin, and shall take other preventive measures necessary to prevent infestation of the building. If, at the time of final inspection or within six months after occupancy, the building is found to be infested by rodents or vermin, the Contractor shall bear the expense of extermination.

1.14 REMOVAL

- A. Temporary facilities shall be removed promptly as each is no longer required.

1.15 PROJECT SIGN (NOT APPLICABLE THIS PROJECT)

END OF SECTION 01500

SECTION 01600 - PRODUCTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. General provisions of the Contract, and General and Supplementary conditions apply to this section.

1.02 TRANSPORTATION AND HANDLING

- A. Materials, products, and equipment shall be properly containerized, packaged, boxed and protected to prevent damage during transportation and handling.
- B. More detailed requirements for transportation and handling are specified under the technical sections.

1.03 STORAGE AND PROTECTION

- A. Provide suitable temporary weather-tight storage facilities as may be required for materials that will be damaged by storage in the open.
- B. Available storage space at the job site is limited to the site. Any additional off-site space required is the responsibility of the contractor.
- C. Allocate the available storage areas and coordinate their use by the trades on the job. Maintain a current list showing all items and where they are stored.
- D. Store and protect materials delivered at the site from danger. Do not use damaged materials on the work.

1.04 INSTALLATION REQUIREMENTS

- A. Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the respective manufacturers, unless otherwise specified.

1.05 IDENTIFYING MARKERS

- A. Name plates and other identifying markings shall not be affixed on exposed surfaces of manufactured items installed in finished areas.

1.06 PRODUCT APPROVAL STANDARDS

- A. Definitions:
 - 1. The term "Product" shall include material, equipment, assembly methods, manufacturer, brand, trade name, or other description.

2. References to “approved equal” or “similar” terms mean that approval of the Architect is required.

- B. Proof of Compliance: Whenever the contract Documents require that a product be in accordance with Federal Specification, ASTM designation, ANSI Specification, or other associated standard, the Contractor shall present an affidavit from the manufacturer certifying that the product complies therewith. Where requested or specified, submit supporting test data to substantiate compliance.

1.07 SUBSTITUTIONS

A. Policy:

1. Wherever in the Specifications or on the drawings a material or article is specified or shown by using the name of a proprietary product of a manufacturer or vendor, the item name is intended to set standard of design, substance, performance and quality for such material or article.
2. Contractors may propose equal substitutions for all products called for in any section of these specifications whether or not the section so states, Contractor is encouraged to do so when a substitution would result in a savings to the Owner with no sacrifice of quality or design intent.
3. **Substitute products shall not be ordered or installed without written acceptance. Contractor's initial bid must reflect products specified in the contract documents unless substitutions during the bid phase have been submitted and pre-approved in writing by the Architect. No substitutions during the bid phase made without the architect's knowledge will be accepted.**
4. Substitutions will not be considered unless submitted to the Architect. The Architect's decision shall be final concerning the acceptability of all substitutions.

B. Procedure Regarding Substitutions:

1. Should the Contractor wish to substitute some product other than the one previously approved, he shall request permission in writing from the Architect. The following information should be included in Contractor's letter of request:
 - a. The name and manufacturer of product specified.
 - b. The name and manufacturer of product Contractor wishes to substitute.
 - c. Complete descriptive and specification data, illustrations, etc., of the product Contractor wishes to substitute and the reasons for substitution.
2. In the consideration of proposed substitution, the Contractor shall supply the Architect with all information which may be requested.
3. The Architect will approve or disapprove the proposed within the provisions of the Contract documents.

4. The burden of proof shall rest with the Contractor to prove that the proposed substitute is equal to the material or article specified.

END OF SECTION 01600

SECTION 01700 - CONTRACT CLOSE-OUT

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. General Provisions of the Contract and General and Supplementary Conditions apply to this section.

1.02 CLEANING UP (WHERE APPLICABLE)

- A. Debris shall not be thrown from windows.
- B. To the maximum extent that is reasonably possible, keep the building and/or project work area free of combustible material.
- C. Debris and/or waste materials not claimed by the Owner prior to the Notice to Proceed shall become the property of the Contractor and shall be promptly removed by him from the project site before the start of construction.
- D. Debris, waste and excess earth shall not be dumped on other property without prior permission of the property owner as applicable.
- E. Burning of waste material on the site will not be permitted.
- F. Re-roof work: The contractor will be responsible for removing all debris from the roof and for any items around the perimeter of the building which may have fallen during the roof installation.
- G. Upon completion of the work, remove temporary buildings and structures, fences, scaffolding, surplus materials, and rubbish of every kind from the site of the work (as project Work Scope relates).

1.03 SUBSTANTIAL COMPLETION

- A. When the Contractor considers the WORK to be substantially complete, he shall submit to the Architect:
 - 1. A written notice that the WORK is substantially complete in accordance with the Conditions of the Contract.
 - 2. A List of items to be completed or corrected and dates scheduled for completion or correction of each item.
- B. Upon receipt of such notice, the Architect will schedule an inspection meeting with the Contractor, the Owner's representative(s) and consultants to determine the status of completion.

- C. Should the Architect determine that the WORK is not substantially complete, Architect will promptly notify the Contractor in writing, stating the reasons. The Contractor shall remedy the deficiencies in the WORK and send a second written Notice of Substantial Completion to the Architect. The Architect will schedule a re-inspection meeting.
- D. When the Architect concurs that the WORK is substantially complete, Architect will prepare a Certificate of Substantial Completion on AIA Document G704, in accordance with the Conditions of the Contract.

1.04 FINAL INSPECTION

- A. When the Contractor determines the WORK is complete, Contractor shall submit written certification that:
 - 1. Contract Documents have been reviewed.
 - 2. The WORK has been inspected by a qualified person authorized by the Contractor for compliance with Contract Documents.
 - 3. The WORK has been completed in accordance with the Contract Documents.
- B. Should the Architect consider the WORK incomplete or defective, he will promptly notify the Contractor in writing, listing all incomplete and/or defective work. The Contractor shall take immediate steps to remedy the stated deficiencies and send a second written certification that the WORK is complete. The Architect will schedule a re-inspection meeting.
- C. When the Architect finds the WORK acceptable under the Contract Documents, Architect shall request the Contractor to make close-out submittals.

1.05 CONTRACT CLOSE-OUT PACKAGE

- A. The Contractor shall submit the following Close-Out documents to the Architect as a single package:
 - 1. Consent of Surety to release retainage and pay Contractor in full (If Applicable).
 - 2. Release of liens from all Subcontractors and Material Suppliers.
 - 3. The final application for payment accompanied by a statement of accounting. The statement shall reflect all adjustments to the Contract Sum.
- B. The Architect will submit to the Owner the Contract Close-Out Package and the signed final Change Order (if required) with a cover letter certifying that, to the best of Architect's knowledge, the completion of the project is in compliance with the Contract Documents and the balance shown is due and payable.

END OF SECTION 01700

SECTION 01710 - CLEANING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of contract, including General and Supplementary Conditions and Division 1, Specification Sections, apply to work of this section.

1.02 DESCRIPTION OF WORK

- A. Final cleanup encompasses the removal of all debris, waste material and rubbish from the job site. Also included in final cleanup is the removal of all temporary facilities (i.e., offices, storage areas, fencing, barricades, temporary toilet facilities, as applicable) and the restoration of the job site to specified condition.
- B. This final cleaning does not relieve the Contractor of responsibility for cleaning specified by the trade sections.

END OF SECTION 01710

SECTION 01726 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.01 DATA BINDERS GENERALLY

- A. Provide two complete sets. Provide commercial quality three ring binders with durable plastic covers. Identify project and type of data on face and side of binder. If multiple binders are required, identify as consecutively numbered volumes, identifying original documents as set number one. Provide information required by Contract Documents organized as outlined below. Include related documents under the heading to which each is most closely related.
- B. Provide introductory information:
 - 1. Cover sheet giving complete project title and number, Contractor's name, address, phone number, name of project superintendent, and related general information.
 - 2. Table of Contents to generally identify material in Binders. Reference and bind separately any over-size documents that cannot be neatly folded and included in this binder

1.02 OPERATING & MAINTENANCE DATA BINDERS

- A. Provide Product Data as outlined below:
 - 1. Detailed Table of Contents for this part.
 - 2. For each system or product: names, addresses, and telephone numbers of supplier, installer, and maintenance service company; drawing and specification reference; building location; manufacturer and model number.
 - 3. Description of unit and component parts, clearly identifying the specific product or part installed. When manufacturer's cut sheets are used for product identification, plainly mark specific items included in Work.
 - 4. Related information required by Contract Documents, or furnished with items included in Project, that Owner may use for maintenance, operation, repair, renovation, or additions to Work.
- B. Provide Operating and Maintenance Data as outlined below for mechanical and electrical systems, equipment, and products:
 - 1. Detailed Table of Contents for this part.
 - 2. Manufacturer's printed operating and maintenance instructions supplemented with drawings and text to clearly illustrate proper operation and a logical sequence of maintenance procedures.

3. Servicing and lubrication schedule with list of lubricants.
4. Manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
5. As-installed control diagrams by controls manufacturer.
6. Installers' coordination drawings with as-installed color coded piping diagrams and wiring diagrams.
7. Charts of valve tag numbers with the location and function of each valve.
8. Circuit directories of panel boards.
9. Instructions for care, with a list of manufacturer's recommended types of cleaning agents and methods.
10. List materials and parts furnished for the Owner's use.

1.03 PROJECT DATA BINDERS (Minimum of Two to be prepared)

- A. Add to introductory information a complete listing of subcontractors and material suppliers, including company name, address, phone number, contact person and local representative.
- B. Provide certificates and acceptance information (as applicable):
 1. Detailed Table of Contents for this part.
 2. Certificate of Substantial Completion.
 3. Use and Occupancy Permits
 4. Certificates(s) of Inspection or letter(s) of acceptance from:
 - a. Fire Marshal
 - b. Department of Labor for boilers, pressure vessels, or elevators
 - c. Public Health Authorities
 - d. Other governing authorities as apply
- C. Guarantees, Warranties, Bonds, Certifications, and Related Documents
 1. Detailed Table of Contents for this part
 2. Contractor's warranty of work
 3. Guarantees, warranties, and bonds, executed by the respective vendors, manufacturers, suppliers, and subcontractors

4. Certifications
5. Maintenance Agreements and service contracts
6. Complete information for each item:
 - a. Product or work item, and scope of installation
 - b. Name of provider, with name of responsible principal, address and telephone number
 - c. Beginning date and duration
 - d. Information about instances which might affect validity, and proper procedure in case of failure.

1.04 CONSTRUCTION RECORD DOCUMENTS

The record copy of Contract Documents shall be kept in good condition for submittal to Architect upon completion of construction activity. In the course of the Work, the superintendent shall legibly mark these documents to record actual conditions of Work, including: location, depth, and identification of new and existing underground items, location by dimension and identification of utilities, valves, tap points, equipment, service access, test points, and related features, field changes in dimensions and detail, changes by addenda, change orders, and construction change directives, description and details of features for maintenance, service, replacement, or expansion of the Work.

END OF SECTION 01726

SECTION 06250 - WOOD REPAIR SYSTEM

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.01 WORK INCLUDED

- A. Provide labor, materials and equipment necessary to complete the work of this Section including, but not limited to the following:
 - 1. Removal of exterior finish systems at areas of wood restoration or repair
 - 2. Preservation and sealing of seams and joints
 - 3. Removal of decayed and contaminated wood
 - 4. Installation of borate wood preservatives
 - 5. Installation of wood repair compound materials
- B. Extent of wood restoration work is as indicated on the drawings and as specified herein.
- C. Related Sections: The following sections contain requirements that relate to this section.

1.03 SUBMITTALS

- A. General Submit the following according to Conditions of Contract and Division I Specification Sections
- B. Product data, installation instructions, and general recommendations from manufacturer for types of repair required including technical data sheets defining performance properties.
- C. Restoration Schedule: Submit schedule for each window, door, cornice, or area of wood trim to be restored, outlining in detail proposed restoration work to be performed on each component. Obtain written approval from Architect prior to commencement of repair work.
- D. Certification that materials comply with local VOC limitations.
- E. Qualification data for firms and persons specified in the "Quality Assurance" article to demonstrate their capabilities and experience. Include a list of completed projects with project name, address, names of Architects and Owners, and information specified.

1. Five (5) business days after bid opening, submit a written qualification and experience of all lead personnel for work on the Project. List project manager or foreman's name and experience relative to this Project.

2. All work shall be performed by persons whose qualifications have been submitted and approved.

1.04 QUALITY ASSURANCE

A. Restorations Specialist: Work must be performed by a firm having not less than (5) years successful experience in comparable wood restoration work including work on at least three (3) buildings listed in the National Register of Historic Places under the direction of federal and state preservation agencies in the last five (5) years and employing personnel skilled in the restoration process and operations indicated.

1. Restoration Specialist firm must be acceptable to, or certified by, manufacturer of primary restoration materials.

2. Work associated with work of this section, including (but limited to) paint removal and substrate preparation, is to be performed by Installer of the work.

3. Only skilled workers who are thoroughly trained and experienced in wood repairs and restoration work at areas as noted, have the skills required for the work of this section, and are completely familiar with the materials and methods specified shall be used for wood restoration work.

4. At least one skilled worker shall be present at all times during the execution of the work and shall personally direct the wood repairs and restoration work.

5. In acceptance or rejection of the wood restoration work, no allowance will be made for lack of skill on the part of the workers.

B. Field Mock-ups

1. Wood Restoration: following the requirements of the Section, perform a mock-up of each type of wood repair system specified to demonstrate materials and methods intended to be used in the finished work.

a) perform mock-ups in areas indicated by the Architect.

b) obtain the Architect's written approval of each mock-up before proceeding with the work of the Section

c) protect the approved mock-ups until the completion of all the work

d) Approved mock-up shall represent the minimum acceptable standard for each type and detail of the restoration work.

- C. Manufacturer: Obtain primary repair materials from a single manufacturer. Provide secondary materials as recommended by the manufacturer of the primary materials.

1.05 DELIVERY STORAGE AND HANDLING

- A. Deliver all materials in original unopened containers labeled with the manufacturer's name, brand name, item name and installation instructions.
- B. Store materials in compliance with the manufacturer's requirements for temperature, maximum and minimum, and other conditions. Keep all materials under cover and dry. Protect against exposure to the weather.
- C. Discard and remove from the job site any materials damaged in handling or storage and any materials that have been subjected to conditions contrary to the manufacturer's recommendations or whose maximum shelf life has expired.

1.06 PROJECT CONDITIONS

- A. Lead: Existing paint may contain lead. Take all necessary precautions to ensure the safety of all persons engaged in removing lead-based paint and dispose of all residues generated from lead-based paint stripping in a legal manner in accordance with all local, state and federal codes.
- B. Coordination: Coordinate wood repair with paint stripping so that the effected surfaces are exposed for a minimal time to avoid further damage to bare wood. Coordinate with painting so that all restored surfaces are primed as soon as possible after repair.
- C. Weather: Proceed with the work of this section only when existing and foreseen weather conditions permit the work to be performed in accordance with the manufacturer's recommendations for temperature and humidity range, minimum and maximum.
- D. Substrate Conditions: Do not proceed with product applications until substrates have been inspected and are determined to be in satisfactory conditions. Substrate moisture content shall not be in excess of 18%/0 during preparation and application.

1. Remove all decayed wood to a clean, sound, unaffected substrate
2. Remove all built up paints, and other debris to a clean sound substrate.
3. Remove all wood sawdust to a clean sound substrate.

- E. Protection:

1. Use all necessary means to protect interior of building from all damage caused by precipitation and other environmental conditions during the work of the Section

2. Protect all adjacent building surfaces from damage, staining or deterioration resulting from wood restoration work.

3. Protect the restoration work in progress to prevent further deterioration exposed wood surfaces. Protect the completed work until the time of final inspection and acceptance by the architect.

- F. Safety: General Contractor shall use all means necessary to ensure that no person (whether involved in the work of the Section or not) is harmed or injured due to the work of this Section. Comply with all applicable laws codes and regulations.
- G. Security: Coordinate work with the owners project manager to ensure that the building is secured at the end of each work period. Review security procedures with the Owner prior to proceeding with the work in this Section.

PART 2 - PRODUCTS

2.01 GENERAL

- A. Compatibility: provide products recommended by the manufacturers to be fully compatible with indicated substrate.

2.02 EPOXY REPAIR PRODUCTS

- A. Epoxy repair materials shall consist of 2 separate systems, a 2 part low viscosity epoxy primer/coupling agent and a 2 part thixotropic paste meeting the criteria of Table A and B.

2.03 MANUFACTURER OF REPAIR PRODUCTS AND EQUIPMENT

- A. Manufacturer: Subject to compliance with the requirements, provide product of the following or approved equal.

1. Advanced Repair Technology, Cherry Valley, NY
2. Window Care Systems, Pembroke, MA
3. or pre-approved equal (DURING THE BID PHASE ONLY)

2.04 REPAIR PRODUCTS

1. Low viscosity epoxy coupling/bonding agent
2. Epoxy repair compound
3. Injectable Borate gel
4. Borate rods

2.05 PAINT STRIPPERS

- A. Chemical Stripping Agent. Methylene chloride based, Thixotropic stripper
- B. Products: Subject to compliance with requirements, provide the following, or approved equal
 - 1. 509 Stripper
 - 2. ProSoCo
 - 3. or approved equal
- C. Low Temperature heat gun or heat plate, no open flame.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Inspect all wood surfaces in conjunction with the Architect to determine the extent of restoration and methods to be used.
 - 1. The Architect's decision regarding the extent of required repair, and extent of profile replication work shall be final.
 - 2. In wood surfaces where decay is present, determine the methods and treatment of repair.
 - 3. Areas that do not attach existing profiles, determine the level of restoration and replication to be achieved.
- B. Joints, Joinery and edges: Check wood members at joints, seams and edges for:
 - 1. Any open seams or failed conditions.
 - 2. Wood moisture content.
 - 3. The presence of wood decay, by probing surfaces.
- C. Sills and Trim
 - 1. Inspect wood surfaces for natural defects (knots) cracks and checks.
 - 2. Determine wood moisture content.
 - 3. Probe for the presence for wood decay.

3.02 REMOVAL

A. Removal of Finishes:

1. Remove all peeling and loose paint by scraping. Taking care not to damage sound wood and profiles.
2. Strip all painted wood surface to bare wood, taking care not to damage sound wood and profiles by the application of stripping paste or by the use of a heat gun or plate
 - a) Remove stripper and finishes as directed by manufacturer.
 - b) Dispose of debris in accordance with approved methods.
3. Wash all surfaces with recommended neutralizing agents to remove any foreign particle, dust and chemical residue, allow surface to thoroughly dry.

3.03 PREVENTATIVE SYSTEMS

A. Preservation and Sealing of seams and joints. Repair of wood" checking" due to weathering.

1. Open or failed seams and checks shall be dilated to a width of 3/16" and depth of 1/2"
2. Remove all decayed, soft and weathered wood.
3. Check the moisture content and hardness of wood at and around the repair, maximum allowable moisture content 18°/0.
4. Sand bare wood to remove all loose fibers, paint, compounds. Remove all sawdust and dirt.
5. Pre-treat bare and sanded wood thoroughly with low viscosity epoxy coupling/ bonding agent
6. Allow coupling agent to penetrate wood surface for a minimum of 10 minutes and maximum of 30 minutes, or as recommended by the manufacturer. Avoid applying in direct sunlight
7. Remove any excess bonding agent with absorbing paper
8. Apply epoxy repair compound over epoxy bonding agent while still tacky.
9. Epoxy compound shall have optimal contact with wood
10. Avoid inclusion of air pockets during application

11. Fill joints fill, even and smooth in one application
12. Allow full cure time as specified by manufacturer before application of paint or varnish.
13. After curing, sand surface even and smooth. Transitions and irregularities between wood and epoxy shall not be visible after sanding
14. If required, smooth any remaining irregularities with an additional application of epoxy repair compound. Always sand between coats.

3.04 CURATIVE SYSTEMS

A. Preservation and Repair of Damaged/Decayed Wood:

1. Remove all paint and other coatings from area to be repaired.
2. Remove all decayed soft and discolored wood, to sound bright unaffected material
3. Check area of removal to determine complete elimination of decayed material.
 - a) Remaining wood should be even color without red-brown and/or gray spots.
 - b) No soft wood, existing brittle compound, or other previous repair materials should remain.
4. Check moisture content and hardness of the wood in and around the repair area
 - a) Moisture content of wood to be 18% or less
5. Sand bare wood to remove all loose fibers, paint, compounds. Remove all sawdust and dirt.
6. Drill holes in effected area to receive borate gel and rods. Follow manufacturer's dose recommendations for dimensional lumber.
7. Inject recommended dose of borate gel. Gel should not come in contact with exposed wood surface.
8. Install borate rod in same hole as gel. Gel should not come in contact with exposed wood surface.
9. Pre-treat bare and sanded wood thoroughly with low viscosity epoxy coupling/bonding agent.
 - a) Allow coupling/bonding agent to penetrate wood surface for a minimum of 10 minutes and maximum of 30 minutes, or as recommended by the manufacturer. Avoid applying in direct sunlight

b) Remove any excess bonding agent with absorbing paper.

10. Apply epoxy repair compound over the uncured epoxy coupling agent.

a) Epoxy fill shall have optimal contact with wood

b) Avoid inclusion of air pockets during application

c) Fill joints fill, even and smooth in one application

d) Allow full cure time as specified by manufacturer before preparing for finishes.

11. After curing, sand surface even and smooth. Transitions and irregularities between wood and epoxy shall not be visible after sanding.

12. If required, smooth any remaining irregularities with an additional application of epoxy repair compound. Always sand between coats.

3.05 ADJUSTMENTS

A. Repair or replace all defective work at no additional cost to the owner.

SECTION 08871 - SOLAR CONTROL FILMS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions (reference Fisher And Arnold Technical) and Division 1 Specification

1.02 SECTION INCLUDES

- A. Solar control films.

1.03 RELATED SECTIONS

- A. Glazing: Substrate for application of solar control film. REFERENCE DRAWINGS FOR THE SCOPE OF WORK.

1.04 REFERENCES

- A. ASTM International (ASTM):
 - 1. ASTM D1044 - Test for Resistance of Transparent Plastics to Surface Abrasion (Taber Abrader Test).
 - 2. ASTM E903 - Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres.
- B. National Fenestration Rating Council, Inc. (NFRC): NFRC 302 - Optical Spectral Data Verification Program.
 - 1. NFRC 302 - Optical Spectral Data Verification Program.

1.05 DEFINITIONS

- A. Emissivity: The ability of a surface to absorb far-infrared heat and to reflect it. The lower the emissivity, the lower the far-infrared heat absorption and the greater the far-infrared heat reflectance.
- B. Far-Infrared Heat: Heat radiated from objects at temperatures below 1300 degrees F such as heat radiated from: room objects, objects heated by the sun, or a home heating system. Far-infrared heat is different from near-infrared heat that is radiated from objects at highly elevated temperatures such as the sun.
- C. Light to Solar Heat Gain Ratio: Ratio of visible light transmission to solar heat gain coefficient for a glazing system.
- D. Low Emissivity (Low-E) Films: Films with improved far-infrared heat reflection, with the ability to reduce winter heat loss through windows. The reflection of far-infrared heat also reduces the need for summer cooling by reducing the transmission of far-

infrared heat from outdoor objects through windows into the interior of a home or building.

- E. Spectrally Selective Solar Control Films: Film products that reduce solar heat gain mainly by reducing the transmission of near-infrared solar radiation with minimal reduction of visible light transmission. Films with a light to solar heat gain ratio of above 1.00 are spectrally selective.

1.06 PERFORMANCE REQUIREMENTS

- A. Scratch Resistance: Solar control films shall average less than 12 percent increase in haze when tested according to ASTM D1044 using a Teledyne Taber Abrader using CS10F Type III wheels each loaded to 0.5 kg for 100 cycles in a 70 percent vacuum.
- B. Scratch resistance and emissivity testing shall be performed by an independent third party agency.
- C. Ultraviolet Transmission: Provide solar control films with UV absorbing materials that limit the weighted UV transmission to less than 1.0 percent when measured according to ASTM E903.
- D. Provide solar control films that do not have a masking sheet.
- E. Product Standard: Comply with NFRC 302 for window film energy performance ratings.
 - 1. Window Film Energy Performance Certification: NFRC certified with label attached to each product package.

1.07 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Submit for each product specified indicating:
 - 1. Physical and performance properties.
 - 2. Preparation and installation instructions and recommendations.
 - 3. Storage and handling recommendations.
- C. Samples: For each type of solar control film specified, two (2) samples, 12 inches square.
- D. Qualification Data: Submit documentation indicating qualifications of solar control film manufacturer.
- E. Operation and Maintenance Data: Submit for solar control film to include in maintenance manuals.
- F. Warranty: Submit sample special warranty specified in this section.

1.08 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A qualified manufacturer that has a minimum of forty (40) years of documented experience manufacturing solar control films similar to that used for this project.
- B. Installer Qualifications: A firm that is authorized by solar control film manufacturer to install film in accordance with guidelines set forth by the manufacturer.
- C. Source Limitations: Obtain each type of solar control film from same manufacturer.
- D. Mockups: Build mockups to verify selections made under sample submittals and to evaluate surface preparation techniques and application workmanship.
 - 1. Construct mockups in the location and of the size indicated or, if not indicated, as directed by Architect.
 - 2. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- E. Preinstallation Conference: Conduct conference at project site to discuss methods and procedures relating to installation of the solar control films.

1.09 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, and handle materials in manufacturer's protective packaging.
- B. Store and protect materials according to manufacturer's written recommendations to prevent damage from condensation, temperature changes, direct exposure to sun, or other causes.

1.10 SITE CONDITIONS

- A. Ambient Conditions: Maintain temperature, humidity, and ventilation within limits recommended by manufacturer.

1.11 WARRANTY

- 1. Manufacturer's Warranty: Manufacturer's standard form in which manufacturer agrees to replace films that fail within specified warranty period.
- 2. Warranty Period: 15 years from date of original installation.
- 3. Warranty coverage limited to owner of property at time of installation.
- 4. Manufacturer's obligation is limited to furnishing replacement film for any film covered by limited warranty which manufacturer determines to be defective. Manufacturer will not be liable for installation costs of replacement film or for any special, indirect, incidental or consequential damages.

PART 2 - PRODUCTS

2.01 MATERIALS

A. MANUFACTURERS

Basis-of-Design Product: EnerLogic Window Films manufactured by Eastman Chemical Company, 575 Maryville Centre Drive, St. Louis, MO 63141; telephone: 800-851-7781; Email: Vista-films@solutia.com; Web Site: www.enerlogicfilms.com.

- B. Substitutions will be considered, subject to compliance with requirements of this section, under provisions of Section 01600, Products.

2.02 SOLAR CONTROL FILMS

- A. Solar Control Film: Vista EnerLogic 70 Low-E Solar Control Film (VEP70SRCDF) with the following performance characteristics when applied to the interior surface of single-pane, 3-mm clear glass:

1. Total Solar Transmittance: 46 percent.
2. Total Solar Reflectance: 21 percent.
3. Total Solar Absorptance: 33 percent.
4. Visible Light Transmission: 70 percent.
5. Visible Light Reflection - Exterior: 8 percent.
6. Visible Light Reflection - Interior: 4 percent.
7. U-Value, Winter Median: 0.61.
8. Shading Coefficient: 0.59.
9. Total Solar Energy Rejected (TSER): 49 percent.
10. Emissivity: 0.09.
11. Solar Heat Gain Coefficient (SHGC): 0.51.
12. Ultraviolet Rejection: 99 percent.
13. Light-to-Solar Heat Gain Ratio (LSG): 1.37.
14. Winter Heat Loss Reduction: 41 percent.
15. Summer Solar Heat Gain Reduction: 41 percent.
16. Glare Reduction: 22 percent.
17. Thickness without Liner: 60μ.
18. Film Color: Warm neutral.
19. NFRC Certification No.: CPF-K-050.

2.03 SOLAR CONTROL FILM ACCESSORIES

- A. General: Provide accessories either manufactured by or acceptable to solar control film manufacturer for application indicated, and with a proven record of compatibility with surfaces contacted in installation.
- B. Cleaners, Primers, and Sealers: Types recommended by solar control film manufacturer.
- C. Edge Sealant: No edge sealant required.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine substrates for compliance with requirements and for conditions affecting performance of solar control film including glass that is broken, chipped, cracked, abraded, or damaged in any way.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Comply with manufacturer's written instructions for surface preparation.
- B. Clean substrates thoroughly prior to installation. Provide additional scrubbing of perimeter area with X-100 solution.
- C. Prepare substrates using methods recommended by film manufacturer to achieve the best results for the substrate under project conditions.
- D. Protect window frames and surrounding surfaces to prevent damage during installation.

3.03 INSTALLATION

- A. Install in accordance with manufacturer's written instructions.
- B. No edge sealant required.
- C. Install film continuously.
- D. Do not remove release liner from film until just before each piece of film is cut and ready for installation.
- E. Custom cut to the glass with neat, square corners and edges to within 1/8-inch of the window frame. Install film with Film-On mounting solution and purified water. X-100 solution should never be used as the application solution for any reason.
- F. Remove air bubbles, blisters, and other defects. Be careful to remove "fingers" to eliminate any contamination or excess water pockets. It is crucial to remove as much water as possible during installation.
- G. A final squeegee pass over the entire pane using a Blue Max Blade with an extended handle design (or Thor's Hammer) is recommended.

3.04 FIELD QUALITY CONTROL

- A. After installation, view film from a distance of 10 feet against a bright uniform sky or background. Film shall appear uniform in appearance with no visible streaks, wrinkles, banding, thin spots or pinholes.

B. If installed film does not meet these criteria, remove and replace with new film.

3.05 CLEANING AND PROTECTION

A. Remove excess mounting solution at finished seams, perimeter edges, and adjacent surfaces.

B. Use cleaning methods recommended by solar control film manufacturer.

C. Replace films that cannot be cleaned.

D. Protect installed products until completion of project.

E. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION 08871

SECTION 09900 - PAINTING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions (reference Fisher And Arnold Technical) and Division 1 Specification sections, apply to work of this section.

1.02 DESCRIPTION OF WORK

- A. Prepare surfaces which are to receive finish.
- B. Finish surfaces as indicated in schedule at end of this section.

1.03 MOCK-UP

- A. Before proceeding with paint application, finish one room clearly indicating selected colors, finish texture, materials and workmanship.
- B. If approved, sample area will serve as a minimum standard for work throughout work.

1.04 SAMPLES

- A. Prepare 12" x 12" in samples of finishes when requested by Architect. When possible, apply finishes on identical type materials to which they will be applied on the job.
- B. Identify each sample as to finish, formula, color name and number.
- C. Colors to be selected by Architect prior to commencement of work.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials in sealed original labeled containers, bearing manufacturer's name, type of paint, brand name, color designation and instruction for mixing and/or reducing.
- B. Provide adequate storage facilities. Store paint materials at minimum ambient temperatures of 45 degrees Fahrenheit (seven (7) degrees C.), in well ventilated area.
- C. Take precautionary measure to prevent fire hazard and spontaneous combustion.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below following maximums:
 - 1. Gypsum Wallboard: 12%.

2. Masonry, Concrete and Concrete Block: 12%.
 3. Interior Located Wood: 15%.
 4. Exterior Located Wood: 15%.
- B. Ensure surface temperatures or the surrounding air temperature is above 40 degrees Fahrenheit before applying finishes. Minimum application temperatures for latex paints for interior work is 40 degrees Fahrenheit and 50 degrees Fahrenheit for exterior work.
 - C. Provide adequate continuous ventilation and sufficient heating facilities to maintain temperatures above 45 degrees Fahrenheit for 24 hours before, during and 48 hours after application of finishes.

1.07 PROTECTION

- A. Adequately protect other surfaces from paint and damage. Repair damage as a result of inadequate or unsuitable protection.
- B. Furnish sufficient drop cloths, shields and protective equipment to prevent spray or droppings from fouling surfaces not being painted and in particular, surfaces within storage and preparation area.
- C. Place cotton waste, clothes and materials which may constitute a fire hazard in closed metal containers and remove daily from site.
- D. Remove electrical plates, surface hardware, fittings and fastenings, prior to painting operations. These items are to be carefully stored, cleaned and replaced on completion of work in each area. Do not use solvent to clean hardware that may remove permanent lacquer finish.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Paint, Varnish, Stain, Enamel, Lacquer and Fillers: Type listed herein, or equivalent products by the following manufacturers are acceptable:
 1. Sherwin Williams Company.
 2. Benjamin Moore and Co. (Moore).
 3. Porter Paints (Porter).
- B. Paint Accessory Materials: Linseed oil, shellac, stain, turpentine and other materials not specifically indicated herein, but required to achieve the finishes specified of high quality and approved manufacturer.
- C. Paints: Ready-mixed except field catalyzed coatings. Pigments fully ground maintaining

a soft paste consistency, capable of being readily and uniformly dispersed to a complete homogeneous mixture.

- D. Paints to have good flowing and brushing properties and be capable of dry or curing free of streaks or sags.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Thoroughly examine surfaces scheduled to be painted prior to commencement of work. Report in writing to Architect, any condition that may potentially affect proper application. Do not commence until such defects have been corrected.
- B. Correct defects and deficiencies in surfaces which may adversely affect work of this section.

3.02 PREPARATION

- A. Remove mildew, by scrubbing with solution of trisodium phosphate and bleach. Rinse with clean water and allow surface to dry completely.
- B. Remove surface contamination from aluminum surfaces requiring a paint finish by steam, high pressure water or solvent washing. Apply etching primer, acid, or etc.
- C. Remove contamination from gypsum wallboard surfaces and prime to show defects, if any. Paint after defects have been remedied.
- D. Remove surface contamination and oils from galvanized surfaces and wash with solvent. Apply coat of etching type primer.
- E. Sand and scrape shop primed steel surfaces to remove loose primer and rust. Feather out edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.
- F. Wipe off dust and grit from miscellaneous wood items and millwork prior to priming. Spot coat knots, patch streaks and sappy sections with sealer. Fill nail holes and cracks after primer has dried and sand between coats. Back prime interior and exterior woodwork.
- G. Remove dust grit and foreign matter from exterior wood siding which is to receive paint finish. Seal knots, patch streaks and sap sections. Fill nail holes with exterior caulking compound after prime coat has been applied.

3.03 APPLICATION

- A. Apply each coat at proper consistency.
- B. Sand lightly between coats to achieve required finish.

- C. Do not apply finishes on surfaces that are not sufficiently dry.
- D. Allow each coat of finish to dry before following coat is applied.
- E. Where clear finishes are required, ensure tint fillers match wood. Work fillers well into the grain before set. Wipe excess from the surface.
- F. Backprime exterior woodwork, which is to receive paint finish, with exterior primer paint.
- G. Backprime interior woodwork, which is to receive paint or enamel finish, with enamel undercoater paint.
- H. Prime top and bottom edges of wood doors with gloss varnish when they are to receive a stain or clear finish.
- I. Remove grilles, covers and access panels for mechanical and electrical systems from location and paint separately.
- J. Finish paint primed equipment to color selected.
- K. Prime and paint exposed, insulated and bare pipes except where items are plates or covered with a prefinished coating.

3.04 PAINTING SCHEDULE

A. Exterior Surfaces:

1. Exterior Ferrous Metals, Hollow Metal Work, and Exposed Piping:

- a. First Coat: Sherwin Williams ProCryl Waterborne Universal Metal Primer.
- b. Second Coat: Sherwin Williams Duration Exterior Acrylic Satin
- c. Third Coat: Sherwin Williams Duration Exterior Acrylic Satin

2. Galvanized Metal:

- a. First Coat: Sherwin Williams ProCryl Waterborne Universal Metal Primer.
- b. Second Coat: Sherwin Williams Duration Exterior Acrylic Satin
- c. Third Coat: Sherwin Williams Duration Exterior Acrylic Satin

3. Exterior Wood Surfaces (Sherwin Williams Super Paint Exterior Acrylic Latex):

- a. First Coat: Primer per manufacturer's recommendations
- b. Second Coat: Exterior Acrylic Latex (Satin)
- c. Third Coat: Exterior Acrylic Latex (Satin)

4. Interior Wood Surfaces:

- a. First Coat: Primer Sealer (May be tinted)
- b. Second Coat: 100% Acrylic Latex (Semi-Gloss)
- c. Third Coat: 100% Acrylic Latex (Semi-Gloss)

5. Pre-painted Brick Surfaces (Sherwin Williams Emerald Exterior Acrylic Latex):

- a. First Coat: Where primer is required for newly repointed mortar joints or new brick, follow manufacturer's recommendations
- b. Second Coat: Exterior Acrylic Latex (Flat Sheen)
- c. Third Coat: Exterior Acrylic Latex (Flat Sheen)

3.05 CLEAN-UP AND PROTECTION

- A. Clean-Up: During progress of work, remove from site discarded paint materials, rubbish, cans, and rags at end of each work day.
- B. Upon completion of painting work, clean window glass and other paint-splattered surfaces. Remove splattered paint by proper methods of washing and scraping, taking care not to scratch or otherwise damage finished surfaces.
- C. Protection: Protect work of other trades, whether to be painted or not, against damage by painting and finishing work. Correct any damage by cleaning, repairing, or replacing and repainting, as acceptable to the Designer.
- D. Provide "wet paint" signs as required to protect newly painted finishes.
- E. At the completion of work of other trades, touch-up and restore all damaged or defaced painted surfaces.