

PROJECT MANUAL

GREENWOOD VOLUNTEER FIRE AND RESCUE FACILITY RENOVATIONS

809 Greenwood Road
Frederick County, VA 22603



JOB # 0324-2
May 14th, 2021



DESIGN CONCEPTS

architecture + interiors

131 South Loudoun Street Winchester, VA 22601
Phone: (540) 722-7247; Fax: (540) 722-7248
architect@1designconcepts.com



THE AMERICAN INSTITUTE
OF ARCHITECTS

OWNER

Greenwood Volunteer Fire and Rescue
809 Greenwood Road
Frederick County, VA 22603

OWNER'S REPRESENTATIVE

Mr. Jeremy Luttrell
Assistant Chief

DESIGN TEAM

ARCHITECT

DESIGN CONCEPTS
Tim Machado, AIA

STRUCTURAL ENGINEER

ALLEGHENY DESIGN SERVICES
David Simpson, PE

MEP ENGINEER

ALLEGHENY DESIGN SERVICES
Mike Chancey, PE
Dave Cotton, PE



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1. To Be Determined

Notes:

1. **All bold and underlined items are addendum items.**
2. **Strikethrough lines or paragraphs are no longer part of the contract.**

END OF SECTION

LIST OF DRAWINGS

The following Drawings are a part of the Contract Documents as defined in the General Conditions of the General Requirements.

		LATEST ISSUE DATE
GENERAL		
CS.1	COVER SHEET	July 24, 2020
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PD.2	SECOND FLOOR PLUMBING DEMO PLAN	July 24, 2020
PD.3	ROOF PLUMBING DEMO PLAN	July 24, 2020
P-1.0	PLUMBING SCHEDULES, SYMBOLS, & NOTES	July 24, 2020
P-1.1	FIRST FLOOR PLUMBING PLAN	July 24, 2020
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MECHANICAL

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MD.3	ROOF HVAC DEMO PLAN	July 24, 2020
M-1.0	MECHANICAL SCHEDULES, SYMBOLS, & NOTES	July 24, 2020
M-1.1	MECHANICAL SCHEDULES & NOTES	July 24, 2020
M-1.2	FIRST FLOOR HVAC PLAN	July 24, 2020
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ELECTRICAL

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E-3.1	1ST FLOOR POWER PLAN	July 24, 2020
E-3.2	2ND FLOOR POWER PLAN	July 24, 2020
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E-8.2	DIAGRAMS & DETAILS	July 24, 2020

END OF SECTION

00100 - INSTRUCTIONS TO BIDDERS

1. Project Name:
Greenwood Volunteer Fire and Rescue Facility Renovations

2. To obtain bidding documents contact:

Tim Machado, AIA
DESIGN CONCEPTS
131 South Loudoun Street
Winchester, VA 22601
architect@1designconcepts.com

Deposit for Documents: A non-refundable fee in the amount of (\$ 0.00) is required to obtain one (1) copy of the bidding documents (plans and specifications).

3. Mandatory Prebid Meeting: **There will be a mandatory Prebid Meeting on** (SEE LETTER TO BIDDERS) **at:**

Greenwood Volunteer Fire and Rescue
809 Greenwood Road
Frederick County, VA 22603

4. Submission of Bids: Submit Section 00300 - Bid Form before the time and date below. Late submissions will not be considered. The bidder is required under Title 54, Chapter 7, Code of Virginia (1950), as amended, to provide evidence of being a Class A "Licensed Virginia Contractor," and shall place this number on the outside of the envelope containing the bid. Submit bids in sealed and labeled envelopes with the project name and bidder's name on the outside of the envelope. Mark the envelope: "Bid Enclosed: Do Not Open".

Submit Bid To:

Greenwood Volunteer Fire and Rescue
809 Greenwood Road
Frederick County, VA 22603
Phone: (540) 667-9417

Date and Time of Day: (SEE LETTER TO BIDDERS)

5. A Bid Security is required in the amount of 5% of the bid. Bid Security must be in the form of an AIA A310 bid bond, certified check, or cashier's check made payable to the Owner. Bid security will be forfeited if a bidder who has been awarded the contract fails to execute the Owner/ Contractor Agreement within 10 days of notification by Owner. Bid Security for unsuccessful bidders will be returned no later than 30 days after the contract is first awarded.

6. Each bidder shall submit evidence of bondability for the entire value of the work. Bonds must be executed by a surety company licensed to do business at the location of the project. Bond form shall be AIA Document A312.
7. Oral, written, or telecopied modifications to bids will not be considered. Modifying or qualifying statements of any kind shall be on a separate sheet and submitted in the same envelope with the bid.
8. The Owner reserves the right to award a Contract base solely on the basis of the Base Bid Proposal or the Base Bid Proposal and any combination of Alternates thereto.
9. The Owner reserves the right to modify the Contract Documents and rebid the project, if necessary, to meet Owner's budgetary requirements.
10. Questions: During the bidding period, submit questions to the person named below. Questions will be answered once a week in writing and copies distributed to bidders of record.

Tim Machado, AIA
DESIGN CONCEPTS
131 South Loudoun Street
Winchester, VA 22601
architect@1designconcepts.com
11. Site Visit: All bidders are required to visit the site.
12. Qualifications of Bidders
 - A. The Owner may make any investigations he deems necessary to determine the ability of each invited Bidder to perform the work. Furnish the Owner all information and data for this purpose as he may request.
 - B. The Owner reserves the right to reject any bid if evidence submitted by, or investigation of, any bidder fails to satisfy the Owner that the Bidder is properly qualified to carry out the obligations of the contract to complete the work contemplated.
 - C. Bidder must have demonstrated ability and experience in projects of similar size and type.
13. Any Voluntary Alternates the Bidder may wish to offer shall be fully defined and separately priced on separate page. All lump-sum alternate prices are to be in the form of additions to or deductions from the Total Base Price.
14. Listing of Subcontractors

- A. The Contractor shall submit to the Architect in writing, with the bid form, for his approval, the names and addresses of the major subcontractors; site work, concrete, masonry, metal stud framing & drywall, painting, flooring, steel erector, heating, ventilating, air conditioning (HVAC), plumbing, and electrical, to whom the bidder proposes to award the work on this project.
- B. The bidder is not required to employ for any such work persons or firms against whom he has justifiable objection, as mutually agreed upon by the Owner and General Contractor.

15. Taxes

- A. Include in the bid all applicable taxes leveled by all government agencies relating to the project, other than sales and use taxes. Owner is exempt from state taxation pursuant to 12 U.S.C. Section 1768. Except as otherwise expressly agreed between Owner and Contractor, Owner desires to purchase the equipment and materials to be incorporated in the Project in the course of construction (the "Materials") separately from any construction services. Contractor will serve as Owner's purchasing agent to make such purchases in the name of and with the credit of Owner as provided by Owner. All forms referred to herein will be amended, as necessary, to reflect this arrangement. All Materials shall be separately stated from construction and other services and such Materials shall be separately purchased by Owner. Contractor shall serve as Owner's purchasing agent for the purchase of the Materials. All such purchases shall be solely made in Owner's name, using Owner's credit and using Owner's form of Purchase Order. The Purchase Order shall state that Owner is exempt from sales and use tax and shall have attached the appropriate exemption certificate from the Virginia Department of Taxation. Payments for all such purchases shall be made solely from an account maintained and funded by and in the name of Owner. Payment from the account for Materials shall be made, at Owner's election by Owner directly, or by contractor as Owner's agent and authorized signatory. The Project bid should state the anticipated cost for the purchase of Materials by Owner and should separately state any fee charged by Contractor for serving as Owner's purchasing agent. Owner and contractor shall enter into an addendum to outline a mutually agreeable procedure for such purchases. Contractor shall ensure that any subcontractors separately state materials and shall arrange for the same to be purchased as provided above.

END OF SECTION

00150 - EXAMINATION, INTERPRETATION AND INTENT OF CONTRACT DOCUMENTS

1.01 Examination

- A. Before submitting a bid, carefully examine the drawings and read the Project Manual and all other contract Documents. Be fully informed prior to bidding of all existing conditions and limitations under which the work is to be performed.
- B. Include in the bid a sum to cover the cost of all items necessary to perform the work as set forth in the contract documents. No allowance will be made to any bidder because of the lack of examination or knowledge. The submission of a bid shall be construed as conclusive evidence that the bidder has made this examination.
- C. The Contract Documents are complementary, and what is required by any one shall be as binding as if required by all. The intention of the contract Documents is to include all labor, materials, equipment, and other items necessary for the proper execution and completion of the work.
- D. Within Contract Documents, there shall be the following precedence:
 - 1. Addenda or modifications of any nature, to the Drawings and Project Manual take precedence of the original.
 - 2. Project Manual takes precedence over Drawings.
 - 3. Within the working Drawings, the larger scale takes precedence over smaller, figured dimensions over scaled, and noted materials over graphic indications.

1.02 Interpretation

- A. It is to be understood and agreed that drawing refinement and additional detailing will be done from time to time. No Adjustment will be made in the contractor's and sub-contractor's price unless such refinement or detailing results in changes in the scope, quality, function, and/or intent of the drawings and specifications not reasonably inferable or anticipatable by a contractor or sub-contractor experienced in this type of work.
- B. If anyone contemplating submitting a bid for the construction of the work is in doubt as to the true meaning of any part of the contract documents, or finds discrepancies or omissions in any part of the contract documents, he may submit to the Architect a written request for an interpretation of correction, no later than 2 business days before the bids will be opened.

1.03 Intent

- A. The Architect has endeavored to separate all work into various categories as set forth in the Project Manual. This separation is done for the convenience of the Contractor, and the Architect assumes no responsibility for the inclusion of all or any specific items under any particular section or trade.
- B. Some sections of the Project Manual have been written in abbreviated style, in which such phrases as “The Contractor shall,” or “shall be”, etc., have been omitted. Where the sense of sentence or statement implies inclusion of the above phrases, it shall be construed to be so included or directed.
- C. The Contractor is held responsible for including all items, either shown on the drawings or called for in the Project Manual and Addenda (if issued). If an item is called for on the drawings, and not specifically designated to or indicated in a particular Project Manual specification section, the Contractor shall determine by whom it will be supplied and installed as part of the contract amount. No extra charge will be allowed. The Architect will not arbitrate differences between Contractor and subcontractor(s). No allowance will be made for lack of skill or workmanship on the part of any trade or workman on this project.
- D. Mechanical and electrical drawings are diagrammatic, intending to show general locations and arrangements of piping, wiring, equipment and specialties, and not necessarily to show all necessary offsets, conditions and appurtenances required for maximum practical accessibility for operation, maintenance and headroom.
- E. No drawings are intended to be rigid in specific details where any details may be in conflict with the recommendations of the equipment manufacturer. Make any modifications in designs indicated or specified as may be necessary to assure that all work conforms to manufacturer’s recommendations.
- F. As Owner’s agent, arrange for the purchase, delivery and (as necessary) storage of all specified equipment and materials with all features normally provided with these items although all features of design and construction may not be specified in complete detail. Include all standard features and appurtenances normally provided or necessary for safe operation, subject to the Architect’s approval.
- G. It shall be the responsibility of the General contractor to advise all subcontractors and equipment suppliers, who are to be used on this project, to thoroughly read and understand the intent of the Project Manual specifications sections and/or drawings, which are specifically related to the furnishing and installation of their product or furnishing of a particular service.

Failure of the General contractor, the subcontractors, and/or equipment suppliers to read and understand their specific Project Manual specification sections and/or equipment suppliers to read and understand their specific Project Manual specification sections and/or drawings, will not relieve the General contractor of responsibility to furnish the specified product or service, at no additional expense to the Owner.

- H. Where the following words, “furnish” or “provide” appear in this Project Manual and on the drawings, the specific product or service referred to shall be furnished or provided as part of the Base Bid, unless indicated otherwise.
- I. The Architect’s decisions in matters relating to artistic effect will be final if consistent with the intent of the Contract Documents.
- J. If the drawings disagree within themselves or with the Project Manual or the Drawings and Project Manual disagree within themselves, the superior and greater quality or quantity of work or materials shall be estimated upon, and unless specified in writing by the Architect, shall be provided.

END OF SECTION

SECTION 00300 - BID FORM

1. Submit bids in compliance with Section 00100 - Instructions to Bidders. Fill in blanks. The Owner reserves the right to reject incomplete bid forms.
2. This Bidding document is not part of the Contract Documents, unless specifically referenced in the Owner/Contractor Agreement.
3. Name and Address of Bidder:
4. Base Bid: The Bidder proposes to perform all of the Work required by the Contract Documents for the amount of: (Fill in amount in words and numbers.)

§

Bid price valid 90 days after submission.

5. Alternates: If an Alternate is selected by the Owner, the Bidder proposes to do the Work required by the Contract Documents by increasing or decreasing the Base Bid the following amount: (Fill in amounts in words and numbers) (See Section 01030).

A. Alternate No. 1 - NOTE ALTERNATE IF ANY

B. Alternate No. 2 - NOTE ALTERNATE IF ANY

6. Time: The Bidder proposes to meet the following dates (Note any deviation):

A. Proposed Starting Date: 1 MONTH AFTER NOTICE OF AWARD.

B. Proposed Date of Substantial Completion: 9 MONTHS AFTER NOTICE OF AWARD

7. By submitting this Bid Form, the Bidder certifies that he has been advised to visit the project site, is aware of existing conditions which affect the work, and has reviewed the Contract Documents, including the following Addenda: (List Addenda received)

Addendum No. 1 **Dated** INSERT DATE

Addendum No. 2 **Dated** INSERT DATE

Addendum No. 3 **Dated** INSERT DATE

Addendum No. 4 **Dated** INSERT DATE

8. Provide the unit cost information: NOTE UNIT COSTS
9. Signed and sealed (Enter date, Bidder's signature and legal business address.)

00300-1

Bids are due no later than (SEE LETTER TO BIDDERS) to:

Greenwood Volunteer Fire and Rescue
809 Greenwood Road
Frederick County, VA 22603
Phone: (540) 667-9417

Bids received after this time will not be considered.

The undersigned, as Bidder, hereby declares that the only person or persons interested in this proposal as principal or principals is or are named herein and that no other person than herein mentioned has any interest in the proposal or in the contract to be entered into; that this proposal is made without connection with any other person, company or parties making a bid or proposal; and that it is in all respects fair and in good faith without collusion or fraud.

The undersigned further agrees that in the case of failure on his part to execute the said contract and the Bond within ten (10) consecutive calendar days after written notice being given of the award of the contract, the check, cash or Bid Bond accompanying this bid shall be paid into the funds for the Owner's account set aside for the project as liquidated damages for such failure; otherwise, the check, cash or Bid Bond accompanying this proposal shall be returned to the undersigned.

The Bidder further declares that he has examined the site of the work and informed himself fully in regard to all conditions pertaining to the places where the work is to be done; that he has examined the Contract Documents relative thereto and he has taken special note that work shall be guaranteed for a period of one year after acceptance by Owner; and he has read all special provisions furnished prior to the opening of bids; that he has satisfied himself relative to the work to be performed.

The Bidder proposes and agrees if this proposal is accepted to contract with the Owner in the form of contract specified to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation and labor necessary to complete the work as stated below in full and complete accordance with the Contract Documents, with a definite understanding that no money will be allowed for extra work except as set forth in the Contract Documents.

00300-2

CONSTRUCTION COST	
(provide cost in numbers with words below)	
ITEM	PRICE
1. General Conditions	\$
2. Site Construction	\$
3. Concrete	\$
4. Masonry	\$
5. Metals	\$
6. Wood and Plastics	\$
7. Thermal and Moisture	\$
8. Doors and Windows	\$
9. Finishes	\$
10. Specialties	\$
11. Equipment	\$
12. Furnishings	\$
13. Special Construction	\$
14. Conveying Systems	\$
15. Mechanical	\$
16. Electrical	\$
Builder's Risk Insurance	\$
Bonds	\$

Permits	\$
Overhead	\$
Profit	\$
Contingency	\$
Signage Allowance	\$ 5 , 0 0 0 . 0 0
Total Construction Cost	\$

BASE BID

_____ Dollars (\$_____)

ADD ALTERNATE #1

_____ Dollars (\$_____)

ADD ALTERNATE #2

_____ Dollars (\$_____)

ADD ALTERNATE #3

_____ Dollars (\$_____)

ADD ALTERNATE #4

_____ Dollars (\$_____)

UNIT PRICES (note where applicable)

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>COST</u>	
1.	Extended General Conditions	\$_____	per day
2.	Concrete Masonry Units		
	8x8x16 ea. in place	\$_____	per lin.ft.
	8x8x16 ea. in place grouted with reinforcing	\$_____	per lin.ft.
3.	Metal stud wall with gypsum each side	\$_____	per lin.ft.
4.	Painting on Concrete Block, coats and finish as specified	\$_____	per sq.ft.
5.	Install R-38 batt insulation (above ceiling)	\$_____	per sq.ft.
6.	Install 2" rigid insulation (walls) in furred walls with metal hat channels	\$_____	per lin.ft.
7.	Install R-30 rigid insulation (roof)	\$_____	per sq.ft.
8.	PT Wood Blocking removal and replacement	\$_____	per lin.ft.
9.	2'x2' Ceiling Grid and Tile, in place	\$_____	per sq.ft.
10.	PLAM Casework	\$_____	per lin.ft.
11.	EPDM Roofing System	\$_____	per sq.
12.	Metal Coping	\$_____	per lin.ft.

The previously listed unit prices shall be applied in determining cost for additions to or from the Work after execution of the construction contract. Unit prices shall include, but are not limited to, all costs for labor, materials, equipment, insurance, taxes, freight charges, delivery charges, trade discounts, overhead, profit and bonds. **The combined percentage total for overhead and profit shall not exceed ten percent (10%).**

NOTE: The Owner reserves the right to renegotiate any or all of the unit prices described herein at any time before commencement of unit price work.

Respectfully submitted this _____ day of _____ 20____.

Registered as a Contractor under Code of Virginia:

(License or Certificate Number)

(Name of Firm or Corporation making bid)

BY: _____

TITLE: _____
(Owner, Partner, or Corp. Pres. or Vice-Pres. Only)

WITNESS:

(Proprietorship or Partnership)

ATTEST:

BY: _____

TITLE: _____
(Corp. Sec, or Assist. Sec. Only)

Addendum No. 1 Dated _____

Addendum No. 2 Dated _____

Addendum No. 3 Dated _____

Addendum No. 4 Dated _____

END OF BID FORM

END OF SECTION

SECTION 00400 - FORMS

PART 1 - GENERAL

1.01 SUMMARY

The purpose of this Section is to describe what forms are required which are not listed elsewhere. For time of and requirements for submittal of forms and other requirements, see Instructions to Bidders, General Conditions and specifications.

1. INSURANCE: *ACORD Certificate of Insurance 25-S*, and AIA DOCUMENT G715, *Supplemental Attachment*, Current Edition.
2. PAYMENT: AIA DOCUMENT G702, *Application and Certificate for Payment*, Current Edition, and AIA DOCUMENT G703, *Continuation Sheet of G702*.
3. PROPOSAL REQUESTS: AIA DOCUMENT G709, *Work Changes Proposal Request*, Current Edition.
4. CHANGE ORDERS: AIA DOCUMENT G701, *Change Order*, Current Edition.
5. CHANGE DIRECTIVE: AIA DOCUMENT G714, *Construction Change Directive*, Current Edition.
6. SUBSTANTIAL COMPLETION: AIA DOCUMENT G704, *Certificate of Substantial Completion*, Current Edition.
7. PAYMENT OF DEBTS AND CLAIMS: AIA DOCUMENT G706, *Contractor's Affidavit of Payment of Debts and Claims*, Current Edition.
8. RELEASE OF LIENS: AIA DOCUMENT G706A, *Contractor's Affidavit of Release of Liens*, Current Edition.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION

SECTION 00500 - AGREEMENT FORM

PART 1 -GENERAL

1.01 SUMMARY

- A. The “Standard Form of Agreement Between Owner and Contractor”, AIA Form A101, Current Edition, of the American Institute of Architects, is a part of this Project Manual to the same extent as if bound here in. Copies of this document may be inspected at or received from the office of the Architect/Engineer upon request. Notwithstanding the foregoing, the Standard Form of Agreement shall be modified by an addendum as necessary to reflect Owner’s desire to have contractor serve as Owner’s agent for the purchase of equipment and materials.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION

DOCUMENT 00600 - BONDS

PART 1 - GENERAL

1.01 SUMMARY

- A. The “Performance Bond and Payment Bond”, AIA Form A312, Current Edition of the American Institute of Architects, is a part of these specifications to the same extent as if bound herein. Copies of this document may be inspected at or received from the office of the Architect/Engineer upon request.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION

SECTION 00700 - GENERAL CONDITIONS

PART 1 - GENERAL

1.01 SUMMARY

- A. The “General Conditions of the Contract for Construction”, AIA. Form A201, Current Edition, of the American Institute of Architects, is a part of these specifications to the same extent as if bound herein. Copies of this document may be inspected at or received from the office of the Architect/Engineer upon request. Notwithstanding the foregoing, the General conditions of the Contract shall be modified by an addendum as necessary to reflect Owner’s desire to have contractor serve as Owner’s agent for the purchase of equipment and materials.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION

SECTION 00800 - SUPPLEMENTARY CONDITIONS

PART 1 - GENERAL

- A. The Supplementary Conditions modify, change, delete from or add to the General conditions and shall apply to each and every Section of the Work as though written in full therein.
- B. The following paragraphs and subparagraphs take precedence over the General conditions. Where any part of the General Conditions is modified or deleted by the Supplementary Conditions, the unaltered provisions remain in effect.
- C. Paragraph numbers and titles refer to like numbers and titles in the General Conditions.

ARTICLE 1 GENERAL PROVISIONS

1.1.1 Omit the last sentence and add the following: The Contract Documents shall include Specification Section 00150 - Examination, Interpretation, and Intent of Contract Documents.

1.1.4 Add the following: The project is the Greenwood Volunteer Fire and Rescue Facility Renovations

1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

Add the following subparagraphs:

1.2.4 Sections of DIVISION 1–GENERAL REQUIREMENTS govern the execution of all sections of the Project Manual.

1.2.5 Summary paragraphs placed at the beginning of the Sections present a brief indication of the principal Work included in that Section, but do not limit Work to subject mentioned nor purport to itemize Work that may be included.

1.2.6 Failure to report a conflict in the Contract Documents shall be deemed evidence that the Contractor has elected to proceed in the more expensive manner.

1.2.7 The words “approved”, “inspected”, “directed”, “selected” and similar words and phrases shall be presumed to be followed by “by Architect”. The words “satisfactory”, “submitted”, “reported”, and similar words and phrases shall be presumed to be followed by “to Architect”.

1.2.8 Adjustments to the Contract Sum. Equitable adjustments to the Contract Sum shall be determined, at the Owner’s option, based on mutual agreement by the Owner and Contractor on (a) a lump sum adjustment, properly itemized in a document signed by both parties; (b) unit prices provided in the Contract Documents, if any,

or subsequently agreed upon by the parties; or (c) the documented change in the Contractor's costs, reasonably incurred, associated with the changed Work plus a fixed or percentage fee adjustment; provided, however, that the percentage mark-ups shall not exceed those set forth in the original proposal submitted by the Contractor. The Contractor shall submit its request for equitable adjustment to the Contract Sum in complete breakdown form showing all units of labor, material, general conditions, overhead and profit. The combined percentage for overhead and profit shall not exceed ten percent (10%).

- 1.2.9 If the parties are unable to agree on an adjustment using one of the three methods set forth in the preceding sentence, then the adjustment shall be proposed for the Owner's approval based on the Architect's determination of the net change in the Contractor's reasonable cost of performing the changed Work plus the applicable percentage markup (or reduction, as the case may be) for overhead and profit.
- 1.2.10 The applicable percentage markup shall include: Field and office supervisors and assistants; wages of timekeepers, clerks, watchmen; hand tools; insurance (other than that allowed under "costs" below); general office expenses; all administrative costs; all other expenses not included below as "cost".
- 1.2.11 The "costs" shall be computed to include the actual costs of: Labor, including prorated charges for foremen; materials entering permanently into the Work, including cost of transportation; Ownership or rental cost of construction plant and equipment during time of use for the extra Work; power and consumable supplies for the operation of power equipment; workers' compensation insurance and labor benefits required under collective bargaining; burden; Social Security and old age and unemployment insurance; bond premiums; job engineering, stakeout and layout; and applicable taxes.
- 1.2.12 Instructions, directions and requirements as specified shall be considered to be followed by the phrase "unless otherwise or indicated".

ARTICLE 2 OWNER

2.1 GENERAL

- 2.1.1 Add the following: Wherever the term "Owner" is used, it refers to Greenwood Volunteer Fire and Rescue. Owner's Representative is Mr. Jeremy Luttrell, Assistant Chief.

2.3 INFORMATION AND SERVICES REQUIRED OF THE OWNER.

Delete Subparagraph 2.3.4 in its entirety and substitute the following:

- 2.3.4 The Owner will furnish surveys only to the extent indicated on the Drawings. Other information required for the completion of the Work, but not indicated on the

Drawings, shall be obtained by the Contractor as a part of the Contract. See SECTION 01520 - FIELD ENGINEERING of the Project Manual for further requirements on this subject.

ARTICLE 3 CONTRACTOR

3.4 LABOR AND MATERIALS

3.4.2 Refer to SECTION 01300-SUBMITTAL PROCEDURES and SECTION 01600 - PRODUCTS AND SUBSTITUTIONS of the Project Manual for further requirements on this subject.

3.5 WARRANTY

3.5.1 Add the following: The contractor shall guarantee the work for a period of one (1) full year following Substantial Completion.

3.8 ALLOWANCES

Delete Subparagraphs 3.8.2.2 and 3.8.2.3 in their entirety. Refer to SECTION 01020 – ALLOWANCES of the Project Manual for further requirements on this subject.

ARTICLE 7 CHANGES IN THE WORK

7.2 CHANGE ORDERS

Refer to SECTION - 01035 - CHANGE PROCEDURES of the Project Manual for further requirements on this subject.

ARTICLE 8 TIME

8.3 DELAYS AND EXTENSIONS OF TIME

8.3.1 Add the following: In case of claims for extensions of time because of adverse weather, such extensions of time shall be granted only when such adverse weather prevented the execution of critical schedule items of Work on normal working days. The Contractor shall provide an estimate of the probable effect of such delay on progress of the Work.

ARTICLE 9 PAYMENTS AND COMPLETION

9.3.1 Add the following: Owner shall pay all approved invoices for materials as and when due. Until the work is fifty percent (50%) complete, the Owner will pay ninety percent (90%) of the amount due the Contractor on account of progress payments. At the time the work is fifty percent (50%) complete and thereafter, if the manner of completion of the work and its progress are and remains satisfactory to the

Architect, and in the absence of other good and sufficient reasons, the Architect will, on presentation of the Contractor of Consent of Surety for each Application, authorize any remaining partial payments to be paid ninety-five percent (95%) of the full amount.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

Add the following subparagraphs:

10.1.1 The Contractor shall provide Owner with an affidavit notarized by a notary public which certifies that no PCB's or asbestos have been used in the materials for construction of the Project. This affidavit shall be due at the same time the Release of Lien on products is furnished tot the Architect.

10.1.2 The Contractor shall provide Owner with an affidavit notarized by a notary public which certifies that all materials containing Volatile Organic components (VOC) are in strict compliance with all VOC (Volatile Organic Components) requirements and regulations of the EPA (Environmental Protection Agency), State, County, City, and Local districts or authorities.

ARTICLE 11 INSURANCE AND BONDS

11.1 CONTRACTOR'S LIABILITY INSURANCE

In the first line of Subparagraph 11.1.1 following the word "maintain", insert the words, "in a company or companies licensed to do business in the Commonwealth of Virginia".

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

1. Worker's Compensation – State, Statutory.
2. Comprehensive General Liability (including Premises – Operations; Independent Contractors' Protective; Products and Completed Operations; Broad form Property Damage):
 - a. Bodily Injury / Property Damage: \$1,000,000 each occurrence
\$1,000,000 annual aggregate
 - b. Property Damage Liability Insurance will provide X, C, or U coverage as applicable.
3. Contractual Liability: a. Bodily Injury
/ Property Damage: \$1,000,000 each occurrence
\$1,000,000 annual aggregate

- 4. Personal Injury, with Employment Exclusion deleted
\$1,000,000 annual aggregate
- 5. Comprehensive Automobile Liability: a. Bodily
Injury / Property Damage: \$1,000,000 each person
\$1,000,000 each occurrence

11.2 OWNER'S INSURANCE

Delete the entirety of Subparagraph 11.2.1 and substitute the following:

- 11.2.1 The Contractor shall purchase and maintain insurance covering the Owner's contingent liability for claims, which may arise from operations under the Contract.

Add the following:

- 11.2.4 the Contractor shall purchase and maintain builder's risk insurance, payable to the Contractor and Owner, upon the entire structure and upon all materials in or adjacent thereto which are to be made part of the insured structure to 100% of the insurable valued thereof covering all risks.

ARTICLE 15 CLAIMS AND DISPUTES

15.1.6 CLAIMS FOR ADDITIONAL TIME

- 15.1.6.2 Delete the portion of the last sentence "and had an adverse effect on the scheduled construction" and insert the following:
"and such adverse weather prevented the execution of critical schedule items of Work on normal working days. The Contractor shall provide an estimate of the probable effect of such delay on progress of the Work."

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION

SECTION 01010 - SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

- A. Project identification: Greenwood Volunteer Fire and Rescue Facility Renovations.
- B. Project summary:
 - 1. Abbreviated written summary: Renovation of existing Fire & Rescue facility
See Cover Sheet.
 - 2. Construction type: III-B; Combustible / Unprotected.
See Cover Sheet.
 - 3. Primary Use Groups: B: Business; R-2: Residential; S-1: Moderate Hazard Storage.
See Cover Sheet.
 - 4. Major systems: Architectural, Structural, Plumbing, Mechanical, Electrical Systems.
- C. Particular project requirements:
 - 1. Existing site conditions and restrictions: All parking, staging, and deliveries on site must be coordinated with Owner. VEHICLE BAYS SHALL BE KEPT FREE AND CLEAR AT ALL TIMES INCLUDING CONSTRUCTION TRAFFIC, STAGING, AND DELIVERIES.
 - 2. Requirements for sequencing or scheduling: OWNER CANNOT HAVE UNANNOUNCED INTERRUPTION IN SERVICES AT ANY TIME. Coordinate with Owner IN ADVANCE if utilities will be interrupted at any time. Coordinate with Owner and Owner's suppliers for furniture, equipment, etc.
 - 3. Prior or concurrent work by Owner or others: Equipment will be installed concurrently with the completion of the building.
 - 4. Prior hazardous waste or asbestos work by Owner or others: None.
 - 5. Pre-purchased and pre-ordered items: See Section 01610.
 - 6. Owner-purchased, Owner-installed items: See Section 01610.
 - 7. Owner-purchased, Contractor-installed items: See Section 01610.
 - 8. Owner's occupancy / Substantial Completion: 9 MONTHS FROM NOTICE OF AWARD.
 - 9. Occupancy of adjacent facilities: Note Existing Uses on Nearby Lots.
 - 10. Contractor's use of new facilities: None
- D. Permits: Apply for, obtain, and pay for permits required to perform the work. Submit copies to Owner.
- E. Codes: Comply with applicable codes and regulations of authorities having jurisdiction. Submit copies of inspection reports, notices and similar communications to Owner.

- F. Dimensions: Verify dimensions indicated on drawings with field dimensions before fabrication or ordering of materials. Do not scale drawings.
- G. Existing Conditions: Notify Owner of existing conditions differing from those indicated on the drawings. Do not remove or alter structural components without prior written approval.
- H. Submit statement to Architect/Engineer certifying that all temporary and permanent materials used on this project are asbestos-free.
- I. Intent: Drawings and specifications are intended to provide the basis for proper completion of the work suitable for the intended use of the Owner. Anything not expressly set forth but which is reasonable implied or necessary for proper performance of the project shall be included.
- J. Writing style: Specifications are written in the imperative mode. Except where specifically intended otherwise, the subject of all imperative statements is the Contractor. For example, 'Provide tile' means 'Contractor shall provide tile.'

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION

SECTION 01020 - ALLOWANCES

PART 1 - GENERAL

1.01 SUMMARY

- A. Allowance amounts below are for materials only. Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances.
- B. Coordinate allowances with requirements for related and adjacent work.
- C. Notify Owner of date when final decision on allowance items is required to avoid delays in the work.
- D. Furnish certification that quantities of products purchased are the actual quantities needed with reasonable allowance for cutting or installation losses, tolerances, mixing waste and similar margins.
- E. Submit invoices or delivery slips to indicate actual quantities of materials delivered and costs. Indicate amounts of applicable trade discounts.
- F. Contractor should include \$5,000 allowances for signage. Exterior building sign is included in this allowance. Coordinate with Owner.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION

3.01 SUMMARY

- A. There will be a considerable amount of field coordination necessary. The bidders' fixed price is to reflect this to avoid change orders.

END OF SECTION

SECTION 01027 - APPLICATION FOR PAYMENT

PART 1 - GENERAL

1.01 SUMMARY

Submit applications for payment to the Architect in accordance with the schedule established by the Conditions of the Contract and the Agreement Between the Owner and the Contractor. Enclose with each application, the progress reports specified in SECTION 01310 - CONSTRUCTION SCHEDULES AND REPORTS.

1.02 FORMAT AND DATA REQUIRED:

Submit itemized applications typed on AIA Document G702. Application and Certificate for Payment, and continuation sheets G703, as specified in SECTION 01350 - SCHEDULE OF VALUES.

1.03 PREPARATION OF APPLICATION FOR PROGRESS PAYMENT:

A. Application Form:

1. Fill in required information, including that for Change Orders executed prior to the date of submittal of application.
2. Fill in summary of dollar value to agree with the respective totals indicated on the continuation sheets.
3. Execute certification with the signature of a responsible officer of the Construction firm on each copy.

B. Continuation Sheets:

1. Fill in total list of all schedule component items of work, with item number and the scheduled dollar value for each item. Listing of component items of work shall be in accordance with Section number 01350 - SCHEDULE OF VALUES.
2. Fill in the dollar value in (the Scheduled Value) (the Original Budget Estimate) column for each scheduled line item when work has been performed or products stored. Round off values to nearest dollar.
3. List each Change Order executed prior to the date of submission, at the end of the continuation sheets. The cost of each Change Order shall be tabulated to correspond with applicable line items of the Schedule of Values. Each Change Order shall have this breakdown of work.

1.04 SUBSTANTIATING DATA:

A. When the Architect requires substantiating data; contractor shall submit suitable information, with a cover letter identifying:

1. Project:
2. Application number and date:
3. Detailed list of enclosures:

And for stored products:

4. Item number and identification as shown on application.
5. Description of specific material.
6. Location of stored products.
7. Certificates of insurance for Materials stored off the Site.

B. Submit one copy of data and cover letter for each copy of application.

C. The Contractor shall provide access to the Architect and the Owner to all receipts, invoices, and other records necessary to substantiate amounts applied for payment.

1.05 PREPARATION OF APPLICATION FOR FINAL PAYMENT:

A. Fill in Application form as specified for progress payments.

B. Use continuation sheet for presenting the final statement of accounting as specified in SECTION 01700 - CONTRACT CLOSE - OUT.

1.06 SUBMITTAL PROCEDURE:

A. Submit four (4) copies of Applications for Payment of Architect at the times stipulated in the Agreement.

B. When Architect finds the Application properly completed and correct, he will transmit a certificate for payment to Owner, with a copy to Contractor.

END OF SECTION

SECTION 01030 - ALTERNATES

PART 1 - GENERAL

1.01 SUMMARY

- A. List price for each alternate in Bid Form. Include cost of modifications to other work to accommodate alternate. Include related costs such as overhead and profit.
- B. Owner will determine which alternates are selected for inclusion in the Contract.
- C. Alternates are described briefly in this section. The Contract Documents define the requirements for alternates.
- D. Coordinate alternates with related work to ensure that work affected by each selected alternate is properly accomplished.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION

3.01 SCHEDULE

A. List of alternates:

- 1. Add alternates:

Alternate No. 1: NOTE ALTERNATE IF ANY.

Alternate No. 2: NOTE ALTERNATE IF ANY.

END OF SECTION

SECTION 01035 - CHANGE PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

This Section defines the procedures required when changes in the Work of this contract are desired. These requirements are in addition to the provisions of the General Conditions.

1.02 ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS:

- A. Minor changes in the Work, which do not involve adjustment to the Guaranteed Maximum Amount or Contract Time, may be ordered by the Architect. Such changes shall be considered part of the Contract Documents upon receipt.

1.03 PROPOSAL REQUEST:

- A. When a Change in the Scope of the Work is contemplated which may affect the contract Sum or duration of the Work, the Contractor will issue a "Proposal Request" detailing the Work involved in such proposed Change. The "Proposal Request" will be on the Contractor's form and may be accompanied by drawings and other descriptive data. The issuance of a "Proposal Request" does not, in any way, authorize commencement of the Work therein described.

1.04 CHANGE QUOTATION:

- A. Upon receipt of such "Proposal Request," the Contractor shall promptly issue a "Change Quotation" stipulating the change in Guaranteed Maximum Amount and duration (if any) as a result of the proposed change. Quotation shall be complete with an itemized material and labor breakdown, indicating quantities and costs for each item of material and labor, as provided in the General Conditions. Quotations not completely itemized will be returned to the Contractor. Each "Change Quotation" shall be numbered. Revised quotations shall be resubmitted with original number with suffix "Rev" and a revised date.

1.05 CHANGE ORDER:

- A. Should the Architect, after review and consultation with the Owner, find the Change Quotation to be acceptable, a Change Order will be issued by the Contractor. Each Change Order will be prepared in triplicate, each bearing the signatures of the Owner, Architect, and the Contractor. The Change Order may be accompanied by drawings to describe the change. Such drawings will be referenced on the Change Order form and when all parties sign the Change Order, such drawings will become a part of the Contract Documents.

END OF SECTION

SECTION 01040 - PROJECT COORDINATION

PART 1 - GENERAL

1.01 SUMMARY

Section includes procedures for discrepancies in documents, site documents and publicity.

1.02 DISCREPANCIES IN DOCUMENTS:

- A. Should the General Contractor or his subcontractors find discrepancies or ambiguities in, or omissions from, the drawings or specifications, or should he be in doubt as to their meaning, he shall at once notify the Architect, who will issue an interpretation. Failure to notify the Architect of discrepancies shall constitute acceptance of the conditions and work necessary to carry out the work.

1.03 SITE DOCUMENTS:

- A. The General Contractor shall maintain, in readable condition at the job site, one complete set of working drawings and specifications for the work, including all shop drawings. Such drawings and specifications shall be available for use by the Architect or his representative.

1.04 PUBLICITY

- A. Without exception, NO publicity or publicity releases (newspapers, radio, television, advertisements, publications, signs, etc.) shall be used or issued without the Owner's prior review and written approval.

1.05 LAYOUT:

- A. The General contractor shall be responsible for the following layout:
 - 1. Verification of property lines and benchmark elevations.
 - 2. Provide datum bench for the use of all Subcontractors.
 - 3. Establish building corners, and column centerline control points.
- B. The General Contractor shall employ a registered land surveyor or engineer for all layout work.
- C. The General Contractor shall verify grades, lines, levels and dimensions indicated on the Drawings, and shall immediately report inconsistencies discovered during entire progress of the work. He shall establish and carefully preserve benchmarks and reference points

from their destruction. He shall be charged with resulting expense of replacement and shall be responsible for any mistakes that may be caused by their loss or disturbance.

- D. As the work progresses, the Contractor shall establish exact locations of partitions on rough floors as a guide to all trades. Where necessary for accurate location of piping, conduit, and other roughing-in items, locations of partitions shall be laid out on sub-grade.
- E. All Contractors shall cooperate in the execution of their work and shall plan their work in such a manner as to avoid conflicting schedules or delay of the work.
- F. If any part of a Contractor's work depends upon the work of another contractor, defects that may affect that work shall be reported to the Architect in order that prompt inspection may be made and the defects corrected. Commencement of work by a Contractor where such conditions exists will constitute acceptance of the other Contractor's work as being satisfactory in all respects to receive the work commenced, except as to defects which may later develop. The Architect shall be judge as to the quality of work and shall settle all disputes on the matter between Contractors.
- G. The work of all contractors and trades shall be thoroughly coordinated regarding locations and elevations of piping, conduit, ductwork, fixtures and other items so as to insure that such items can be properly installed, adjusted and used.
- H. Should any conflicts occur in the locations and elevations of items of work, the contractor shall be responsible for decisions regarding relocation of the work of any Contractor or trade to provide the most satisfactory overall installation. Relocation and rerouting of such items shall be subject to Architect's approval, and shall conform to requirements specified for the initial installation.
- I. Coordination drawings of crowded locations or where there is a possibility of conflict between the trades shall be prepared by the trades affected. The drawings shall indicate the exact locations and elevations of pipes, ducts, conduits, etc., obtained from filed measurements, after consultation and agreement among trades involved.

1.06 UNDERWRITERS APPROVAL:

- A. All fabricated assemblies of electrically operated equipment shall be bear the label of the Underwriters' Laboratories or their re - examination listing in every case where such approval has been established for the particular type of material or device in question. This requirement shall apply also to all manufactured items of electrically operated equipment.

1.07 USE OF CONSTRUCTION CHEMICALS AND MISCELLANEOUS FUME PRODUCING MATERIALS

- A. Contractor shall take precautions as necessary to prevent migration into existing occupied facility of noxious, irritating or hazardous fumes and gases. When sealants, adhesives, compounds, cleaners, lubricants, paints, etc. are to be applied, provide adequate exhaust

to exterior of building away from air intake. Provide fresh air ventilation as required to work safely in confined areas. Prior to application of form oil or concrete curing compound, arrange for test application to be made on site.

1.08 NOISE CONTROL:

- A. Operations which require the use of machines which produce excessive noise such as rotary hammers, jack hammers, and engines on construction equipment and which will be in or near (within 200 feet) of any adjacent building shall be coordinated with the Owner prior to execution. The use of machines that will produce structural vibrations shall be coordinated with the Owner to minimize disruptions to critical operations and tests.

1.09 CONSTRUCTION DOCUMENTS:

- A. Contractor may purchase copies of drawings and specifications through Owner's selected copy center.
- B. Contractor must keep a copy of sealed Permit set of Drawings on site in addition to Proposal Requests and Change Orders.

PART 2 - PRODUCTS: (Not Applicable)

PART 3 - EXECUTION: (Not Applicable)

END OF SECTION

SECTION 01050 - DEFINITIONS AND STANDARDS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

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

1.02 DEFINITIONS:

General: Basic Contract definitions are included in the General Conditions.

Approved: Acceptance of item submitted for approval. Not a limitation or release for compliance with the Contract Documents or regulatory requirements. The term “Approved”, where used in conjunction with the Architect’s action on the Contractor’s submittals, applications, and requests, is limited to the duties and responsibilities of the Architect as stated in General and Supplementary Conditions. Such approval shall not release the Contractor from responsibility to fulfill Contract requirements.

Directed: Terms such as “directed”, “requested”, “authorized”, “selected”, “approved”, “required”, and “permitted” mean “directed by the Architect”, “requested by the Architect”, and similar phrases. However, no implied meaning shall be interpreted to extend the Architect’s responsibility into the Contractor’s area of construction supervision.

Furnish: The term “furnish” is used to mean “supply and deliver to the project site, ready for unloading, unpacking, assembly, installation, and similar operations.”

Indicated: Graphic representations, notes, or schedules on the drawings, or other paragraphs or schedules in the Project Manual, and similar requirements in the Contract Documents. Where terms such as “shown”, “noted”, “scheduled”, and “specified” are used, it is to help locate the reference. No limitation on location is intended except as specifically noted.

Installer: An “Installer” is the Contractor or an entity engaged by the Contractor, either as an employee, subcontractor, or sub-subcontractor for performance of a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operation they are engaged to perform.
The term “experienced” when used with the term “Installer” means having a minimum of 3 previous Projects similar in size and scope to this Project, being

familiar with the precautions required, and having complied with requirements of the authority having jurisdiction.

Match Existing: Match existing as acceptable to the Owner and Architect.

Project Manual: Sections 00100 through 16900 including Instructions to Bidders and Bid Form as well as the Contracting Requirements such as the Agreement, Bond Forms, General Conditions, and Supplementary Conditions.

Project Site: The space available to the Contractor for performance of construction activities, either exclusively or in conjunction with others performing construction activities as part of the Project. The extent of the Project Site is shown on the Drawings and may or may not be identical

Provide: Furnish and install, complete with all necessary accessories, ready for intended use. Pay for all related costs.

Regulation: The term "Regulations" includes laws, ordinances, statutes and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work, whether lawfully imposed by authorities having jurisdiction or not.

Specifications: That portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

1.03 ABBREVIATIONS AND NAMES

- A. Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in the Project Manual or other Contract Documents, they mean the recognized name of the trade association, standards generating organization, authority having jurisdiction, or other entity application to the context of the text provision. Refer to the "Encyclopedia of Associations", published by Gale Research Co., available in most libraries.

1.04 STANDARDS

- A. Where copies of standards are needed for performance of a required construction activity, the Contract shall obtain copies directly from the publication source.
- B. Although copies of standards needed for enforcement of requirements also may be included as part of required submittals, the Architect Reserves the right to require the Contractor to submit additional copies as necessary for enforcement of requirements.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION

SECTION 01100 - PROJECT PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

- A. Provide coordination of work.
 - 1. Supervisory personnel.
 - 2. Pre-construction conference.
 - 3. Monthly meetings; distribute minutes.
 - 4. Other meetings.
- B. Submit list of Contractors.
- C. Submit daily and special reports; (Per Section 01310).
- D. Submit progress schedule, bar-chart type, updated monthly; (Per Section 01310).
- E. Prepare submittal schedule; coordinate with progress schedule; (Per Section 01310).
- F. Submit schedule of values; (Per Section 01350).
- G. Submit schedule of required tests including payment and responsibility.
- H. Perform surveys and Field Engineering; (Per Section 01520).
 - 1. Laying out the work and verifying locations during construction.
 - 2. Final site survey.
- I. Submit and post a list of emergency telephone numbers and address for individuals to be contacted in case of emergency.
- J. Submit record drawings and specifications; to be maintained and annotated by Contractor as work progresses.
- K. Submit payment request procedures.
- L. Perform quality control during installation.
- M. Clean and protect the work.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION

01100-1

SECTION 01200 - PROJECT MEETINGS

PART 1 - GENERAL

1.01 CONDITIONS:

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

1.02 SUMMARY:

- A. This Section specifies administrative and procedural requirements for project meetings including but not limited to:
 - 1. Pre-Construction conference.
 - 2. Pre-Pour conference.
 - 3. Progress Meetings.

1.03 PRE - CONSTRUCTION CONFERENCE:

- A. Schedule a Pre-Construction Conference and organizational meeting at the project site or other convenient location no later than 15 days after execution of the Agreement and prior to commencement of construction activities. Conduct the meeting to review responsibilities and personnel assignments.
- B. Attendees: The Owner, Architect/Engineer and their consultants, the Contractor and its superintendent, major subcontractors and other concerned parties shall attend. All representatives at the conference shall be familiar with and authorized to conclude matters relating to the Work.
- C. Agenda: Discuss items of significance that could affect progress including such topics as:
 - 1. Designation of responsible personnel.
 - 2. Tentative construction schedule.
 - 3. Use of the premises.
 - 4. Safety procedures.
 - 5. Working hours.
 - 6. Procedures for processing field decisions and Change Orders.
 - 7. Procedures for processing Applications for Payment
 - 8. Preparation of record documents.

1.04 PROGRESS MEETINGS:

- A. Conduct progress meetings at the project site at regularly scheduled intervals. Notify the Owner and Architect/Engineer of scheduled meeting dates. Coordinate dates of meetings with preparation of the payment request.
- B. Attendees: In addition to representatives of the Owner and Architect/Engineer, each subcontractor, supplier or other entity concerned with current progress or involved in planning, coordination or performance of future activities shall be represented at these meetings by persons familiar with the project and authorized to conclude matters relating to progress.
- C. Agenda: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the current status of the project.
 - 1. Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
- D. Reporting: No later than 3 days after each progress meeting date, distribute copies of minutes of the meeting to each party present and to other parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.
 - 1. Schedule Updating: Revise the construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue the revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION

SECTION 01300 - SUBMITTALS

PART 1 - GENERAL

1.01 SUMMARY

- A. Comply with project format for submittals.
- B. Provide types of submittals listed in individual sections and number of copies required.
 - 1. Shop drawings - digital copy **reviewed, annotated, and signed by the Contractor verifying conformance with contract documents.**
 - 2. Product data - digital copy **reviewed, annotated, and signed by the Contractor verifying conformance with contract documents.**
 - 3. Samples - 3, plus extra samples as required to indicate range of color, finish, and texture to be expected **reviewed, annotated, and signed by the Contractor verifying conformance with contract documents.**
 - 4. Mock-ups – for each finish product prior to installation.
 - 5. Inspection and test reports - digital copy **reviewed, annotated, and signed by the Contractor verifying conformance with contract documents.**
 - 6. Warranties - digital copy **reviewed, annotated, and signed by the Contractor verifying conformance with contract documents.**
 - 7. Survey data - digital copy **reviewed, annotated, and signed by the Contractor verifying conformance with contract documents.**
 - 8. Close-out submittals - digital copy **reviewed, annotated, and signed by the Contractor verifying conformance with contract documents.**
- C. Provide required re-submittals if original submittals are not approved. Provide distribution of approved copies including modifications after submittals have been approved. Contractor must thoroughly review submittals prior to submitting to Architect. Submittal must contain original signature as proof that contractor has thoroughly reviewed documents. Failure to do so will result in rejection of submittal. Architect will allow for a maximum of 2 reviews, after which Owner will be contacted and may seek compensation from contractor for additional reviews by Architect/ Engineer.
- D. Samples and shop drawings shall be prepared specifically for this project. Shop drawings shall include dimensions and details, including adjacent construction and related work. Note special coordination required. Note any deviations from requirements of the Contract Documents.
- E. Provide warranties as specified; warranties shall not limit length of time for remedy of damages Owner may have by legal statute. Warranties shall be signed by the contractor, the supplier, or the installer responsible for performance of the warranty.

PART 2 - PRODUCTS - Not Applicable To This Section

01300-1

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION

01300-2

SECTION 01310 - CONSTRUCTION SCHEDULES AND REPORTS

PART 1 - GENERAL

1.01 SUMMARY:

- A. These requirements are in addition to the provisions of the Conditions of the Contract. Requirements of this Section do not relieve the Contractor of the responsibility of conformance with all requirements of the Contract Documents. Items included are Coordination, Construction Schedule, Monthly Progress Reports, Submittal Schedule, Superintendent's Daily Progress Reports, Submissions, and Distribution.

1.02 COORDINATION:

- A. Coordinate both the listing and timing of reports and other activities required by provisions of this and other sections, so as to provide consistency and logical coordination between reports. Maintain coordination and correlation between separate reports by updating at monthly or shorter time intervals.

1.03 CONSTRUCTION SCHEDULE:

- A. Promptly after award of contract and prior to the submission of the first application for payment submit a comprehensive bar - chart type progress schedule indicating, by stage - coded symbols, a time bar for each major category or unit of work to be performed at the site; include minor elements of work involved in overall sequencing of the work. Arrange schedule to show graphically the major sequences of the work necessary for the completion of related elements of work. Arrange the schedule to show how substantial completion is scheduled to allow for the Architect's procedure for certification of substantial completion. Prepare the schedule on sheets of reproducible material to permit reproduction for the required distribution.
- B. Elements of Work shall correspond to breakdown of line items noted in the schedule of values.
- C. This schedule shall be a working document, which shall be maintained throughout the progress of the project. Revise and update the construction schedule to reflect significant changes in the construction time or sequence.

1.04 MONTHLY PROGRESS REPORTS:

- A. Submit progress reports with each application for payment. Progress reports shall include a revised construction schedule chart as a graphic representation of progress.
- B. Show changes occurring since previous report:
 - 1. Major changes in scope.

2. Activities modified since previous report.
3. Revised projections of progress, duration, and completion.
4. Other identifiable changes.

C. Provide a narrative report to define:

1. Problem areas, delays and their impact on the schedule.
2. Corrective action recommended, and its effect.

1.05 SUBMITTAL SCHEDULE:

- A. Contractor shall furnish, within 20 days after award of Contract, a submittal schedule listing all items, which are required to be submitted to the Architect for review. This schedule shall include all submittals required by the contract documents including all shop drawings, product data and other miscellaneous submittals.
- B. Schedule shall indicate item, specification section reference (where applicable), Contractor's scheduled dates for submission to Architect and the required return date back to the Contractor. Schedule shall show a minimum of ten (10) calendar days for review by Architect after receipt.
- C. Submittal schedule shall be coordinated with the Construction schedule. Contractor shall revise and/or update the schedule to insure consistency with the Construction Schedule should it be revised. Submit revised schedules promptly. Failure to list any item in the Submittal Schedule or any revision thereto shall not be interpreted as relieving the Contractor of his obligation to comply with requirements of the Contract Documents.

1.06 SUPERINTENDENT'S DAILY PROGRESS REPORT:

- A. The form of the daily progress report shall be the Contractor's standard form upon approval of the Architect, provided all of the required information is included. Prior to the commencement of the Work, submit a sample of the form intended for use.

1.07 SUBMISSIONS:

- A. Promptly after award of the Contract and prior to the submission of the first application for payment, submit 2 prints of the Construction Schedule and the Submittal Schedule. Architect will review schedules for information purposes only.
- B. Submit monthly progress reports as indicated above.
- C. Submit daily progress reports at the end of each week.

1.08 DISTRIBUTION:

- A. In addition to submittals to the Architect, distribute copies of the schedules and progress reports to:
 - 1. Job site file.
 - 2. Subcontractors.
 - 3. Owner's Representative.

- B. Instruct recipients to report promptly to the Contractor, problems anticipated by the projections shown in the schedules.

END OF SECTION

SECTION 01350 - SCHEDULE OF VALUES

PART 1 - GENERAL

1.01 SUMMARY

- A. The following section includes general requirements, form submittals, review and re-submittal.

1.02 GENERAL REQUIREMENTS:

- A. Submit to the Architect a Schedule of Values at least twenty (20) days prior to submitting the first Application for Payment. Schedule shall be used only as basis for the Contractor's applications for payment.
- B. Upon request by the Architect, support values given with data that will substantiate their correctness.
- C. List sums of materials specified under unit-price allowances, and include total quantity and unit price.

1.03 FORM OF SUBMITTAL

- A. Submit a typewritten Schedule of Values on Application and Certification for Payment, using AIA forms that will also be used as the form for Requests for Payment.
- B. Use the Table of Contents of the Project Manual as the format for listing costs of work for sections under Division 2 through 16.
- C. Identify each line item with the number and title as listed in the Technical Specifications of the Project Manual.
- D. Itemize separate line item cost for project administration.
- E. Itemize a separate line item for allowances.

1.04 REVIEW AND RESUBMITTAL:

- A. After review by the Architect, if required, revise and resubmit the Schedule of Values following the same procedure as for the original submission.

PART 2 - PRODUCTS: Not Applicable To This Section

PART 3 - EXECUTION: Not Applicable To This Section

END OF SECTION

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SECTION 01400 - QUALITY CONTROL

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes Quality assurance and control of installation, References, Field Samples, Mock-ups, and Manufacturers' field services and reports.

1.02 QUALITY ASSURANCE/CONTROL OF INSTALLATION:

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

1.03 REFERENCES:

- A. Conform to reference standard by date of issue current on date of Contract Documents.
- B. Obtain copies of standards when required by Contract Documents.
- C. Should specified reference standards conflict with Contract Documents, request clarification for Architect/Engineer before proceeding.
- D. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.04 FIELD SAMPLES

- A. Install field samples at the site as required by individual specification Sections for review.
- B. Acceptable samples represent a quality level for the Work.

- C. Where field sample is specified in individual Sections to be removed, clear area after field sample has been accepted and permission is granted by Architect/Engineer.

1.05 MOCK UPS

- A. Assemble and erect specified items, with specified attachment and anchorage devices, flashings, seals, and finishes.
- B. Where mock-up is specified in individual Sections to be removed, clear area after mock-up has been accepted and permission is granted by Architect/Engineer.

1.06 MANUFACTURERS' FIELD SERVICES AND REPORTS:

- A. Submit qualifications of observer to Architect/Engineer 30 days in advance of required observations. Observer will be subject to approval of Architect/Engineer and Owner.
- B. When specified in individual specification Sections, require material or Product suppliers or manufactures to provide qualified staff personnel to observe site conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment as applicable, and to initiate instructions when necessary.
- C. Individuals to report observation and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers; written instructions.
- D. Submit report in duplicate within 30 days of observation to Architect/Engineer for review.

END OF SECTION

SECTION 01450 - THIRD PARTY INSPECTIONS AND TESTING

PART 1 - GENERAL

1.01 INSPECTIONS AND TESTING LABORATORY SERVICES

- A. Required inspection and testing services are intended to assist in the determination of probable compliance of the Work with requirements specified or indicated.
- B. The Owner will employ and pay for the services of Independent Testing Laboratories or Inspection Agencies to perform specified services and testing. Employment of the laboratory or agency shall in no way waive Contractor's Obligations to perform the Work of the Contract. The Owner's testing and inspections involvement is listed below:
 - 1. Soils testing and inspections per structural drawings and specifications.
 - 2. Concrete testing and inspections per structural drawings and specifications.
 - 3. Structural Steel testing and inspections per structural drawings and specifications.
- C. The independent firm will perform inspections, tests, and other services specified in individual specification Sections and as required by the Architect/Engineer.
- D. The Contractor shall cooperate with the independent firm; furnish samples of materials, design mix, equipment, tools, storage and assistance as requested.
 - 1. Notify Architect/Engineer and Managing Contractor and independent firm 24 hours prior to expected time for operations requiring services.
 - 2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.
- E. Retesting required because of non-conformance to specified requirements shall be performed by the same independent firm on instructions by the Architect/Engineer. Payment for retesting will be charged to the Contractor by deducting inspection or testing charges from the Contract Sum/Price.
- F. All testing and inspections shall be in accordance with the requirements of the 2000 IBC and 2000 VA USBC.

1.02 INDEPENDENT TESTING LABORATORIES

- A. Meet "Recommended Requirements for Independent Laboratory Qualification", published by American Council of Independent laboratories.
- B. Meet basic requirements of ASTM E 329, "Standards of Recommended Practice for Inspection and Testing Agencies for Concrete and Steel as Used in Construction".

- C. Authorized and approved to operate in the State and locality in which the Project is located.
- D. Calibrate testing equipment at reasonable intervals by devices of accuracy traceable to the National Bureau of Standards.

1.03 LABORATORY DUTIES:

- A. Cooperate with Architect and Contractor: provide qualified personnel after due notice.
- B. Perform specified inspections, sampling and testing of materials to verify compliance comply with specified standards and to ascertain compliance with requirements of contract Documents.
- C. Immediately notify Architect (by telephone) and Contractor (in person at the site) of observed irregularities or deficiencies of Work or products or of the acceptability if no deficiencies are observed.
- D. Verbal reports shall be promptly followed within 72 hours by a written report of each test and inspection to the Contractor with a copy to the Architect, the local building code official, and the Owner. Each report shall include:
 - 1. Date issued:
 - 2. Project title and number:
 - 3. Testing agency name, address and telephone number:
 - 4. Name and signature of inspector:
 - 5. Date and time of sampling or inspection:
 - 6. Record of temperature and weather conditions:
 - 7. Date and test:
 - 8. Identification of product and Specification Section:
 - 9. Location of sample or test in the Project:
 - 10. Type of inspection or test:
 - 11. Results of test and compliance with Contract Documents:
 - 12. Interpretation of test results, when requested by Architect.
- F. Laboratory is not authorized to reduce, revoke, alter or enlarge on requirements of Contract Documents, approve or accept any portion of the Work or perform any duties of the Contractor.

1.04 CONTRACTOR'S RESPONSIBILITIES:

- A. Cooperate with agency personnel, provide access to Work.
- B. Secure and deliver to the laboratory adequate quantities of representative samples of materials proposed to be used and which require testing.
- C. Furnish copies of product test reports as required.

- D. Furnish incidental labor and facilities to provide access to Work to be tested, to obtain and handle samples at the Project site or at the source of the product to be tested, to facilitate inspections and tests and for storage and curing of test samples.
- E. Notify agency sufficiently in advance of operations to allow for laboratory assignment of personnel and scheduling of tests.

1.05 COORDINATION:

- A. The Contractor and each independent agency engaged to perform inspections, tests and similar services for the project shall coordinate the sequence of their activities so as to accommodate required services and to avoid delay in the progress of the Work.

1.06 RE - TEST RESPONSIBILITY:

- A. Where results of inspections, tests or similar services prove unsatisfactory and do not indicate compliance of the Work with the requirements of the Contract Documents, retesting is the responsibility of the Contractor, regardless of whether the original test by the Contractor is the Contractor's responsibility, where testing was required for the original Work.

PART 2 - PRODUCTS: Not Applicable To This Section

PART 3 - EXECUTION: Not Applicable To This Section

END OF SECTION

SECTION 01500 - TEMPORARY FACILITIES

PART 1 - GENERAL

1.01 SUMMARY

- A. Furnish and install temporary facilities at locations required to avoid any delay in performance of the work as required. Maintain, expand as required and modify temporary utilities as needed throughout the progress of the Work. Do not remove until services are no longer needed, or are replaced by the authorized use of complete permanent facilities.
- B. Materials may be new or used, shall be adequate in capacity for the required usage, shall not create unsafe conditions, and shall not violate requirements of applicable codes and standards.
- C. Comply with applicable requirements specified in Divisions 15 - Mechanical and 16 - Electrical.
- D. Maintain and operate systems to assure continuous service.
- E. Provide construction facilities, including utility costs.
- F. Provide personnel support facilities.
- G. Operate temporary utilities in a safe efficient manner. Do not overload temporary utilities. Do not allow unsanitary conditions, public nuisances or hazardous conditions to develop or persist on the site.
- H. Comply with Federal, State and local codes and regulations and with utility company requirements.

1.02 TEMPORARY WATER

- A. Provide temporary Water as required (potable and non-potable).
 - 1. Extend temporary water service from the Owner's existing domestic water system. Verify connection locations and routing requirements with the Owner.
 - 2. Install a branch piping with taps located so that water is available throughout the construction by the use of hoses. Protect piping and fittings against freezing.
 - 3. Install vacuum breakers at all connections for temporary water service.

1.03 TEMPORARY ELECTRICITY AND LIGHTING:

- A. Provide temporary Electricity and Lighting as required

1. Extend temporary electrical services from the nearest existing service. Verify connection locations and coordinate with local Power Company.
2. Install weatherproof, grounded circuit and branch wiring, with area distribution boxes located so that power and lighting is available throughout the construction by the use of construction - type power cords. Provide ground fault protection for all receptacle outlets.
3. Provide adequate artificial lighting for all areas of work when natural light is not adequate for Work, and for areas required to be accessible to the public.

1.04 TEMPORARY HEATING

A. Temporary Heating.

1. Provide temporary heat and ventilation as required to maintain adequate ambient conditions to facilitate progress of the Work, to meet specified minimum conditions for the installations of materials, and to protect materials and finishes from damage due to improper temperature or humidity.
2. Provide adequate forced ventilation of enclosed areas for curing and drying of installed materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors, or gases.
3. Portable heaters shall be standard approved units complete with controls. Units shall be UL and FM approved and labeled.
4. Pay all costs of installation, maintenance, operations and removal, and for fuel consumed.
5. When temporary heating is no longer required, or as soon as the permanent heating system may be used. Contractor shall dismantle the temporary heating system and shall, at his own expense (including cost of fuel), operate the permanent heating system, assuming all responsibility and risk thereof.

1.06 TEMPORARY TELEPHONE AND FAX MACHINE

A. Provide temporary Telephone, FAX, and internet service as required to provide reliable and efficient communication with Owner and Architect. This includes the ability to transmit digital drawings and mark-ups, photos, etc.

1. Arrange with local telephone service company to provide direct line telephone service at the construction site for the use of personnel and employees as required. Pay all costs for installation, maintenance and removal, and service charges. Service required includes one direct line instrument in Field Office and other direct line instruments required by regulations.

1.07 TEMPORARY SANITARY FACILITIES

- A. Provide sanitary facilities in compliance with law and regulations.
- B. Service, clean, and maintain facilities and enclosures.
- C. Permanent plumbing facilities shall not be used by construction personnel.
- D. Drinking water.
- E. Cleaning and trash removal.
- F. Location as approved by Owner.

1.08 CONSTRUCTION FACILITIES

- A. Construction equipment.
- B. Dewatering and pumping.
- C. Enclosure.
- D. Access.
- E. Materials storage.
- F. Roads.

1.09 FIRE PROTECTION:

- A. Provide security and protection requirements:
 - 1. Temporary Fire Protection: Install and maintain temporary fire protection facilities of the types needed to adequately protect against predictable and controllable fire losses. Comply with the applicable recommendations of NFPA standard 10 “Standard for Portable Fire Extinguishers”. Locate fire extinguishers where they are most convenient and effective for their intended purpose. Store combustible materials in containers in recognized fire - safe locations.
 - 2. At the earliest possible date in each are of the project, complete installation of the permanent fire protection facility, including connected services, and place into operation and use. Instruct Key personnel at the site on how to use facilitates. Coordinate with Section 15300 - FIRE PROTECTION.

1.10 SITE ENCLOSURE FENCE, BARRICADES & GATES, WARNING SIGNS, AND LIGHTS

- A. Provide site enclosure fence, barricades and gates, warning signs, and lights as required.

1. Provide and maintain suitable fences, screens and partitions as required to prevent public entry to hazardous areas, and to provide for public safety, and to protect the Work, existing facilities, trees, plants, and adjacent rights - of - way from construction operations. Remove when no longer needed, or at completion of Work. Provide warnings signs to inform personnel at the site and the public of the hazard.
 2. Comply with federal, state and local codes and regulations.
 3. Materials may be new or used, suitable for the intended purpose, to contractor's option, as appropriate to serve the required purpose, but must not violate requirements of applicable codes and standards.
 4. Provide barriers of neat and reasonably uniform appearance, structurally adequate for the required purposes. Maintain barriers during entire construction period. Relocate barriers as required by progress of construction.
 5. Completely remove barriers, including foundations, when construction has progressed to the point that they are no longer needed, and when approved by Architect. Clean and repair damage caused by installation, fill and grade the areas of the site to required elevations and slopes, and clean the area.
- B. Building enclosure and lock-up.
- C. Environmental protection.
- D. Pest control.
- E. Snow and ice removal if applicable.

1.11 CONTRACTOR'S FIELD OFFICE

- A. Provide and maintain **a temporary field office** and storage sheds during the entire construction period for the use of Contractor's personnel, the Owner's and Architect's (and his consultants) field personnel, building officials, personnel and others as required. Prior to installation, consult with Owner on location, access, and related facilities. Location as approved by Owner.
- B. REQUIREMENTS:
1. Structurally sound and weather tight. Temperature transmission resistance compatible with occupancy and storage requirements. Size as required for general use and to provide space for project meetings. Provide adequate heat and air conditioning, electrical power, lighting and ventilation.
 2. Portable or mobile buildings may be used at Contractor's option.

3. One ten inch outdoor - type thermometer, mounted in a shaded location.
 4. Furnishings in Meeting Area:
 - a. Conference table and chairs for at least eight persons.
 - b. Racks and files for Project Record Documents in, or adjacent to, the meeting area.
 5. Telephone: As specified in Temporary Utilities.
 6. Fax: As specified in Temporary Utilities.
- C. Construct (or install) temporary field offices and sheds on proper foundations and provide connection for utility services. Secure portable or moveable buildings (if used). Provide steps, handrails, and landings at entrance doors.
 - D. Provide periodic maintenance and leaning for temporary structures, furnishing, equipment and services.
 - E. Remove temporary structures, contents and services at a time they are no longer needed as approved by the Architect. Remove foundations and debris and grade the site to indicated elevations.

1.12 REMOVAL:

- A. Completely remove temporary materials and equipment when their use is no longer required.
- B. Clean and repair damage caused by temporary installations or use of temporary facilities.
- C. Restore existing facilities used for temporary services to specified, or to original condition.
- D. Restore permanent facilities used for temporary services to specified condition.
- E. Prior to final inspections, remove temporary lamps from fixtures to remain, clean fixtures and install new lamps.

1.13 STAIRS, SCAFFOLDING, RAMPS, AND HOISTS:

- A. Contractor shall provide and maintain temporary scaffolding, ramps, and runways as required.
- B. Hoisting of materials and equipment weighing one ton or more, or of size in excess of the capacity of the hoist, shall be provided by the contractor requiring such hoisting.
- C. All apparatus, equipment, and construction included in this article shall be in accordance with all applicable state and local laws.

- D. Contractor shall provide roof protection as necessary where scaffolds and chutes are used.

1.14 TEMPORARY STORAGE AND PARKING:

- A. Only the area within the new construction as shown on the Drawings may be used for storing materials including stockpiling topsoil. At the Owner's option, any vehicles in violation of this requirement will be towed at the Contractor's expense.

1.15 BURNING ON SITE:

- A. Open fire, for any purpose, will not be permitted within the building enclosure or on the project site.

1.16 ACCESS ROADS:

- A. Construct and maintain temporary roads accessing public thoroughfares to serve construction area.
- B. Extend and relocate as Work progress requires. Provide detours necessary for unimpeded traffic flow.
- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering.
- E. Designated existing on - site roads may be used for construction traffic.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION

SECTION 01510 - PROJECT IDENTIFICATION

PART 1 - GENERAL

1.01 SUMMARY

- A. Provide site sign as per the following instructions.

1.02 PROJECT IDENTIFICATION

- A. Provide project sign of exterior grade plywood and wood frame construction, painted, with exhibit lettering by professional signage vendor to Architect/Engineer's design and colors. Allow for (1) 4' x 8' plywood panels and (2) 4" x 4" posts.
- B. List title of project, names of Owner, Architect/Engineer, Professional Sub-Consultants, Contractor, and major Subcontractors.
- C. Erect on site at location established by Architect/Engineer.
- D. No other signs are allowed without Owner permission except those required by law.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION

SECTION 01520 - FIELD ENGINEERING

PART 1 - GENERAL

1.01 SUMMARY

- A. Certain work, as specified or as required, shall be controlled or accomplished by a Professional Engineer or a Certified Land Surveyor. The Contractor shall be responsible for having such a Professional on the site at all times when work is being performed which requires his services as stated below. The Contractor shall pay all costs of the Professional involved in accomplishing the work.
- B. Work as specified in the pertinent sections of Division 2 includes but is not limited to:

Layout of all construction at the site and all pertinent site improvements. Establishing and verifying all grades and elevations. Render written reports to the Architect, providing actual elevations and quantities of over - excavation: and cross sections of rock, if excavation is classified.

1.02 QUALIFICATIONS:

- A. Engineer or Land surveyor shall be registered in the state where project is located, and acceptable to Contractor and Architect.

1.03 SURVEY REFERENCE POINTS:

- A. Existing basic horizontal and vertical control points for the Project are those designated on the Drawings or Survey.
- B. Locate and protect control points prior to starting site work, and preserve all permanent reference points during construction. Make no changes or reallocations without prior written notice to Architect.

1.04 PROJECT SURVEY REQUIREMENTS:

- A. Establish a minimum of two permanent benchmarks on the site, referenced to data established by survey control points. Record locations, with horizontal and vertical data, on Project Record Documents.
- B. Establish lines and levels, locate and lay out, by instrumentation and similar appropriate means:

Site Improvements, Staking for road alignment: grading, filling, cutting, etc., utility slopes, and invert elevations, building foundation, location, column locations, floor elevations, and other controlling lines and levels as required.

1.05 RECORDS

- A. Maintain a complete, accurate log of all control and survey work as it progresses.

1.06 SUBMITTALS

- A. Submit name and address of surveyor and professional engineer to Architect.
- B. Submit a certification signed by the surveyor, stating that principal features such as building, roadways and parking, utilities, grades and elevations, etc. have been accurately positioned as shown on the Contract Documents and are not in conflict with any known easements.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION

SECTION 01600 - PRODUCTS AND SUBSTITUTIONS

PART 1 - GENERAL

1.01 SUMMARY

Read the following below, in reference to Products, Transportation and handling, Storage and Protection, and Substitutions.

1.02 PRODUCTS

- A. Provide products from one manufacturer for each type or kind as applicable. Provide secondary materials as recommended by manufacturers of primary materials.
- B. Products means new material, machinery, components, equipment, fixtures, and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.
- C. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
- D. Provide interchangeable components of the same manufacturer, for similar components.

1.03 TRANSPORTATION AND HANDLING

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.04 STORAGE AND PROTECTION

- A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather tight, climate-controlled enclosures.
- B. For exterior storage of fabricated products, place on sloped supports, above ground.
- C. Provide off-site storage and protection when site does not permit on-site storage or protection.

- D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.
- E. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

1.05 SUBSTITUTIONS

- A. Provide products selected or approved equal. Products submitted for substitution shall be submitted with acceptable documentation, and include costs of substitution including related work.
- B. Conditions for substitution include:
 - 1. An 'or equal' phrase in the specifications.
 - 2. Specified material cannot be coordinated with other work.
 - 3. Specified material is not acceptable to authorities having jurisdiction.
 - 4. Substantial advantage is offered Owner in terms of cost, time, or other valuable consideration.
- C. Substitutions shall be submitted prior to award of contract, unless otherwise acceptable. Approval of shop drawings, product data, or samples is not a substitution approval unless clearly presented as a substitution at the time of submittal.
- D. Architect shall be the judge of the acceptability of the proposed substitution.
- F. The burden of proof of the merit of the proposed substitute is upon the Contractor.
- G. A request for substitution constitutes a representation that the Contractor:
 - 1. has investigated the proposed product (whether proposed by him or through him by a subcontractor or material supplier) and determined that it is equal to, or superior in all respects to that specified.
 - 2. will provide the same warranties or bonds for the substitution as for the product specified.
 - 3. will coordinate the installation of the substitution into the Work, and make such other changes as may be required to make the Work complete in all respects.

4. waives all claims for an increase in the Project cost which may subsequently become apparent due to inclusion of the substitution.
- I. The Architect will notify the Contractor in writing, of acceptance or rejection of the proposed substitution. If adequate data regarding any proposed substitution is not provided, the Architect may state that action will be deferred until the Contractor provides such date. Failure to object to a proposed substitution shall not constitute a waiver of any of the requirements of the Contract Documents. Acceptance of any substitution does not relieve the Contractor from verifying that all materials and installations conform to the Contract Documents.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION

SECTION 01610 - WORK BY OWNER

PART 1 - GENERAL

1.01 RELATED DOCUMENTS:

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

1.02 DESCRIPTION OF WORK:

- A. The Owner will be responsible for preparing necessary specifications, receiving bids and handling the coordination of installation of the manufactured equipment that will not be part of the General Contract. (See Equipment Schedule Sheet A-806)
- B. The Owner will also be responsible for performing certain work, listed above, or having such work performed under separate contractor, by selected contractors. These workmen shall be responsible for their own clean-up and removal of excess material and related debris.
- C. Although such work shall not be the direct responsibility of this contractor, he shall coordinate the related work wherever possible and shall cooperate with the Owner's contractors, to the fullest extent possible.

1.03 MANUFACTURED EQUIPMENT:

- A. The rough-in and connection of all utilities, where required, for the equipment is part of the General Contract. (See Paragraph 1.06 following)

1.04 WORK BY OWNER:

- A. See equipment drawings for information. (See Paragraph 1.06 following)

1.05 INSTALLATION WORK RELATED TO OWNER FURNISHED EQUIPMENT:

- A. The General Contractor has the responsibility to coordinate rough-in data on mechanical, plumbing and electrical bid documents with rough-in data provided by the Owner's Equipment Contractor (Supplier).
- B. The General Contractor shall have the responsibility to provide all final interconnections between and final connections to all equipment components on this project. (Owner's Equipment Plan Pending)
- C. The Equipment Contractor shall deliver, assemble, and set in place the equipment, in accordance with the approved equipment rough-in plans. The Equipment Contractor will be responsible for the removal of all debris resulting from his work, and for the repair of any damage to the building or the work of others that might be caused by him.

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1.06 OWNER FURNISHED PRODUCTS:

- A. Except as provided below or otherwise agreed between Owner and Contractor, equipment and materials for use in the project will be purchased on Owner's behalf by Contractor as Owner's purchasing agent.
- B. See Equipment Schedule.
- C. The Owner will:
 - 1. Arrange and pay for Product delivery to the site, in accordance with the construction schedule.
 - 2. Inspect deliveries jointly with Contractor.
 - 3. Submit claims for transportation damage.
 - 4. Arrange for replacement of damaged, defective, or missing items.
 - 5. Arrange for manufacturer's warranties, bonds, service, and inspections, as required.
- D. Contractor's Responsibilities:
 - 1. Designate delivery date for each Product in the Construction Schedule.
 - 2. Direct Owner where to unload Products at the site.
 - 3. Promptly inspect products jointly with Owner, record shortages, damaged or defective items.
 - 4. Repair or replace items damaged by the Contractor.

END OF SECTION

SECTION 01650 - STARTING SYSTEMS

PART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Starting systems.
- B. Demonstration and instructions.
- C. Testing, adjusting, and balancing.

1.02 RELATED SECTIONS:

- A. Section 01400 - QUALITY CONTROL: Manufacturers field reports.
- B. Section 01700 - PROJECT CLOSE OUT: system operation and maintenance data and extra materials.

1.03 STARTING SYSTEMS:

- A. Coordinate schedule for start - up of various equipment and systems.
- B. Notify Architect / Engineer, General Contractor and Owner seven days prior to start - up of each item.
- C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, or other conditions that may cause damage.
- D. Verify wiring and support components for equipment are complete and tested.
- F. Execute start - up under supervision of responsible manufacturer's representative in accordance with manufacturers' instructions.
- G. When specified in individual specification Sections, require manufacture to provide authorized representative to be present at site to inspect, check and approve equipment or system installation prior to start - up, and to supervise placing equipment or system in operation.

1.04 DEMONSTRATION AND INSTRUCTIONS:

- A. Demonstrate operation and maintenance of Products to Owner's personnel two weeks prior to date of final inspection.

- B. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owners' personnel in detail to explain all aspects of operation and maintenance.
- C. Demonstrate start - up, operation, control, adjustment, trouble - shooting, servicing, maintenance, and shutdown of each item of equipment at equipment or designated location.
- D. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.
- E. The amount of time required for instruction on each item of equipment and system is that specified in individual sections.

1.05 TESTING, ADJUSTING, AND BALANCING:

- A. The Contractor will appoint, employ, and pay for services of an independent firm to perform testing, adjusting and balancing.
- B. The independent firm will perform services specified in the HVAC Sections.
- C. Reports will be submitted by the independent firm to the Architect / Engineer indicating observations and results of tests indicating compliance or non - compliance with specified requirements and with the requirement of the Contract Documents.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION

SECTION 01660 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL:

1.01 DESCRIPTION:

- A. Provide the Owner with an accurate set to record construction documents (“As Built”) to indicate the actual construction methods, locations, and conditions of construction.
- B. Maintain at the site a copy of the following Project Record Documents:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other Modifications to the Contract.
 - 5. Architect’s written instructions (Job site Visit Reports).
 - 6. Field test records.
 - 7. Superintendent’s Daily Progress Reports.

1.02 SUBMITTALS

- A. Project Record Documents shall be submitted upon completion of the project as specified in Section 01700 - Project Close – out.
- B. Submit actual set maintained in Project Field Office. Do not transfer notes to another set of documents for submittal purposes.
- C. Format of submittals shall be similar to format required in Section 01670 - Operating and Maintenance Data.
- D. Submittal of Project Record Documents shall be accompanied by a certification, signed by the Contractor, that the submitted Documents represent the actual “as installed” conditions.

1.03 RECORD DOCUMENTS:

- A. Drawings and specifications shall be one of the sets of Construction Documents issued at the time of the signing of the contract.
- B. Indicate all revisions legibly in red pencil or pen or some similar, easily distinguishable color.
- C. Drawings shall be corrected to indicate actual “as - installed” conditions. Items that are required to be marked on Record Drawings shall include, but are not necessarily limited to the following:

1. Revisions to piping and conduit routing.
2. Revisions to electrical circuitry.
3. Actual equipment locations.
4. Actual duct sizing and routing.
5. Concealed and underground piping and conduit; Actual inverts and locations shall be determined and recorded.
6. All dimensional changes to the drawings.
7. Revisions to details shown on the drawings.
8. Depth of various elements of foundation in relation to finish first floor datum.
9. Horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
10. Location of internal utilities and appurtenances concealed in the construction, referenced to visible and accessible features of the structure.
11. Changes made by Change Order.
12. Details not on original Contract Drawings.

D. Specifications and Addenda: Legibly mark each Section to record:

1. Manufacturer, trade name, catalog number, and Supplier of each Product and item of equipment actually installed.
2. Changes made by Change Order.

E. Include such supplementary notes, legends, and details as may be necessary for legibility and clear portrayal of the “as - built” construction. Note related Change Order numbers where applicable.

1.04 RECORDING:

A. Changes and modifications to the Documents shall be posted as they occur. Do not wait until the end of the project to attempt to recall the changes. The terminology “constructed or installed as shown” will not be acceptable. The Architect will periodically review the Record Documents to assure compliance with this requirement. Proper maintenance and updating of the Record Documents will be considered a condition for certification of progress payments.

B. Label each document “RECORD DOCUMENT” in neat large print or stamped letters.

PART 2 - MATERIAL (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION

SECTION 01670 - OPERATING AND MAINTENANCE DATA

PART 1 - GENERAL

1.01 DESCRIPTION:

- A. Provide Operating and Maintenance Manual appropriate for Owner's maintenance and operation of products and equipment provided under this Contract as required by other Sections.
- B. Provide instructions of the Owner's personnel in the maintenance of products and in the operation of equipment and systems.

1.02. MANUAL:

- A. Compile data into two identical copies of an instruction manual for use by Owner's personnel in commercial quality three - ring binders with durable and cleanable plastic covers. Collate the data into related consistent groupings.
- B. Format:
 - 1. Size: 8 1/2" x 11"
 - 2. Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE MANUAL", along with:

Title of Project,
Name of Contractor,
Name of Architect
Identity of each separate structure as applicable,
Identity of general subject matter covered in the manual.
 - 3. Text: Manufacturer's printed or typewritten data.
 - 4. Drawings: Provide reinforced punched binder tab, bound in with text. Fold larger drawings to the size of the text pages.
 - 5. Provide tabbed separator for each separate product, or group of similar products, and item of operating equipment. Provide typed description of product, and major component parts of equipment.

1.03 CONTENT OF MANUAL

- A. Type written table of contents for each volume, arranged in a systematic order to match the specifications, including each product to be included, indexed to the content of the volume. Use the specification section and paragraph numbers to determine the proper order of all equipment items.
 - 1. List, with each product, the specification and paragraph number, the name, address and telephone number of the Subcontractor or installer, and Maintenance

contractor as appropriate. Identify the subcontractor of responsibility for each item. Local a source of supply for parts and replacement.

2. Identify each product by product name and other identifying symbols as set forth in Contract Documents.
- B. Product Data: Include for each item of equipment and system, the following data in order, as appropriate:
1. Copy of shop drawings and manufacturer's product data submitted to and approved by the Architect (complete with "approval" stamp).
 2. Installation and Operating Instructions detailing support, clearance and connection requirements, and start - up, break - in, routine and normal operation instructions, control, shut - down, emergency and normal operating instructions.
 3. Maintenance Procedures including guide to "trouble - shooting", disassembly, servicing, lubrication requirements, reassembly, alignment, adjusting, and checking.
 4. Description of sequence of operation narrative and diagrams by control manufacturer. (May be included as an independent section when part of a consolidated system)
 5. Original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance with predicted life of parts subject to wear and items recommended to be stocked as spare parts.
 6. Coordination drawings with "as - installed" piping and / or wiring diagrams.
 7. List of original manufacturers recommended spare parts quantities to be maintained in storage.
 8. Copies of bonds, warranties, etc. added in appropriate sections.
 9. Other data as required under pertinent sections of specifications, including emergency procedures, valve tag number chart, letters of completion, verification of performance inspection reports and / or approval by local code and building officials, etc.
- C. Drawings:
1. Supplement product data with drawings as necessary to clearly illustrate control and flow diagrams and relations of component parts of equipment and systems.

2. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation. Do not use Project Record Documents as maintenance drawings.

1.04 COORDINATION

- A. Prior to preparation of the Operating and Maintenance Manuals, confer with the architect to determine the extent of the equipment to be included in the manual.

1.05 SUBMITTAL

- A. Submit manuals at the time specified in Section 01700 - Project Close Out. Manuals will be reviewed by the Owner and/or Owner's rep. for format, order and completeness. Manuals rejected by the Owner and/or owner's rep. shall be modified and upgraded until found acceptable.

1.06 INSTRUCTION OF OWNER'S PERSONNEL:

- A. Provide instruction of the Owner's designated operating and maintenance personnel, in the operation, adjustment, and maintenance of all products, equipment and systems so noted in the applicable Specification Sections. The Operating and Maintenance Manuals shall be used as a guide during this training period. Instruction shall be given by factory authorized service personnel for each respective item of equipment. Notify Owner and/or Owner's rep. in Sufficient time to allow proper scheduling.
- B. Review contents of the Operating and Maintenance Manual with Owner's personnel in full detail to explain all aspects of operations and maintenance.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION

SECTION 01680 - WARRANTIES AND BONDS

PART 1 GENERAL

1.01 SUBMITTAL REQUIREMENTS:

- A. Compile specified warranties and bonds. Review to verify compliance with Contact Documents. Submit to architect for review and transmittal to Owner.
- B. Assemble two original copies of each warranty and bond executed by each of the respective manufacturers, suppliers, and subcontractors into duplicate complete sets, punch and bind in commercial quality, 8 1/2" x 11" three ring binders with durable and cleanable plastic covers. Identify each packet with types or printed title "WARRANTIES AND BONDS". List title of Project and name of contractor.
- C. Submit all warranties and bonds specified in the respective sections of specifications. Submit additional copies if specified elsewhere in these specifications.
- D. Table of contents: Neatly typed, in orderly sequence. Provide complete information for each item:
 - 1. Product of work item;
 - 2. Firm, with name of principal, address and telephone number;
 - 3. Scope;
 - 4. Date of beginning of warranty of bond;
 - 5. Duration of warranty or bond;
 - 6. Information for Owner's personnel on proper procedure in case of failure and on instances that might in affect the validity of warranty or bond;
 - 7. Contractor, name of responsible principal, address and telephone number.

1.02 TIME SUBMITTALS:

- A. For equipment or component parts of equipment place into service during progress of construction, submit documents within 10 days after inspection and acceptance. Otherwise make submittals as specified in Section 01700 - Project Close Out.
- B. For items of Work where acceptance is delayed materially beyond the Date of Substantial Completion, provide updated submittal and revised Table of Contents within 10 days after acceptance, listing the date of acceptance as the start of the warranty period.

END OF SECTION

SECTION 01700 - PROJECT CLOSE-OUT

PART 1 - GENERAL

1.01 SUMMARY

- A. The following are prerequisites to substantial completion. Contractor to provide the following:
1. Punch list.
 2. Supporting documentation.
 3. Warranties.
 4. Certifications.
 5. Occupancy permit.
 6. Start-up and testing of building systems.
 7. Change over of locks.
- B. Provide the following prerequisites to final acceptance:
1. Final payment request with supporting affidavits.
 2. Completed punch list.
- C. Provide a marked-up set of drawings including changes that occurred during construction.
- D. Provide the following close-out procedures:
1. Submission of record documents.
 2. Submission of maintenance manuals.
 3. Training and turnover to Owner's personnel.
 4. Final cleaning and touch-up.
 5. Removal of temporary facilities.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION

SECTION 01710 - FINAL INSPECTIONS

PART 1 - GENERAL

1.01 SUMMARY

At the completion of the Project, two reviews will be performed by the Architect to establish acceptance of the Work. The terminology of these reviews shall be: Preliminary Review and Final Review

1.02 PRELIMINARY REVIEW The preliminary review shall establish a check list of items to be corrected and completed before the Final Review.

- A. The Contractor shall submit written certification to the Architect that the Project is substantially complete and shall submit list of major items to be completed or corrected.
- B. The Architect shall make a preliminary review, within seven days after receipt of the certification, together with the Owner's Representative. A check list of items will be prepared for correction and completion before the Final Review.
- C. Should the Architect consider the work not substantially complete, he shall immediately notify the Contractor, in writing, stating the reasons.
- D. The Contractor shall complete the work, and send a second written notice to the Architect, certifying that the Project is substantially complete, at which time the Architect shall re-inspect the Work. If the Work is not substantially complete, the Contractor shall reimburse the Owner to compensate the Architect for all additional visits.

1.03 FINAL REVIEW The final review shall determine whether items on the check list have been corrected and completed, and whether the Owner can accept the work.

- A. The Contractor shall submit written certification that the Project, or designated portion thereof, is completed and ready for final inspection, and that:
- B. The work has been inspected for compliance with, and has been completed in accordance with, the Contract Documents.
- C. Equipment and systems have been tested in the presence of Owner's Representative and are operational.
- D. For guarantees beyond one year, the Owner shall make inspections after notification to the Contractor, & shall promptly notify the Contractor, in writing, of any observed deficiencies.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION

01710-1

SECTION 1720 - CLEANING

PART 1 - GENERAL

1.01 SUMMARY

- A. The following section includes general information, hazard control, materials, construction cleaning and final cleaning.

1.02 GENERAL:

- A. The General contractor shall be responsible for all of the clean-up requirements as listed below.
- B. Coordinate the requirements of this section with cleaning requirements specified in each section of the Technical Specification.
- C. Maintain the project premises and public properties free from accumulations of waste, debris, soil and rubbish caused by operations.
- D. Remove all construction equipment, scaffolding, barricades, tools, surplus materials, etc. no longer required at the site.
- E. Provide refuse containers located so as to be easily accessible to all workmen at the site. These containers shall be for the deposit of garbage, refuse from meals, and other trash that might attract vermin. Containers shall have properly fitting lids that shall be maintained normally closed. Containers shall be emptied regularly, and their contents removed from the site. No open accumulation of refuse will be permitted.
- F. At the completion of work, remove waste materials, rubbish, tools, equipment, machinery, and surplus materials. Clean all sight-exposed surfaces. Leave the project clean and ready for occupancy.

1.03 HAZARD CONTROL:

- A. Prevent the accumulation of wastes that create hazardous conditions. Store volatile wastes in covered metal containers, and remove from premises daily. Provide adequate ventilation during use of volatile and noxious substances.
- B. Conduct clean and disposal operations to comply with local ordinances and anti-pollution laws.
- C. Do not burn or bury rubbish and waste materials on the project site.
- D. Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner in storm or sanitary drains.

E. Do not dispose of wastes into streams, waterways or open drainage ways.

1.04 MATERIALS:

- A. Use only cleaning materials recommended by the manufacturer of the surface to be cleaned or as specified in the technical sections of the specifications.
- B. Use cleaning materials only on the surfaces for which they are intended. Protect adjacent surfaces.

1.05 CONSTRUCTION CLEANING:

- A. Execute cleaning to insure that the buildings, grounds, and public properties are maintained free from accumulations of waste materials. Provide suitable approved containers on the site for collection of waste materials and rubbish. The existing dumpsters on the site shall not be used for the disposal of construction waste.
- B. Once a week during the progress of the Work, clean the site and public properties, and legally dispose of waste materials, debris and rubbish at dumping areas off the Owner's property.
- C. Schedule cleaning operations so that the dust and other contaminants resulting from the cleaning process will not interfere with work in progress or contaminate newly finished surfaces. Wet down dry materials and rubbish to lay dust and prevent blowing dust.

1.06 FINAL CLEANING:

- A. At final inspection, the building shall be clean and completely prepared for occupancy by the Owner without additional cleaning by the Owner. Employ experienced workmen, or professional cleaners, for final cleaning.
- B. In preparation for final inspection, conduct an inspection for exposed, interior and exterior surfaces.
- C. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from sight-exposed interior and exterior finished surfaces; polish surfaces designated to a shine finish.
- D. Repair, patch, and touch-up marred surfaces to their specified finish.
- E. Broom clean and wash down paved surfaces.
- F. Mechanical Subcontractor shall replace air conditioning filters.
- G. Mechanical Subcontractor shall clean ducts, blowers, and coils.

H. Maintain cleanliness of the project until it is accepted by the Owner.

PART 2 - PRODUCTS - Not Applicable To This Section

Part 3 - EXECUTION - Not Applicable To This Section

END OF SECTION