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**Sealed bids** from prime contractors will be received until **2:00 p.m. on Thursday, October 25, 2011** at the: **Carrollton City Hall**  
**315 Bradley Street**  
**Carrollton, Georgia 30117**

for the following:

**RENOVATIONS TO:**  
**CARROLLTON TRAIN DEPOT**  
**City Of Carrollton**  
**Carrollton, Georgia**

Bid documents may be examined or downloaded:  
**alanbellarchitect.com**

**Pre-Bid** Conference will be held on site at **10:00 am on Thursday, October 13, 2011.**

Bid documents may be obtained from the Architect's website, [alanbellarchitect.com](http://alanbellarchitect.com)  
A fee of \$100.00 is required to be placed on the List of Bidders.

**A bid bond amounting to five percent of base bid is required and must be submitted with bid.**

**A performance and payment bonds amounting to 100 percent of contract sum will be required.**

The owner reserves the right to waive technicalities and reject bids.

BY:  
Casey Coleman  
City Manager

*END OF DOCUMENT*

**To be considered, Bids must be made in accordance with these Instructions to Bidders.**

1. **EXAMINATION:** Bidders shall carefully examine the documents and the construction site to obtain first-hand knowledge of existing conditions. Contractors will not be given extra payments for conditions that can be determined by examining the site and documents. Pre-bid conference will be held at **On Site** at 10:00 on October 13, 2011
2. **QUESTIONS:** Submit all questions about the Drawings and Specifications **to the Architect, in writing**. Replies will be issued to all bidders of record as Addenda to the Drawings and Specifications and will become part of the Contract. The Architect and Owner will not be responsible for oral clarification.
3. **PREPARATION OF BIDS:** Bids shall be made on unaltered Bid Forms furnished by the Architect. Fill in all blank spaces and submit in triplicate. Bids shall be signed with name typed below signature.
4. **BID SECURITY:** Bid Bond shall be payable to City of Carrollton in the amount of **five percent** (5%) of bid, issued by surety licensed to conduct business in the State of Georgia. The Owner reserves the right to retain the bonds of the next 3 lowest bidders until the lowest bidder enters into a contract. The bid bond is to be submitted concurrently with the Bid.
5. **PERFORMANCE & LABOR & MATERIAL PAYMENT BONDS:** The accepted bidder (Contractor) shall furnish a proper **Performance Bond and Payment Bond** covering the full amount of the Contract Price as security for the faithful performance of all work under the Contract and payment of all charges in connection therewith. Cost of referenced Bonds shall be included in the Bid.
6. **SUBMITTALS:** Submit bid and bid security in an opaque, sealed envelope to **The City of Carrollton 315 Bradley Street Carrollton, Ga 30117 Attn: Casey Coleman**. Identify the envelope with project name and name of bidder.
7. **MODIFICATION AND WITHDRAWAL:** Bids may not be modified after submittal. Bidders may withdraw Bids at any time before bid openings, but may not resubmit them.
8. **DISQUALIFICATION:** The Owner reserves the right to disqualify bids, before or after opening, upon evidence of collusion with intent to defraud or other illegal practices upon the part of the bidder. Owner reserves the right to disqualify bids submitted without bid security.
9. **AWARD:** Owner reserves the right to accept any Bid, to reject any and all Bids, or to negotiate Contract Terms with the various Bidders, when such is deemed by the Owner to be in his best interest.
10. **CONTRACT FORM:** Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum.
11. **COMMENCEMENT:** Accepted bidder shall assist and cooperate with the Owner in preparing the formal Contract Agreement, and within 10 days following its presentation shall execute same and return it to the Owner along with bonds and certificates of insurance. Accepted bidder must be ready to begin work within 10 days following receipt of written order from the Owner to proceed or on date stipulated in such order.

*END OF DOCUMENT*

**TO: City of Carrollton  
315 Bradley Street  
Carrollton, Georgia 30117**

I have received and reviewed bid documents, drawings dated 09/20/11 and Project Specification Manual titled:

**Renovations to:  
Carrollton Train Depot  
City of Carrollton  
Carrollton, Georgia**

I have also received Addenda no. \_\_\_\_, \_\_\_\_, \_\_\_\_, Clarification no \_\_\_\_ and have included their provisions in my bid. I have examined both the documents and the sites and submit the following bid.

In submitting this bid, I agree:

1. To hold my bid open until 30 days after bid date.
2. To accept all provisions of the Instructions to Bidders.
3. To execute a Contract if awarded, on the basis of this bid and to furnish Performance and Payment Bonds.
4. To accomplish the work in accordance with the Contract Documents.
5. To remove and replace the Carrollton Train Depot roof for the individual project base bid sum of:

\_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_) and complete

all work in \_\_\_\_\_ consecutive calendar days.

I have attached the required bid bond:

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

By: \_\_\_\_\_

Company: \_\_\_\_\_

Title: \_\_\_\_\_

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

\_\_\_\_\_  
END OF DOCUMENT

**General Conditions of the Contract  
For Construction**

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**ARTICLE 1**

**GENERAL PROVISIONS**

**1.1 BASIC DEFINITIONS**

### **1.1.1 THE CONTRACT DOCUMENTS**

The Contract Documents consist of the Agreement between Owner and Contractor (hereinafter the Agreement), Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, addenda issued prior to execution of the Contract, other documents listed in the Agreement and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Architect.

### **1.1.2 THE CONTRACT**

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Architect and Contractor, (2) between the Owner and a Subcontractor or Sub-subcontractor or (3) between any persons or entities other than the Owner and Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

### **1.1.3 THE WORK**

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

### **1.1.4 THE PROJECT**

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner or by separate contractors.

### **1.1.5 THE DRAWINGS**

The Drawings are the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.

### **1.1.6 THE SPECIFICATIONS**

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the Work, and performance of related services.

### **1.1.7 THE PROJECT MANUAL**

The Project Manual is the volume usually assembled for the Work that may include the bidding requirements, sample forms, Conditions of the Contract and Specifications.

## **1.2 EXECUTION, CORRELATION AND INTENT**

**1.2.1** The Contract Documents shall be signed by the Owner and Contractor as provided in the Agreement. If either the Owner or Contractor or both do not sign all the Contract Documents, the Architect shall identify such unsigned Documents upon request.

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

**1.2.3** The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the intended results.

**1.2.4** Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

**1.2.5** Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

### **1.3 OWNERSHIP AND USE OF ARCHITECT'S DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS**

**1.3.1** The Drawings, Specifications and other documents prepared by the Architect are instruments of the Architect's service through which the Work to be executed by the Contractor is described. The Contractor may retain one contract record set. Neither the Contractor nor any Subcontractor, Sub-subcontractor or material or equipment supplier shall own or claim a copyright in the Drawings, Specifications and other documents prepared by the Architect, and unless otherwise indicated the Architect shall be deemed the author of them and will retain all common law, statutory and other reserved rights, in addition to the copyright. All copies of them, except the Contractor's record set, shall be returned or suitably accounted for to the Architect, on request, upon completion of the Work. All copies made under this license shall bear the statutory copyright notice, if any, shown on the Drawings, Specifications and other documents prepared by the Architect. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the Architect's copyright or other reserved rights.

### **1.4 CAPITALIZATION**

**1.4.1** Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles and identified references to Paragraphs, Subparagraphs and Clauses in the document.

### **1.5 INTERPRETATION**

**1.5.1** in the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

## **ARTICLE 2**

### **OWNER**

#### **2.1 DEFINITION**

**2.1.1** The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Owner" means the Owner or the Owner's authorized representative.

**2.1.2** The Owner upon reasonable written request shall furnish to the Contractor in writing information that is necessary and relevant for the Contractor to evaluate, give notice of or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein at the time of execution of the Agreement and, within five days after any change, information of such change in title, recorded or unrecorded.

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

**2.2.1** The Owner shall, at the request of the Contractor, prior to execution of the Agreement and promptly from time to time thereafter, furnish to the Contractor reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. [*Note: Unless such reasonable evidence were furnished on request prior to the execution of the Agreement, the prospective contractor would not be required to execute the Agreement or to commence the Work.*]

**2.2.2** The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site,

**2.2.3** Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

**2.2.4** The Owner shall furnish Information or services under the Owner's control with reasonable promptness to avoid delay in orderly progress of the Work.

**2.2.5** Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, such copies of Drawings and Project Manuals as are reasonably necessary for execution of the Work.

**2.2.6** The foregoing is in addition to other duties and responsibilities of the Owner enumerated herein and especially those in respect to Article 6 (Construction by Owner or by Separate Contractors), Article 9 (Payments and Completion) and Article 11 (Insurance and Bonds).

### **2.3 OWNER'S RIGHT TO STOP THE WORK**

**2.3.1** If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract Documents as required by Paragraph 12.2 or persistently fails to carry out Work in accordance with the Contract Documents, the Owner, by written order signed personally or by an agent specifically so empowered by the owner in writing, may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Subparagraph 6.1.3.

### **2.4 OWNER'S RIGHT TO CARRY OUT THE WORK**

**2.4.1** If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may after such seven-day period give the Contractor a second written notice to correct such deficiencies within a second seven-day period. If the Contractor within such second seven-day period after receipt of such second notice fails to commence and continue to correct any deficiencies, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the Architect's additional services and expenses made necessary by such default, neglect or failure. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

## **ARTICLE 3**

### **CONTRACTOR**

#### **3.1 DEFINITION**

**3.1.1** The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Contractor" means the Contractor or the Contractor's authorized representative.

#### **3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR**

**3.2.1** The Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by the Owner pursuant to Subparagraph 2.2.2 and shall at once report to the Architect errors, inconsistencies or omissions discovered. The Contractor shall not be liable to the Owner or Architect for damage resulting from errors, inconsistencies or omissions in the Contract Documents unless the Contractor recognized such error, inconsistency or omission and knowingly failed to report it to the Architect. If the Contractor performs any construction activity knowing it involves a recognized error, inconsistency or omission in the Contract Documents without such notice to the Architect, the Contractor shall assume appropriate responsibility for such performance and shall bear an appropriate amount of the attributable costs for correction.

**3.2.2** The Contractor shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Contractor with the Contract Documents before commencing activities, Errors, inconsistencies or omissions discovered shall be reported to the Architect at once.

**3.2.3** The Contractor shall perform the Work in accordance with the Contract Documents and submittals approved pursuant to Paragraph 3.12.

#### **3.3 SUPERVISION AND CONSTRUCTION PROCEDURES**

**3.3.1** The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless Contract Documents give other specific instructions concerning these matters.

**3.3.2** The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons performing portions of the Work under a contract with the Contractor.

**3.3.3** The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons other than the Contractor.

**3.3.4** The Contractor shall be responsible for inspection of portions of Work already performed under this Contract to determine that such portions are in proper condition to receive subsequent Work.

### **3.4 LABOR AND MATERIALS**

**3.4.1** Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

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

### **3.5 WARRANTY**

**3.5.1** The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, modifications not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

### **3.6 TAXES**

**3.6.1** The Contractor shall pay sales, consumer, use and similar taxes for the Work or portions thereof provided by the Contractor which is legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

### **3.7 PERMITS, FEES AND NOTICES**

**3.7.1** Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the governmental fees, licenses and inspections necessary for proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required when bids are received or negotiations concluded. It will be the responsibility of the contractor to secure building permits. However, building permit fees will be waived by the City of Carrollton.

**3.7.2** The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations and lawful orders of public authorities bearing on performance of the Work.

**3.7.3** It is not the Contractor's responsibility to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations. However, if the Contractor observes that portions of the Contract Documents are at variance therewith, the Contractor shall promptly notify the Architect and Owner in writing, and necessary changes shall be accomplished by appropriate Modification,

**3.7.4** If the Contractor performs Work knowing it to be contrary to laws, statutes, ordinances, building codes, and rules and regulations without such notice to the Architect and Owner, the Contractor shall assume full responsibility for such Work and shall bear the attributable costs.

### **3.9 SUPERINTENDENT**

**3.9.1** The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to

the superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be similarly confirmed on written request in each case.

### **3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES**

**3.10.1** The Contractor, promptly after being awarded the Contract, shall prepare and submit for the Owner and Architect's information a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

**3.10.2** The Contractor shall prepare and keep current, for the Architect's approval, a schedule of submittals that is coordinated with the Contractor's construction schedule and allows the Architect reasonable time to review submittals.

**3.10.3** The Contractor shall conform to the most recent schedules.

### **3.11 DOCUMENTS AND SAMPLES AT THE SITE**

**3.11.1** The Contractor shall maintain at the site for the Owner one record copy of the Drawings, Specifications, addenda, Change Orders and other Modifications, in good order and marked currently to record changes and selections made during construction, and in addition approved Shop Drawings, Product Data, Samples and similar required submittals. These shall be available to the Architect and shall be delivered to the Architect for submittal to the owner upon completion of the Work.

### **3.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

**3.12.1** Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

**3.12.2** Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

**3.12.3** Samples are physical examples that illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

**3.12.4** Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required the way the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. Review by the Architect is subject to the limitations of Subparagraph 4.2.7.

**3.12.5** The Contractor shall review, approve and submit to the Architect Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors. Submittals made by the Contractor that are not required by the Contract Documents may be returned without action.

**3.12.6** The Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Architect. Such Work shall be in accordance with approved submittals.

**3.12.7** By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

**3.12.8** The Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Architect in writing of such deviation at the time of submittal and the Architect has given written approval to the specific deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect's approval thereof.

**3.12.9** The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Architect on previous submittals.

**3.12.10** Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents.

**3.12.11** When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the Architect shall be entitled to rely upon the accuracy and completeness of such calculations and certifications.

### **3.13 USE OF SITE**

**3.13.1** The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

### **3.14 CUTTING AND PATCHING**

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

**3.14.2** The Contractor shall not damage or endanger a portion of the Work, fully or partially, completed construction of the Owner or separate contractors by cutting, patching or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the Owner or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the Owner or a separate contractor the Contractor's consent to cutting or otherwise altering the Work.

### **3.15 CLEANING UP**

**3.15.1** The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work the Contractor shall remove from and about the Project waste materials, rubbish, the Contractor's tools, construction equipment, machinery and surplus materials.

**3.15.2** If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the cost thereof shall be charged to the Contractor.

### **3.16 ACCESS TO WORK**

**3.16.1** The Contractor shall provide the Owner and Architect access to the Work in preparation and progress wherever located.

### **3.17 ROYALTIES AND PATENTS**

**3.17.1** The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a patent; the Contractor shall be responsible for such loss unless such information is promptly furnished to the Architect.

### **3.18 INDEMNIFICATION**

**3.18.1** To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including loss of use resulting there from, but only to the extent caused in whole or in part by negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Paragraph 3.18.

**3.18.2** In claims against any person or entity indemnified under this Paragraph 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this Paragraph 3.18 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

**3.18.3** The obligations of the Contractor under this Paragraph 3.18 shall not extend to the liability of the Architect, the Architect's consultants, and agents and employees of any of them arising out of (1) the preparation or approval of maps,

drawings, opinions, reports, surveys, Change Orders, designs or specifications, or (2) the giving of or the failure to give directions or instructions by the Architect, the Architect's consultants, and agents and employees of any of them provided such giving or failure to give is the primary cause of the injury or damage.

## **ARTICLE 4**

### **ADMINISTRATION OF THE CONTRACT**

#### **4.1 ARCHITECT**

**4.1.1** The Architect is the person lawfully licensed to practice architecture or an entity lawfully practicing architecture identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Architect" means the Architect or the Architect's authorized representative.

**4.1.2** Duties, responsibilities and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified or extended without written consent of the Owner, Contractor and Architect. Consent shall not be unreasonably withheld.

**4.1.3** In case of termination of employment of the Architect, the Owner shall appoint an architect against whom the Contractor makes no reasonable objection and whose status under the Contract Documents shall be that of the former architect.

**4.1.4** Disputes arising under Subparagraphs 4.1.2 and 4.1.3 shall be subject to arbitration.

#### **4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT**

**4.2.1** The Architect will provide administration of the Contract as described in the Contract Documents, and will be the Owner's representative (1) during construction, (2) until final payment is due and (3) with the Owner's concurrence, from time to time during the correction period described in Paragraph 12.2. The Architect will advise and consult with the Owner, The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified by written instrument in accordance with other provisions of the Contract.

**4.2.2** The Architect will visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed Work and to determine in general if the Work is being performed in a manner indicating that the Work, when completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check quality or quantity of the Work. On the basis of on-site observations as an architect, the Architect will keep the Owner informed of progress of the Work, and will endeavor to guard the Owner against defects and deficiencies in the Work.

**4.2.3** The Architect will not have control over or charge of and will not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility as provided in Paragraph 3.3. The Architect will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Architect will not have control over or charge of and will not be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons performing portions of the Work.

**4.2.4** Communications Facilitating Contract Administration. Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate through the Architect. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Owner.

**4.2.5** Based on the Architect's observations and evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

**4.2.6** The Architect will have authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable for implementation of the intent of the Contract Documents, the Architect will have authority to require additional inspection or testing of the Work in accordance with Subparagraphs 13.5.2 and 13.5.3, whether or not such Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing portions of the Work.

**4.2.7** The Architect will review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken with such reasonable promptness as to cause no delay in the Work or in the activities of the Owner, Contractor or separate contractors, while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, a of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Paragraphs 3.3, 3.5 and 3.12. The Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect, of any construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

**4.2.8** The Architect will prepare Change Orders and Construction Change Directives, and may authorize minor changes in the Work as provided in Paragraph 7.4.

**4.2.9** The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion, will receive and forward to the Owner for the Owner's review and records written warranties and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment upon compliance with the requirements of the Contract Documents.

**4.2.10** If the Owner and Architect agree, the Architect will provide one or more project representatives to assist in carrying out the Architect's responsibilities at the site. The duties, responsibilities and limitations of authority of such project representatives shall be as set forth in an exhibit to be incorporated in the Contract Documents.

**4.2.11** The Architect will interpret and decide matters concerning performance under and requirements of the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests will be made with reasonable promptness and within any time limits agreed upon. If no agreement is made concerning the time within which interpretations required of the Architect shall be furnished in compliance with this Paragraph 4.2, then delay shall not be recognized on account of failure by the Architect to furnish such interpretations until 15 days after written request is made for them.

**4.2.12** Interpretations and decisions of the Architect will be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either and will not be liable for results of interpretations or decisions so rendered in good faith.

**4.2.13** The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

### **4.3 CLAIMS AND DISPUTES**

**4.3.1 Definition.** A Claim is a demand or assertion by one of the parties seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. Claims must be made by written notice. The responsibility to substantiate Claims shall rest with the party making the Claim.

**4.3.2 Decision of Architect.** Claims, including those alleging an error or omission by the Architect shall be referred initially to the Architect for action as provided in Paragraph 4.4. A decision by the Architect, as provided in Subparagraph 4.4.4, shall be required as a condition precedent to arbitration or litigation of a Claim between the Contractor and Owner as to all such matters arising prior to the date final payment is due, regardless of (1) whether such matters relate to execution and progress of the Work or (2) the extent to which the Work has been completed. The decision by the Architect in response to a Claim shall not be a condition precedent to arbitration or litigation in the event (1) the position of, Architect is vacant, (2) the Architect has not received evidence or has failed to render a decision within agreed time limits, (3) the Architect has failed to take action required under Subparagraph 4.4.4 within 30 days after the Claim is made, (4) 45 days have passed after the Claim has been referred to the Architect or (5) the Claim relates to a mechanic's lien.

**4.3.3 Time Limits on Claims.** Claims by either party must be made within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. Claims must be made by written notice. An additional Claim made after the initial Claim has been implemented by Change Order will not be considered unless submitted in a timely manner.

**4.3.4 Continuing Contract Performance.** Pending final resolution of a Claim including arbitration, unless otherwise agreed in writing the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

**4.3.5 Waiver of Claims: Final Payment.** The making of final payment shall constitute a waiver of Claims by the Owner except those arising from:

- .1 liens, Claims, security interests or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents; or
- .3 terms of special warranties required by the Contract Documents.

**4.3.6 Claims for Concealed or Unknown Conditions.** If conditions are encountered at the site which are (1) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then notice by the observing party shall be given to the other party promptly before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall so notify the Owner and Contractor in writing, stating the reasons. Claims by either party in opposition to such determination must be made within 21 days after the Architect has given notice of the decision. If the Owner and Contractor cannot agree on an adjustment in the Contract Sum or Contract Time, the adjustment shall be referred to the Architect for initial determination, subject to further proceedings pursuant to Paragraph 4.4.

**4.3.7 Claims for Additional Cost.** If the Contractor wishes to make Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Paragraph 10.3. If the Contractor believes additional cost is involved for reasons including but not limited to (1) a written interpretation from the Architect, (2) an order by the Owner to stop the Work where the Contractor was not at fault, (3) a written order for a minor change in the Work issued by the Architect, (4) failure of payment by the Owner, (5) termination of the Contract by the Owner, (6) Owner's suspension or (7) other reasonable grounds, Claim shall be filed in accordance with the procedure established herein.

#### **4.3.8 Claims for Additional Time**

**4.3.8.1** If the Contractor wishes to make Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.

**4.3.8.2** If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that weather conditions had an adverse effect on the scheduled construction.

**4.3.9 Injury or Damage to Person or Property.** If either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party, of any of the other party's employees or agents, or of others for whose acts such party is legally liable, written notice of such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after first observance. The notice shall provide sufficient detail to enable the other party to investigate the matter. If a Claim for additional cost or time related to this Claim is to be asserted, it shall be filed as provided in Subparagraphs 4.3.7 or 4.3.8.

#### **4.4 RESOLUTION OF CLAIMS AND DISPUTES**

**4.4.1** The Architect will review Claims and take one or more of the following preliminary actions within ten days of receipt of a Claim; (1) request additional supporting data from the claimant, (2) submit a schedule to the parties indicating when the Architect expects to take action, (3) reject the Claim in whole or in part, stating reasons for rejection, (4) recommend approval of the Claim by the other party or (5) suggest a compromise. The Architect may also, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim.

**4.4.2** If a Claim has been resolved, the Architect will prepare or obtain appropriate documentation.

**4.4.3** If a Claim has not been resolved; the party making the Claim shall, within ten days after the Architect's preliminary response, take one or more of the following actions: (1) submit additional supporting data requested by the Architect, (2) modify the initial Claim or (3) notify the Architect that the initial Claim stands.

**4.4.4** If a Claim has not been resolved after consideration of the foregoing and of further evidence presented by the parties or requested by the Architect, the Architect will notify the parties in writing that the Architect's decision will be made within seven days, which decision shall be final and binding on the parties but subject to arbitration. Upon expiration of such time period, the Architect will render to the parties the Architect's written decision relative to the Claim, including any change in the Contract Sum or Contract Time or both. If there is a surety and there appears to be a possibility of a Contractor's default, the Architect may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

## **4.5 ARBITRATION**

**4.5.1 Controversies and Claims Subject to Arbitration.** Any controversy or Claim arising out of or related to the Contract, or the breach thereof, shall be settled by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, and judgment upon the award rendered by the arbitrator or arbitrators may be entered in any court having jurisdiction thereof, except controversies or Claims relating to aesthetic effect and except those waived as provided for in Subparagraph 4.3.5. Such controversies or Claims upon which the Architect has given notice and rendered a decision as provided in Subparagraph 4.4.4 shall be subject to arbitration upon written demand of either party. Arbitration may be commenced when 45 days have passed after a Claim has been referred to the Architect as provided in Paragraph 4.3 and no decision has been rendered.

**4.5.2 Rules and Notices for Arbitration.** Claims between the Owner and Contractor not resolved under Paragraph 4.4 shall, if subject to arbitration under Subparagraph 4.5.1, be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association currently in effect, unless the parties mutually agree otherwise. Notice of demand for arbitration shall be filed in writing with the other party to the Agreement between the Owner and Contractor and with the American Arbitration Association, and a copy shall be filed with the Architect.

**4.5.3 Contract Performance during Arbitration.** During arbitration proceedings, the Owner and Contractor shall comply with Subparagraph 4.3.4.

**4.5.4 When Arbitration May Be Demanded.** Demand for arbitration of any Claim may not be made until the earlier of (1) the date on which the Architect has rendered a final written decision on the Claim, (2) the tenth day after the parties have presented evidence to the Architect or have been given reasonable opportunity to do so, if the Architect has not rendered a final written decision by that date, or (3) any of the five events described in Subparagraph 4.3.2.

**4.5.4.1** When a written decision of the Architect states that (1) the decision is final but subject to arbitration and (2) a demand for arbitration of a Claim covered by such decision must be made within 30 days after the date on which the party making the demand receives the final written decision, then failure to demand arbitration within said 30 days' period shall result in the Architect's decision becoming final and binding upon the Owner and Contractor. If the Architect renders a decision after arbitration proceedings have been initiated, such decision may be entered as evidence, but shall not supersede arbitration proceedings unless the decision is acceptable to all parties concerned.

**4.5.4.2** A demand for arbitration shall be made within the time limits specified in Subparagraphs 4.5.1 and 4.5.4 and Clause 4.5.4.1 as applicable, and in other cases within a reasonable time after the Claim has arisen, and in no event shall it be made after the date when institution of legal or equitable proceedings based on such Claim would be barred by the applicable statute of limitations as determined pursuant to Paragraph 13.7.

**4.5.5 Limitation on Consolidation or Joinder.** No arbitration arising out of or relating to the Contract Documents shall include, by consolidation or joinder or in any other manner, the Architect, the Architect's employees or consultants, except by written consent containing specific reference to the Agreement and signed by the Architect, Owner, Contractor and any other person or entity sought to be joined. No arbitration shall include, by consolidation or joinder or in any other manner, parties other than the Owner, Contractor, a separate contractor as described in Article 6 and other persons substantially involved in a common question of fact or law whose presence is required if complete relief is to be accorded in arbitration. No person or entity other than the Owner, Contractor or a separate contractor as described in Article 6 shall be included as an original third party or additional third party to an arbitration whose interest or responsibility is insubstantial. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of a dispute not described therein or with a person or entity not named or described therein. The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

**4.5.6 Claims and Timely Assertion of Claims.** A party who files a notice of demand for arbitration must assert in the demand of Claims then known to that party on which arbitration is permitted to be demanded. When a party fails to include a Claim through oversight, inadvertence or excusable neglect, or when a Claim has matured or been acquired subsequently, the arbitrator or arbitrators may permit amendment.

**4.5.7 Judgment on Final Award.** The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

## ARTICLE 5

### SUBCONTRACTORS

#### 5.1 DEFINITIONS

**5.1.1** A Subcontractor is a person or entity that has a direct contract with the contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor, The term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor.

**5.1.2** A Sub-subcontractor is a person or entity that has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

#### 5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

**5.2.1** Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Architect the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work. The Architect will promptly reply to the Contractor in writing stating whether or not the Owner or the Architect, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Owner or Architect to reply promptly shall constitute notice of no reasonable objection.

**5.2.2** The Contractor shall not contract with a proposed person or entity to which the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

**5.2.3** If the Owner or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. The Contract Sum shall be increased or decreased by the difference in cost occasioned by such change and an appropriate Change Order shall be issued. However, no increase in the Contract Sum shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

**5.2.4** The Contractor shall not change a Subcontractor, person or entity previously selected if the Owner or Architect makes reasonable objection to such change.

#### 5.3 SUBCONTRACTUAL RELATIONS

**5.3.1** By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement which may be at variance with the Contract Documents. Subcontractors shall similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

#### 5.4 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

**5.4.1** Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner provided that:

- .1 assignment is effective only after termination of the Contract by the Owner for cause, pursuant to Paragraph 14.2 and only for those subcontract agreements which the Owner accepts by notifying the Subcontractor in writing; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

5.4.2 If the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted.

## **ARTICLE 6**

### **CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS**

#### **6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS**

**6.1.1** The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided elsewhere in the Contract Documents.

**6.1.2** When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

**6.1.3** The Owner shall provide for coordination of the activities of the Owner's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the Owner in reviewing their construction schedules when directed to do so. The Contractor shall make any revisions to the construction schedule and Contract Sum deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors and the Owner until subsequently revised.

**6.1.4** Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces, the Owner shall be deemed to be subject to the same, obligations and to have the same rights which apply to the Contractor under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6 and Articles 10, 11 and 12.

#### **6.2 MUTUAL RESPONSIBILITY**

**6.2.1** The Contractor shall afford the Owner and separate contractors' reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

**6.2.2** If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Architect apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor so to report shall constitute an acknowledgment that the Owner's or separate contractors' completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.

**6.2.3** Costs caused by delays or by improperly timed activities or defective construction shall be borne by the party responsible therefore.

**6.2.4** The Contractor shall promptly remedy damage wrongfully caused by the Contractor to completed or partially completed construction or to property of the Owner or separate contractors as provided in Subparagraph 10.2.5.

**6.2.5** Claims and other disputes and matters in question between the Contractor and a separate contractor shall be subject to the provisions of Paragraph 4.3 provided the separate contractor has reciprocal obligations,

**6.2.6** The Owner and each separate contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Paragraph 3.14.

#### **6.3 OWNER'S RIGHT TO CLEAN UP**

**6.3.1** If a dispute arises among the Contractor, separate contractors and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish as described in Paragraph 3.15, the Owner may clean up and allocate the cost among those responsible as the Architect determines to be just.

## **ARTICLE 7**

*Carrollton Train Depot 10032-H08*

## **CHANGES IN THE WORK**

### **7.1 CHANGES**

**7.1.1** Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order. for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

**7.1.2** A Change Order shall be based upon agreement among the Owner, Contractor and Architect; a Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor; an order for a minor change in the Work may be issued by the Architect alone.

**7.1.3** Changes in the Work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive or order for a minor change in the Work.

**7.1.4** If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are so changed in a proposed Change Order or Construction Change Directive that application of such unit prices to quantities of Work proposed would cause substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

### **7.2 CHANGE ORDERS**

**7.2.1** A Change Order is a written instrument prepared by the Architect and signed by the Owner, Contractor and Architect, stating their agreement upon all of the following:

- .1 a change in the Work;
- .2 the amount of the adjustment in the Contract Sum, if any; and
- .3 the extent of the adjustment in the Contract Time, if any.

**7.2.2** Methods used in determining adjustments to the Contract Sum may include those listed in Subparagraph 7.3.3.

### **7.3 CONSTRUCTION CHANGE DIRECTIVES**

**7.3.1** A Construction Change Directive is a written order prepared by the Architect and signed by the Owner and Architect, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

**7.3.2** A Construction Change Directive shall be used in the absence of total agreement on, the terms of a Change Order.

**7.3.3** If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 cost to be determined in a manner agreed upon by the parties and percentage fees as follows:  
cost plus 12% for work done by the General Contractor's own forces,
- .4 cost plus 7.5% for work done by the General Contractor's sub-contractors; or as provided in Subparagraph 7.3.6.

**7.3.4** Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

**7.3.5** A Construction Change Directive signed by the Contractor indicates the agreement of the Contractor therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

**7.3.6** If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by the Architect on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. In such case, and also under Clause 7.3.3.3, the Contractor shall keep and present, in such form as

the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Subparagraph 7.3.6 shall be limited to the following:

- .1 costs of labor, including social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and workers' or workmen's compensation insurance;
- .2 costs of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
- .3 rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- .4 costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work; and
- .5 additional costs of supervision and field office personnel directly attributable to the change.

**7.3.7** Pending final determination of cost to the Owner, amounts not in dispute may be included in Applications for Payment. The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

**7.3.8** If the Owner and Contractor do not agree with the adjustment in Contract Time or the method for determining it, the adjustment or the method shall be referred to the Architect for determination.

**7.3.9** When the Owner and Contractor agree with the determination made by the Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and shall be recorded by preparation and execution of an appropriate Change Order.

#### **7.4 MINOR CHANGES IN THE WORK**

**7.4.1** The Architect will have authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order and shall be binding on the Owner and Contractor. The Contractor shall carry out such written orders promptly.

### **ARTICLE 8**

#### **TIME**

##### **8.1 DEFINITIONS**

**8.1.1** Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work,

**8.1.2** The date of commencement of the Work is the date established in the Agreement. The date shall not be postponed by the failure to act of the Contractor or of persons or entities for whom the Contractor is responsible.

**8.1.3** The date of Substantial Completion is the date certified by the Architect in accordance with Paragraph 9.8.

**8.1.4** The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

##### **8.2 PROGRESS AND COMPLETION**

**8.2.1** Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

**8.2.2** The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the site or elsewhere prior to the effective date of insurance required by Article 11 to be furnished by the Contractor. The date of commencement of the Work shall not be changed by the effective date of such insurance. Unless the date of commencement is established by a notice to proceed given by the Owner, the Contractor shall notify the Owner in writing not less than five days or other agreed period before commencing the Work to permit the timely filing of mortgages, mechanic's liens and other security interests.

**8.2.3** The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

##### **8.3 DELAYS AND EXTENSIONS OF TIME**

**8.3.1** If the Contractor is delayed at any time in progress of the Work by an act or neglect of the Owner or Architect, or of an employee of either, or of 2 separate contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control, or by delay authorized by the Owner pending arbitration, or by other causes which the Architect determines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine.

**8.3.2** Claims relating to time shall be made in accordance with applicable provisions of Paragraph 4.3.

**8.3.3** This Paragraph 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

## **ARTICLE 9**

### **PAYMENTS AND COMPLETION**

#### **9.1 CONTRACT SUM**

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

#### **9.2 SCHEDULE OF VALUES**

**9.2.1** Before the first Application for Payment, the Contractor shall submit to the Architect a schedule of values allocated to various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.

#### **9.3 APPLICATIONS FOR PAYMENT**

**9.3.1** At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment for operations completed in accordance with the schedule of values. Such application shall be notarized, if required, and supported by such data substantiating the Contractor's right to payment as the Owner or Architect may require, such as copies of requisitions from Subcontractors and material suppliers, and reflecting retainage if provided for elsewhere in the Contract Documents.

**9.3.1.1** Such applications may include requests for payment on account of changes in the Work that has been properly authorized by Construction Change Directives but not yet included in Change Orders.

**9.3.1.2** Such applications may not include requests for payment of amounts the Contractor does not intend to pay to a Subcontractor or material supplier because of a dispute or other reason.

**9.3.2** Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include applicable insurance, storage and transportation to the site for such materials and equipment stored off the site.

**9.3.3** The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

#### **9.4 CERTIFICATES FOR PAYMENT**

**9.4.1** The Architect will, within seven days after receipt of the Contractor's Application for Payment, either issue to the Owner a Certificate for Payment, with a copy to the Contractor, for such amount as the Architect determines is properly due, or notify the Contractor and Owner in writing of the Architect's reasons for withholding certification in whole or in part as provided in Subparagraph 9.5.1.

**9.4.2** The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's observations at the site and the data comprising the Application for Payment, that the Work has progressed to the point indicated and that, to the best of the Architect's knowledge, information and belief, quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to minor deviations from the Contract Documents correctable prior to completion and to specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the Owner to substantiate the Contractor's right to payment or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

## **9.5 DECISIONS TO WITHHOLD CERTIFICATION**

**9.5.1** The Architect may decide not to certify payment and may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Subparagraph 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Subparagraph 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also decide not to certify payment or, because of subsequently discovered evidence or subsequent observations, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss because of:

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims;
- .3 failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or another contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 persistent failure to carry out the Work in accordance with the Contract Documents.

**9.5.2** When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

## **9.6 PROGRESS PAYMENTS**

**9.6.1** After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Architect.

**9.6.2** The Contractor shall promptly pay each Subcontractor, upon receipt of payment from the Owner, out of the amount paid to the Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of such Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in similar manner.

**9.6.3** The Architect will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Architect and Owner on account of portions of the Work done by such Subcontractor.

**9.6.4** Neither the Owner nor Architect shall have an obligation to pay nor to see to the payment of money to a Subcontractor except as may otherwise be required by law.

**9.6.5** Payment to material suppliers shall be treated in a manner similar to that provided in Subparagraphs 9.6.2, 9.6.3 and 9.6.4.

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

## **9.7 FAILURE OF PAYMENT**

**9.7.1** If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents the amount certified by the Architect or awarded by arbitration, then the

Contractor may, upon seven additional days' written notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, which shall be accomplished as provided in Article 7.

## **9.8 SUBSTANTIAL COMPLETION**

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

**9.8.2** When the Contractor considers that the Work, or a portion thereof which the owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected. The Contractor shall proceed promptly to complete and correct items on the list. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. Upon receipt of the Contractor's list, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item whether or not included on the Contractor's list, which is not in accordance with the requirements of the Contract Documents, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. The Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion. When the Work or designated portion thereof is substantially complete, the Architect will prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion, shall establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in such Certificate.

**9.8.3** Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and certification by the Architect, the Owner shall make payment, reflecting adjustment in retainage, if any, for such Work or portion thereof as provided in the Contract Documents.

## **9.9 PARTIAL OCCUPANCY OR USE**

**9.9.1** The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer as required under Subparagraph 11.3.11 and authorized by public authorities having jurisdiction over the Work, Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Architect as provided under Subparagraph 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect.

**9.9.2** Immediately prior to such partial occupancy or use, the Owner, Contractor and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

**9.9.3** Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

## **9.10 FINAL COMPLETION AND FINAL PAYMENT**

**9.10.1** Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection and, when the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's observations and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in said final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Subparagraph 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

**9.10.2** Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be cancelled or allowed to expire until at least 30 days' prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and (5), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

**9.10.3** If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of claims. The making of final payment shall constitute a waiver of claims by the Owner as provided in Subparagraph 4.3.5.

**9.10.4** Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment. Such waivers shall be in addition to the waiver described in Subparagraph 4.3.5.

## **ARTICLE 10**

### **PROTECTION OF PERSONS AND PROPERTY**

#### **10.1 SAFETY PRECAUTIONS AND PROGRAMS**

**10.1.1** The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract.

**10.1.2** in the event the Contractor encounters on the site material reasonably believed to be asbestos or polychlorinated biphenyl (PCB) that has not been rendered harmless, the Contractor shall immediately stop Work in the area affected and report the condition to the Owner and Architect in writing. The Work in the affected area shall not thereafter be resumed except by written agreement of the Owner and Contractor if in fact the material is asbestos or polychlorinated biphenyl (PCB) and has not been rendered harmless. The Work in the affected area shall be resumed in the absence of asbestos or polychlorinated biphenyl (PCB), or when it has been rendered harmless, by written agreement of the Owner and Contractor, or in accordance with final determination by the Architect on which arbitration has not been demanded, or by arbitration under Article 4.

**10.1.3** The Contractor shall not be required pursuant to Article 7 to perform without consent any Work relating to asbestos or polychlorinated biphenyl (PCB).

**10.1.4** To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Architect, Architect's consultants and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material is asbestos or polychlorinated biphenyl (PCB) and has not been rendered harmless, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself including loss of use resulting there from, but only to the extent caused in whole or in part by negligent acts or omissions of the Owner, anyone directly or indirectly employed by the Owner or anyone for whose acts the Owner may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Subparagraph 10.1.4.

#### **10.2 SAFETY OF PERSONS AND PROPERTY**

**10.2.1** The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to:

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on for off the site, under care, custody or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

**10.2.2** The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.

**10.2.3** The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.

**10.2.4** When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

**10.2.5** The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Clauses 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Clauses 10.2.1.2 and 10.2.1.3, except damage or loss attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Paragraph 3.18.

**10.2.6** The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect.

**10.2.7** The Contractor shall not load or permit any part of the construction or site to be loaded so as to endanger its safety.

### **10.3 EMERGENCIES**

**10.3.1** in an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Paragraph 4.3 and Article 7.

## **ARTICLE 11**

### **INSURANCE AND BONDS**

#### **11.1 CONTRACTOR'S LIABILITY INSURANCE**

**11.1.1** The Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- .1 claims under workers' or workmen's compensation, disability benefit and other similar employee benefit acts that are applicable to the Work to be performed;
- .2 claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
- .3 claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
- .4 claims for damages insured by usual personal injury liability coverage that are sustained (1) by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor, or (2) by another person;
- .5 claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting there from;

- .6 claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle; and
- .7 claims involving contractual liability insurance applicable to the Contractor's obligations under Paragraph 3.18.

**11.1.2** The insurance required by Subparagraph 11.1.1 shall be written for not less than limits of liability specified in the Contract Documents or required by law, whichever coverage is greater. Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption from date of commencement of the Work until date of final payment and termination of any coverage required to be maintained after final payment.

**11.1.3** Certificates of Insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work. These Certificates and the insurance policies required by this Paragraph 11.1 shall contain a provision that coverages afforded under the policies will not be cancelled or allowed to expire until at least 30 days' prior written notice has been given to the Owner. If any of the foregoing insurance coverages are required to remain in force after final payment and are reasonably available, an additional certificate evidencing continuation of such coverage shall be submitted with the final Application for Payment as required by Subparagraph 9.10.2. Information concerning reduction of coverage shall be furnished by the Contractor with reasonable promptness in accordance with the Contractor's information and belief.

## **11.2 OWNER'S LIABILITY INSURANCE**

**11.2.1** The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance. Optionally, the Owner may purchase and maintain other insurance for self-protection against claims that may arise from operations under the Contract. The Contractor shall not be responsible for purchasing and maintaining this optional Owner's liability insurance unless specifically required by the Contract Documents.

## **11.3 PROPERTY INSURANCE**

**11.3.1** Unless otherwise provided, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance in the amount of the initial Contract Sum as well as subsequent modifications thereto for the entire Work at the site on a replacement cost basis without voluntary deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Paragraph 9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Paragraph 11.3 to be covered, whichever is earlier. This insurance shall include interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Work.

**11.3.1.1** Property insurance shall be on an all-risk policy form and shall insure against the perils of fire and extended coverage and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, false-work, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's services and expenses required as a result of such insured loss. Coverage for other perils shall not be required unless otherwise provided in the Contract Documents.

**11.3.1.2** If the Owner does not intend to purchase such property insurance required by the Contract and with all of the coverages in the amount described above, the Owner shall so inform the Contractor in writing prior to commencement of the Work. The Contractor may then affect insurance that will protect the interests of the Contractor, Subcontractors and Sub-subcontractors in the Work, then appropriate Change Order thereof shall charge the cost to the Owner. If the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain insurance as described above, without so notifying the Contractor, then the Owner shall bear all reasonable costs properly attributable thereto.

**11.3.1.3** If the property insurance requires minimum deductibles and such deductibles are identified in the Contract Documents, the Contractor shall pay costs not covered because of such deductibles. If the Owner or insurer increases the required minimum deductibles above the amounts so identified or if the Owner elects to purchase this insurance with voluntary deductible amounts, the Owner shall be responsible for payment of the additional costs not covered because of such increased or voluntary deductibles. If deductibles are not identified in the Contract Documents, the Owner shall pay costs not covered because of deductibles.

**11.3.1.4** Unless otherwise provided in the Contract Documents, this property insurance shall cover portions of the Work stored off the site after written approval of the Owner at the value established in the approval, and also portions of the Work in transit.

**11.3.2 Boiler and Machinery Insurance.** The Owner shall purchase and maintain boiler and machinery insurance required by the Contract Documents or by law, which shall specifically cover such insured objects during installation and until final acceptance by the Owner; this insurance shall include interests of the Owner, Contractor, Subcontractors and Sub-subcontractors in the Work, and the Owner and Contractor shall be named insureds.

**11.3.3 Loss of Use Insurance.** The Owner, at the Owner's option, may purchase and maintain such insurance as will insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused. The Owner waives all rights of action against the Contractor for loss of use of the Owner's property, including consequential losses due to fire or other hazards however caused.

**11.3.4** If the Contractor requests in writing that insurance for risks other than those described herein or for other special hazards be included in the property insurance policy, the Owner shall, if possible, include such insurance, and the cost thereof shall be charged to the Contractor by appropriate Change Order.

**11.3.5** If during the Project construction period the Owner insures properties, real or personal or both, adjoining or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, the Owner shall waive all rights in accordance with the terms of Subparagraph 11.3.7 for damages caused by fire or other perils covered by this separate property insurance. All separate policies shall provide this waiver of subrogation by endorsement or otherwise.

**11.3.6** Before an exposure to loss may occur, the Owner shall file with the Contractor a copy of each policy that includes insurance coverages required by this Paragraph 11.3. Each policy shall contain all generally applicable conditional definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be cancelled or allowed to expire until at least 30 days' prior written notice has been given to the Contractor.

**11.3.7** Waivers of Subrogation. The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents and employees, each of the other, and (2) the Architect, Architect's consultants, separate contractors described in Article 6, if any, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other perils to the extent covered by property insurance obtained pursuant to this Paragraph 11.3 or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the Owner as fiduciary. The Owner or Contractor, as appropriate, shall require of the Architect, Architect's consultants, separate contractors described in Article 6, if any, and the subcontractors, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

**11.3.8** A loss insured under Owner's property insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Subparagraph 11.3.10. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner.

**11.3.9** If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner's duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account proceeds so received, which the Owner shall distribute in accordance with such agreement as the parties in interest may reach, or in accordance with an arbitration award in which case the procedure shall be as provided in Paragraph 4.5. if after such loss no other special agreement is made, replacement of damaged property shall be covered by appropriate Change Order.

**11.3.10** The Owner as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing within five days after occurrence of loss to the Owner's exercise of this power; if such objection be made, arbitrators shall be chosen as provided in Paragraph 4.5. The Owner as fiduciary shall, in that case, make settlement with insurers in accordance with directions of such arbitrators, if distribution of insurance proceeds by arbitration is required, the arbitrators will direct such distribution.

**11.3.11** Partial occupancy or use in accordance with Paragraph 9.9 shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use by endorsement or otherwise. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.

#### **11.4 PERFORMANCE BOND AND PAYMENT BOND**

**11.4.1** The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

**11.4.2** Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall permit a copy to be made.

## **ARTICLE 12**

### **UNCOVERING AND CORRECTION OF WORK**

#### **12.1 UNCOVERING OF WORK**

**12.1.1** If a portion of the Work is covered contrary to the Architect's request or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Architect, be uncovered for the Architect's observation and be replaced at the Contractor's expense without change in the Contract Time.

**12.1.2** If a portion of the Work has been covered which the Architect has not specifically requested to observe prior to its being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be charged to the Owner. If such Work is not in accordance with the Contract Documents, the Contractor shall pay such costs unless the condition was caused by the Owner or a separate contractor in which event the Owner shall be responsible for payment of such costs.

#### **12.2 CORRECTION OF WORK**

**12.2.1** The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear costs of correcting such rejected Work, including additional testing and inspections and compensation for the Architect's services and expenses made necessary thereby.

**12.2.2** If, within one year after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established under Subparagraph 9.9.1, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. This period of one year shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work. This obligation under this Subparagraph 12.2.2 shall survive acceptance of the Work under the Contract and termination of the Contract. The Owner shall give such notice promptly after discovery of the condition.

**12.2.3** The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner;

**12.2.4** If the Contractor fails to correct nonconforming Work within a reasonable time, the Owner may correct it in accordance with Paragraph 2.4. If the Contractor does not proceed with correction of such nonconforming Work within a reasonable time fixed by written notice from the Architect, the owner may remove it and store the salvable materials or equipment at the Contractor's expense. If the Contractor does not pay costs of such removal and storage within ten days after written notice, the Owner may upon ten additional days' written notice sell such materials and equipment at auction or at private sale and shall account for the proceeds thereof, after deducting costs and damages that should have been borne by the Contractor, including compensation for the Architect's services and expenses made necessary thereby. If such proceeds of sale do not cover costs that the Contractor should have borne, the Contract Sum shall be reduced by the deficiency. If payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

**12.2.5** The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate contractors caused by the Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.

**12.2.6** Nothing contained in this Paragraph 12.2 shall be construed to establish a period of limitation with respect to other obligations that the Contractor might have under the Contract Documents. Establishment of the time period of one year as described in Subparagraph 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no

relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

### **12.3 ACCEPTANCE OF NONCONFORMING WORK**

**12.3.1** If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

## **ARTICLE 13**

### **MISCELLANEOUS PROVISIONS**

#### **13.1 GOVERNING LAW**

**13.1.1** The Contract shall be governed by the law of the place where the Project is located.

#### **13.2 SUCCESSORS AND ASSIGNS**

**13.2.1** The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to the other party hereto and to partners, successors, assigns and legal representatives of such other party in respect to covenants, agreements and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

#### **13.3 WRITTEN NOTICE**

**13.3.1** written notice shall be deemed to have been duly served if delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

#### **13.4 RIGHTS AND REMEDIES**

**13.4.1** Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.

**13.4.2** No action or failure to act by the Owner, Architect or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

#### **13.5 TESTS AND INSPECTIONS**

**13.5.1** Tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction shall be made at an appropriate time. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The Contractor shall give the Architect timely notice, of when and where tests and inspections are to be made so the Architect may observe such procedures. The Owner shall bear costs of tests, inspections or approvals that do not become requirements until after bids are received or negotiations concluded.

**13.5.2** If the Architect, Owner or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection or approval not included under Subparagraph 13.5.1, the Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Architect of when and where tests and inspections are to be made so the Architect may observe such procedures. The Owner shall bear such costs except as provided in Subparagraph 13.5.3.

**13.5.3** If such procedures for testing, inspection or approval under Subparagraphs 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, the Contractor shall bear all costs made necessary by such failure including those of repeated procedures and compensation for the Architect's services and expenses.

**13.5.4** Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

**13.5.5** If the Architect is to observe tests, inspections or approvals required by the Contract Documents, the Architect will do so promptly and, where practicable, at the normal place of testing.

**13.5.6** Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

### **13.6 INTEREST**

**13.6.1** Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at such rate as the parties may agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

### **13.7 COMMENCEMENT OF STATUTORY LIMITATION PERIOD**

**13.7.1** As between the Owner and Contractor:

**.1 Before Substantial Completion.** As to acts or failures to act occurring prior to the relevant date of Substantial Completion, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than such date of Substantial Completion;

**.2 Between Substantial Completion and Final Certificate for Payment.** As to acts or failures to act occurring subsequent to the relevant date of Substantial Completion and prior to issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of issuance of the final Certificate for Payment; and

**.3 After Final Certificate for Payment.** As to acts or failures to act occurring after the relevant date of issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of any act or failure to act by the Contractor pursuant to any warranty provided under Paragraph 3.5, the date of any correction of the Work or failure to correct the Work by the Contractor under Paragraph 12.2, or the date of actual commission of any other act or failure to perform any duty or obligation by the Contractor or Owner, whichever occurs last.

## **ARTICLE 14**

### **TERMINATION OR SUSPENSION OF THE CONTRACT**

#### **14.1 TERMINATION BY THE CONTRACTOR**

**14.1.1** The Contractor may terminate the Contract if the Work is stopped for a period of 30 days through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor, for any of the following reasons:

**.1** issuance of an order of a court or other public authority having jurisdiction;

**.2** an act of government, such as a declaration of national emergency, making material unavailable;

**.3** because the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Subparagraph 9.4. 1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents;

**.4** if repeated suspensions, delays or interruptions by the Owner as described in Paragraph 14.3 constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any, 365-day period, whichever is less; or

**.5** the Owner has failed to furnish to the Contractor promptly, upon the Contractor's request, reasonable evidence as required by Subparagraph 2.2.1.

**14.1.2** If one of the above reasons exists, the Contractor may, upon seven additional days' written notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed and for proven loss with respect to materials, equipment, tools, and construction equipment and machinery, including reasonable overhead, profit and damages.

**14.1.3** If the Work is stopped for a period of 60 day's through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor because the Owner has persistently failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' written notice to the Owner and the Architect, terminate the Contract and recover from the Owner as provided in Subparagraph 14.1.2.

#### **14.2 TERMINATION BY THE OWNER FOR CAUSE**

**14.2.1** The Owner may terminate the Contract if the Contractor:

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

**14.2.2** When any of the above reasons exist, the Owner, upon certification by the Architect that sufficient cause exists to justify such action, may without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' written notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 takes possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 accept assignment of subcontracts pursuant to Paragraph 5.4; and
- .3 finishes the Work by whatever reasonable method the Owner may deem expedient.

**14.2.3** When the Owner terminates the Contract for one of the reasons stated in Subparagraph 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

**14.2.4** If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, such excess shall be paid to the Contractor, If such costs exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall be certified by the Architect, upon application, and this obligation for payment shall survive termination of the Contract.

### **14.3 SUSPENSION BY THE OWNER FOR CONVENIENCE**

**14.3.1** The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in whole or in part for such period of time as the Owner may determine.

**14.3.2** An adjustment shall be made for increases in the cost of performance of the Contract, including profit on the increased cost of performance, caused by suspension, delay or interruption. No adjustment shall be made to the extent:

- .1 that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of this Contract.

**14.3.3** Adjustments made in the cost of performance may have a mutually agreed fixed or percentage fee.

**End of Document**

**Standard Form of Agreement  
Between Owner and Contractor**  
*where the Basis of Payment is a STIPULATED SUM*

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This **AGREEMENT** is made: \_\_\_\_\_ 2011

**BETWEEN** the Owner:

**City of Carrollton  
315 Bradley Street  
Carrollton, Georgia 30117**

and the Contractor:

for the following Project:

**RENOVATIONS TO:  
CARROLLTON TRAIN DEPOT  
City of Carrollton  
Carrollton, Georgia**

The Architect is:

**Alan Bell Architect, Inc.  
128 Lovvorn Road  
Carrollton, GA 30117**

The Owner and Contractor agree as follows.

**ARTICLE 1  
THE CONTRACT DOCUMENTS**

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

- .1** this Agreement signed by the Owner and Contractor;
- .2** General Conditions of the Contract;
- .3** the Drawings and Specifications prepared by the Architect, dated and enumerated as follows:
  - T-1 – 9/20/11
  - A-1 – 9/20/11
  - A-3 – 9/20/11
  - A-4 - 9/20/11
  - A-8 – 9/20/11
- .4** Specifications;
- .5** addenda prepared by the Architect as follows:
  - Addendum # \_\_\_\_, \_\_\_\_, and \_\_\_\_.
- .6** written change orders or orders for minor changes in the Work issued after execution of this Agreement; and
- .7** other documents, if any, identified as follows:
  - Clarification # \_\_\_\_

**ARTICLE 2**

**DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION DATE**

The date of commencement shall be \_\_\_\_\_, **2011**. The Contractor shall substantially complete the Work not later than \_\_\_\_\_ days after start work date of \_\_\_\_\_, **2011** subject to adjustment by Change Order.

**ARTICLE 3**  
**CONTRACT SUM**

**3.1** Subject to additions and deductions by Change Order, the Contract Sum is: \_\_\_\_\_

**3.2** The Contract Sum shall include all items and services necessary for the proper execution and completion of the Work.

**ARTICLE 4**  
**PAYMENT**

**4.1** Based on Contractor’s Applications for Payment certified by the Architect, the Owner shall pay the Contractor as follows:

Pay requests shall be submitted on AIA Document G702, Application and Certificate for Payment with AIA Document G703, Continuation Sheet no later than the 25th of each month for payment to be made on the 10th of the following month, with 10% retainage on each draw amount until work is half completed. At that time, if owner is satisfied with progress, retainage may be dropped from remainder of pay requests.

**4.2** Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate of 1.5% per month, or in the absence thereof, at the legal rate prevailing at the place of the Project.

**ARTICLE 5**  
**INSURANCE**

**5.1** The Contractor shall provide Contractor’s Liability and other Insurance as follows:  
Workmen’s Compensation Insurance for at least \$500,000 each occurrence and \$500,000 total for bodily injury including personal injury.  
Property damage for at least \$100,000

**5.2** The Owner shall provide Owner’s Liability and Owner’s Property Insurance as follows:  
Property insurance in the full amount of insurable value. The insurance shall include the interests of the bank, or other mortgage holder, if any, and the Owner shall insure against all risks of physical loss or damage

**5.3** The Contractor shall obtain an endorsement to its general liability insurance policy to cover the Contractor’s obligations under Paragraph 3 of General Conditions of the Contract.

**5.4** Certificated of insurance shall be provided by each party showing their respective coverages prior to commencement of the Work.

**ARTICLE 6**  
**OTHER TERMS AND CONDITIONS**

This Agreement entered into as of the day and year first written above.

OWNER \_\_\_\_\_  
\_\_\_\_\_

(Signature) \_\_\_\_\_  
CONTRACTOR  
\_\_\_\_\_

(Signature) \_\_\_\_\_

**PART 1 - GENERAL**

**1.01 DESCRIPTION:**

- A. Name of Project: **Renovations to:  
Carrollton Train Depot  
City of Carrollton  
Carrollton, Georgia**
- B. Owner: City of Carrollton  
315 Bradley Street  
Carrollton, Georgia 30117
- C. Contract Documents: Prepared by A. Alan Bell, Architect, Inc.
- D. Summary by References: Work of Contract can be summarized by reference to the contract, contract conditions, and specification sections as listed in the Project Manual "Table of Contents", drawings listed in "List of Drawings", and addenda and modifications to the contract documents issued after printing this project manual.
- E. Abbreviated Written Summary:  
1. Work under base bid:  
a. **Carrollton Train Depot Roof Replacement @ 403 Bradley Street**

**1.02 ALTERNATES: NOT USED**

**PART 2 - NOT USED**

**PART 3 - EXECUTION**

**3.01 ALTERNATES:** No alternates at this time (*September 20, 2011*)

END OF SECTION 01005

**PART 1 - GENERAL**

**1.01 DESCRIPTION:**

This section covers requirements for schedules and payments.

**1.02 PROGRESS SCHEDULE:**

- A. Submit a comprehensive bar-chart type progress schedule.

**1.03 SCHEDULE OF VALUES:**

- A. Prepare a schedule of values in such a manner that each major item of work and each subcontracted item of work is shown on a single line.
- B. Show dollar value and percent of total for each unit of work scheduled. Submit not later than 7 days prior to first payment request, and revise each time schedule is affected by change order or other value revision.

**1.04 PAYMENT REQUESTS**

- A. The form of application shall be approved by the architect.
- B. Submit request for each calendar month, for the portion of the Contract sum properly allocated to labor, materials and equipment incorporated into the work, and the portion of the Contract Sum properly allocated to materials and equipment suitably stored, up to the twenty-fifth of the month, less previous payments and retainage.
- C. Prior to first pay request, submit:
1. Schedule of values
  2. Progress schedule
- D. Application at Time of Substantial Completion: Following issuance of Architect's final "certificate of substantial completion," the contractor shall submit or do the following:
1. Permits and similar approvals or certifications by governing authorities and franchised services, assuring Owner's full access and use of completed work.
  2. Warranties, (guarantees), maintenance agreements and similar provisions of contract documents.
  3. Maintenance instructions and similar change-over information germane to Owner's occupancy, use, operation and maintenance of completed work.
  4. Final cleaning of the work.
  5. Application for reduction of retainage, and consent of surety.
  6. Advice to Owner on coordination of shifting insurance coverage, including proof of extended coverage as required.
  7. Listing of Contractor's incomplete work, recognized as exceptions to Architect's certificate of substantial completion.
- E. Final Payment Application:

1. Removal of temporary facilities, services, surplus materials, rubbish and similar elements.
  2. Consent of surety for final payment.
  3. Receipt of Statutory Affidavit, Contractor's Warranty, and Roofing Guarantee.
- F. Application Transmittal: Submit 3 executed copies of each payment application, with a transmittal form.

**PART 2 - NOT USED**

**PART 3 - NOT USED**

**END OF SECTION 01155**

**PART 1 - GENERAL**

**1.01 SUMMARY:**

- A. Section Includes: Product related submittals.
  - 1. Shop drawings, product data and samples.
  - 2. Shop drawing, product data and sample submittal schedule.
  
- B. Related Documents and Sections:
  - 1. Document 00700-General Conditions:
    - a. Definitions of shop drawings, product data and samples.
    - b. Contractor review.
  
  - 2. Section 01630-Product Options and Substitutions:
  
  - 3. Section 01705-Project Closeout: Administrative submittals after substantial completion.
    - a. Project record documents.
    - b. Maintenance data.
    - c. Warranties and bonds.
    - d. Spare parts and maintenance materials.
    - e. Other closeout documents.

**1.02 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES:**

- A. Shop Drawings:
  - 1. Prepare special use drawings, as follows:
    - a. Title
    - b. Dimensions
    - c. Materials
    - d. Fasteners
    - e. Utilities
  - 2. Contract documents prepared by architect or consultants are not acceptable as shop drawing submittals.
  - 3. Submit bond copies or blue line prints. Submit number required by contractor, plus two to be retained by architect. Submit number required by contractor, plus three to be retained by architect when review by a professional engineer is required (Structural, etc....).
  
- B. Product Data:
  - 1. Prepare manufacturers standard specifications and descriptive literature, as follows:
    - a. Mark to show specific information and any options, if any, required for this project.
    - b. Include printed color charts, for color selection by architect, when actual samples are not required.
  - 2. Submit number required by contractor, plus 2 to be retained by architect.
  
- C. Samples:
  - 1. Prepare and submit actual samples of required products for architect review of color, texture or finish. Show full color range for products with a range of color.
  - 2. Submit number required by contractor, plus one to be retained by architect.

- D. Architect Review: Architect will review and mark each submittal with appropriate action, as follows:
1. "Approved" indicates submittal information is acceptable and work may proceed.
  2. "Approved as Noted" indicates submittal information is acceptable as noted and work may proceed, subject to compliance with notations.
  3. "Returned for Correction" or "NOT Approved" indicates submittal information is not acceptable and work may not proceed. Revise submittal or prepare new submittal, to comply with notations, and resubmit for subsequent review by architect.

**PART 2 - NOT USED**

**PART 3 - NOT USED**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

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

**1.2 SUMMARY**

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:

- 1. General project coordination procedures.
- 2. Conservation.
- 3. Coordination Drawings.
- 4. Administrative and supervisory personnel.
- 5. Project meetings.

- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility will be assigned to a specific contractor.

- C. Related Sections: The following Sections contain requirements that relate to this Section:

- 1. Division 1 Section "Construction Progress Documentation" for preparing and submitting the Contractor's Construction Schedule.
- 2. Division 1 Section "Closeout Procedures" for coordinating Contract closeout.

**1.3 COORDINATION**

- A. Coordination: Coordinate construction operations included in various Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.

**1.4 ADMINISTRATIVE AND SUPERVISORY PERSONNEL**

- A. General: In addition to a full time Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.

- 1. Include special personnel required for coordination of operations with other contractors.
- 2. Owner reserves the reasonable right to approve Contractor's personnel before and or during the project.
- 3. Project superintendent is to be on site the duration of each workday through the later of final punch list completion.
- 4. Contractor may not change or reassign the Project Superintendent without prior discussion and approval of the Owner.

**1.5 PROJECT MEETINGS**

- A. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner prior to the start of construction. Coordinate date with Owner. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.

**SECTION 01310 – PAGE 2**  
**PROJECT MANAGEMENT AND COORDINATION**

1. Attendees: Authorized representatives of Owner; Contractor and its superintendent; major subcontractors; manufacturers; suppliers and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  
- B. Post Construction Meeting: Schedule meeting just prior to substantial completion to review equipment and systems operation, repair, and trouble-shooting with Operations Management. The intent of the meeting being to alleviate unnecessary warranty calls.
  1. Attendees: Owner's Operation Management, Contractor and appropriate Sub-Contractors.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01310

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other miscellaneous submittals.
- B. Related Sections include the following:
  - 1. Division 1 Section "Project Management and Coordination" for submitting Coordination Drawings.
  - 2. Division 1 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule.
  - 3. Division 1 Section "Quality Requirements" for submitting test and inspection reports and Delegated-Design Submittals.
  - 4. Division 1 Section "Closeout Procedures" for submitting warranties Project Record Documents and operation and maintenance manuals.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information that requires Architect's responsive action.
- B. Informational Submittals: Written information that does not require Architect's approval. Submittals may be rejected for not complying with requirements.

1.4 SUBMITTAL PROCEDURES

- A. General: All submittals are to be made to the Owner's Construction Manager.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that requires sequential activity.
  - 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
    - a. Owner's Construction Manager reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Owner's Construction Manager's receipt of submittal.
  - 1. Initial Review: Allow 10 days for initial review of each submittal. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. Owner's Construction Manager will advise Contractor when a submittal being processed must be delayed for coordination.
  - 2. Concurrent Review: Where concurrent review of submittals by Architect's consultants, Owner, or other parties is required, allow 15 days for initial review of each submittal.

**SECTION 01330 – PAGE 2**  
**SUBMITTAL PROCEDURES**

3. Allow 10 days for processing each resubmittal.
  4. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing.
- D. Identification: Place a permanent label or title block on each submittal for identification.
1. Indicate name of firm or entity that prepared each submittal on label or title block.
  2. Include the following information on label for processing and recording action taken:
    - a. Project name.
    - b. Date.
    - c. Name and address of Contractor.
    - d. Name of manufacturer.
    - e. Other necessary identification.
- E. Deviations: Highlight, encircle, or otherwise identify deviations from the Contract Documents on submittals.
- F. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- G. Use for Construction: Use only final submittals with mark indicating action taken by Architect and Owner's Construction Manager in connection with construction.

**PART 2 - PRODUCTS**

**2.1 ACTION SUBMITTALS**

- A. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Include the following information, as applicable:
    - a. Dimensions.
    - b. Identification of products.
    - c. Fabrication and installation drawings.
    - d. Roughing-in and setting diagrams.
    - e. Shop work manufacturing instructions.
    - f. Schedules.
    - g. Design calculations.
    - h. Notation of dimensions established by field measurement.
  2. Number of Copies: Submit four blue-line or black-line prints of each submittal. Architect and Owner's Construction Manager will retain two prints; remainder will be returned. Mark up and retain one returned print as a Project Record Drawing.

**2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE**

- A. Construction Schedules: Along with the Invitation to Bid, the Owner will submit to Contractor his Anticipated Construction Time.
- B. Type: Network analysis system using the critical path method, generally as outlined in Associated General Contractors of America (AGC) publication "The use of CPM in Construction – A

**SECTION 01330 – PAGE 3**  
**SUBMITTAL PROCEDURES**

Manual for General Contractors” is preferred, but a horizontal bar chart with separate bar for each major trade or operation, identifying first work day of each week is acceptable.

- C. Sequence of Construction: Show complete sequence of construction by activity, identifying work of separate stages and other logically grouped activities.
- D. Percentage of Completion: Show projected percentage of completion for each item of work as of time of each Application for Payment.
- E. Submittal Dates: Show submittal dates required for shop drawings, product data, and samples, and product delivery dates, including those furnished by Owner.
- F. Progress Reports: The Contractor shall, on Friday of each week, complete and make distribution of a synopsis of job progress by trade category with distribution as directed by Owner. The form shall be completed by the Contractor’s job superintendent, complete with a “remarks” space for written communication of minor job problems and requests that can be made under field conditions.
- G. Copies Required:
  - 1. Initial Issue: Submit three; within 10 days after date of notice to proceed. After review by Owner, revise and resubmit as required.
  - 2. Revised: Submit three; with each Application for Payment, reflecting changes since previous submittal.
- H. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
  - 1. Name, address, and telephone number of entity performing subcontract or supplying products.

2.3 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by other Specification Sections.
  - 1. Number of Copies: Submit two copies of each submittal, unless otherwise indicated. Owner’s Construction Manager will return copies.
  - 2. Test and Inspection Reports: Comply with requirements in Division 1 Section "Quality Requirements."
- B. Contractor's Construction Schedule: Comply with requirements in Division 1 Section "Construction Progress Documentation."
- C. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Review each submittal and check for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Owner’s Construction Manager.

3.2 ARCHITECT'S AND OWNER’S CONSTRUCTION MANAGER'S ACTION

**SECTION 01330 – PAGE 4**  
**SUBMITTAL PROCEDURES**

- A. Action Submittals: Architect and Owner's Construction Manager will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
  - 1. No Exceptions:
  - 2. Exceptions as Noted:
  - 3. Revise and Resubmit:
- B. Informational Submittals: Owner's Construction Manager will review each submittal and will not return it, or will reject and return it if it does not comply with requirements. Owner's Construction Manager will forward each submittal to appropriate party.
- C. Submittals not required by the Contract Documents will not be reviewed and may be discarded.

END OF SECTION 01330

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection facilities.
- B. Temporary utilities include, but are not limited to, the following:
  - 1. Sanitary facilities, including toilets, wash facilities, and drinking-water facilities.
  - 2. Heating and cooling facilities.
  - 3. Ventilation.
  - 4. Lighting.
  - 5. Telephone service (Cellular phone is acceptable)
- C. Support facilities include, but are not limited to, the following:
  - 1. Project identification and temporary signs.
  - 2. Waste disposal facilities.
  - 3. Construction aids and miscellaneous services and facilities.
- D. Security and protection facilities include, but are not limited to, the following:
  - 1. Security enclosure and lockup.
  - 2. Barricades, warning signs, and lights.
  - 3. Temporary enclosures.
- E. Related Sections include the following:
  - 1. Division 1 Section "Submittal Procedures" for procedures for submitting copies of implementation and termination schedule and utility reports.
  - 2. Division 1 Section "Execution Requirements" for progress cleaning requirements.
  - 3. Divisions 2 through 16 for temporary heat, ventilation, and humidity requirements for products in those Sections.

1.3 DEFINITIONS

- A. Permanent Enclosure: As determined by Architect, permanent or temporary roofing is complete, insulated, and weathertight; exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures.

1.4 USE CHARGES

- A. General: Cost or use charges for temporary water and electric services are not chargeable to Contractor. Owner shall be responsible for water and electric use fees. Allow other entities to use temporary services and facilities including, but not limited to, the following:
  - 1. Owner's construction forces.
  - 2. Occupants of Project.
  - 3. Testing agencies.
  - 4. Personnel of authorities having jurisdiction.

**SECTION 01500 – PAGE 2**  
**TEMPORARY FACILITIES, UTILITIES AND CONTROLS**

1.5 QUALITY ASSURANCE

- A. Standards: Comply with ANSI A10.6 and NFPA 241.
  - 1. Trade Jurisdictions: Assigned responsibilities for installation and operation of temporary utilities are not intended to interfere with trade regulations and union jurisdictions.

1.6 PROJECT CONDITIONS

- A. Temporary Utilities:
  - 1. Temporary Use of Permanent Facilities: Water and Electric service are available on site and the contractor will not be responsible for fees pertaining to these services.
- B. Conditions of Use: The following conditions apply to use of temporary services and facilities by all parties engaged in the Work:
  - 1. Keep temporary services and facilities clean and neat.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Provide new materials suitable for use intended.

2.2 EQUIPMENT

- A. General: Provide equipment suitable for use intended.
- B. Field Offices: Not Required.
- C. Fire Extinguishers: Hand carried, portable, UL rated. Provide class and extinguishing agent as indicated or a combination of extinguishers of NFPA-recommended classes for exposures.
  - 1. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent, and size required by location and class of fire exposure.
- D. Self-Contained Toilet Units: Single-occupant units of chemical, aerated recirculation, or combustion type; vented; fully enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material.
- E. Heating Equipment: Unless Owner authorizes use of permanent heating system; provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
  - 1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
  - 2. Heating Units: Listed and labeled, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use for type of fuel being consumed.
- F. **Provide project identification sign** with 4'-0" x 8'-0" x 3/4" thick APA A-A Exterior plywood panel, painted on both sides in two colors, 2 x 4 painted wood top and bottom panel braces and 4 x 4 painted wood posts, complying with the layout shown below. Locate on-site as directed by Architect.



**PART 3 - EXECUTION**

**3.1      INSTALLATION, GENERAL**

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

**3.2      TEMPORARY UTILITY INSTALLATION**

- A.    Lighting: Provide temporary portable lighting that provides adequate illumination for construction operations and traffic conditions.
- B.    Telephone Service: Provide cellular phone service throughout construction period for common-use facilities used by all personnel engaged in construction activities.

**3.3      SUPPORT FACILITIES INSTALLATION**

- A.    General: Comply with the following:
  - 1.    Locate staging, sanitary facilities, and other temporary construction and support facilities for easy access.
- B.    Project Identification and Temporary Signs: Prepare Project identification and other signs in sizes indicated. Install signs where indicated to inform public and persons seeking entrance to Project. Do not permit installation of unauthorized signs.
  - 1.    Contractor to provide 4 by 8 ft sheet of 3/4 inch marine grade plywood on (2) 4 by 4 inch posts for Owner's Project Sign.
- C.    Contractor Signs and Advertising: No freestanding signs or advertising other than the Project ID sign or waning signs will be permitted.

**3.4      SECURITY AND PROTECTION FACILITIES INSTALLATION**

**SECTION 01500 – PAGE 4**  
**TEMPORARY FACILITIES, UTILITIES AND CONTROLS**

- A. Security Enclosure and Lockup: Fenced enclosure with gate is present at the site. Contractor will be responsible for lock up to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
- B. Barricades, Warning Signs, and Lights: Comply with standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and public of possible hazard. Where appropriate and needed, provide lighting, including flashing red or amber lights.
- C. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
- D. Temporary Fire Protection: Until fire-protection needs are supplied by permanent facilities, install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
  - 1. Provide fire extinguishers visible and accessible from space being served, with sign mounted above.
  - 2. Store combustible materials in containers in fire-safe locations.
  - 3. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire-protection facilities, stairways, and other access routes for firefighting. Prohibit smoking in hazardous fire-exposure areas.
  - 4. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition.

3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage caused by freezing temperatures and similar elements.
- C. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

END OF SECTION 01500

**PART 1 - GENERAL**

**1.01 DESCRIPTION**

This section covers products and prior approvals.

**1.02 PRODUCTS:**

Products are specified by ASTM or other reference standard, and/or by manufacturer's name and model number or trade name. When specified only by reference standard, Contractor may select any product meeting this standard, by any manufacturer. When several products or manufacturers are specified as being equally acceptable, Contractor has the option of choosing among those named.

**1.03 SUBSTITUTIONS/PRIOR APPROVALS:**

A. If it is desired to use products different from those indicated in the Contract Documents, the party requesting the substitution shall make written application as described herein. The burden of proving equality of proposed substitutions rests on the party making the request for substitution.

1. Requests for substitution shall reach the Architect **not less than 7 days prior** to the date set for opening of bids.
2. Requests received by Architect after this date will not be considered.
3. Requests for substitution shall be accompanied by such technical data as the party making the request desired to submit. Architect will consider reports from independent testing laboratories, verified experience records from previous users, and other printed or written information valid in the circumstances.
4. Requests for substitution shall indicate in what respects proposed materials or products differ from those specified.
5. Requests for substitution shall be accompanied by the manufacturer's printed recommendations describing the installation, use and care, as applicable, of the proposed substitution.
6. Determination as to acceptability of proposed substitution will be made based only upon data submitted.

B. If a proposed substitution is approved by Architect, an addendum will be issued to prospective bidders not less than three days prior to the date set for opening of bids. Unless substitutions are received and approved as described above, the successful bidder shall be responsible for furnishing materials and products in accordance with the Contract Documents.

**PART 2 - PRODUCTS**

**2.01 REQUESTS FOR PRIOR APPROVAL:**

1. Date of Request: \_\_\_\_\_, 2011      Job Bid Date: \_\_\_\_\_, 2011
2. Name of Party Proposing Substitute:

3. Job Name:
4. Specification Section and Paragraph:
5. Specified Item:
6. Proposed Substitute:
7. Manufacturer:
8. Deviations from the Specified Item:
9. Manufacturer's Recommendations for Use and Installation: *(List Recommendation)*
10. Change in Other Work to Permit Use of Proposed Substitute: List of changes. *(Submit drawings if required for clarity.)*
11. Technical Data to Support Request for Approval: *(List ASTM designations met, submit testing laboratory reports and experience records, etc.)*
12. Other supporting data: *(Submit brochures, samples, drawings, etc.)*

### **PART 3 - EXECUTION**

#### **3.01 GENERAL:**

In connection with the use of any substitute item approved by the Architect it shall be the General Contractor's responsibility to see that such items meet all space requirements, and that any alterations to connecting items necessitated by use of the alternate items are properly made at no increase in cost to the Owner, and that all items are in compliance with the specification requirements.

**END OF SECTION**

**PART 1 - GENERAL**

**1.01 DESCRIPTION:**

This section covers general requirements in preparation for final acceptance, final payment, normal termination of contract and occupancy by Owner.

**1.02 PREREQUISITES TO SUBSTANTIAL COMPLETION:**

- A. General: Prior to requesting Architect's inspection for certification of substantial completion (for either entire work or portions thereof), complete the following:
1. In progress payment request, show either 100% completion for portion of work claimed as "substantially complete", or list incomplete items, value of incompleteness, and reasons for being incomplete.
  2. Advise Owner of pending insurance change-over requirements.
  3. Submit specific warranties, workmanship/maintenance bonds, maintenance agreements, final certifications and similar documents.
  4. Complete final cleaning up requirements, including touch-up painting of marred surfaces.

**1.03 SUBSTANTIAL COMPLETION:**

The date of substantial completion of the work or designated portion is the date certified by the Architect when construction is sufficiently complete, in accordance with the Contract Documents, so the Owner can occupy.

**1.04 PREREQUISITES TO FINAL ACCEPTANCE:**

- A. General: Prior to requesting Architect's final inspection, complete the following:
1. Submit final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
  2. Submit updated final statement, accounting for additional (final) changes to Contract Sum.
  3. Submit certified copy of Architect's final punch-list of itemized work to be completed or corrected, stating that each item has been completed.
  4. Submit consent of surety.
  5. Revise and submit evidence of final, continuing insurance coverage complying with insurance requirements.

**1.05 RECORD DOCUMENT SUBMITTALS:**

- A. Record Drawings: Maintain a white-print set (blue-line or black- line) of contract drawings and shop drawings in clean, undamaged condition, with mark-up of actual installations which vary substantially from the work as originally shown.
- B. Maintenance Manuals: Organize maintenance-and-operating manual information into suitable sets of manageable size, and bind into individual binders properly identified and indexed.

**PART 2 - NOT USED**

**PART 3 - EXECUTION**

**3.01 CLOSEOUT PROCEDURES:**

General Maintenance Instructions: Provide basic instructions needed for proper maintenance of entire work.

**3.02 FINAL CLEANING:**

General: Provide final cleaning of the work, at time indicated, consisting of cleaning each surface or unit of work to normal "clean" condition expected for a first-class building cleaning and maintenance program. Comply with manufacturer's instructions for cleaning operations.

**END OF SECTION 01705**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
  - 1. Inspection procedures.
  - 2. Project Record Documents.
  - 3. Maintenance manuals.
  - 4. Warranties.
  - 5. Final cleaning.
- B. Related Sections include the following:
  - 1. Division 1 Section "Execution Requirements" for progress cleaning of Project site.
  - 2. Divisions 2 through 16 Sections for specific closeout and special cleaning requirements for products of those Sections.

1.3 PROJECT COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
  - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
  - 2. Advise Owner of pending insurance changeover requirements.
  - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
  - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include certificates, all lien, and similar releases.
  - 5. Prepare and submit Project Record Documents, maintenance manuals, damage or settlement surveys and similar final record information.
  - 6. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  - 7. Complete final cleaning requirements, including touchup painting.
  - 8. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

1.4 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit three copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
  - 1. Organize list of spaces in sequential order, starting with exterior areas first.
  - 2. Owner reserves the right to add items to the punch list and determine acceptability of item resolution.

1.5 PROJECT RECORD DOCUMENTS

- A. General: Do not use Project Record Documents for construction purposes. Protect Project Record Documents from deterioration and loss. Provide access to Project Record Documents for Owner's reference during normal working hours.
- B. Record Drawings: Maintain and submit one set of blue- or black-line white prints of Contract Drawings and Shop Drawings.
  - 1. Mark Record Prints to show the actual installation where installation varies from that shown originally.
    - a. Accurately record information in an understandable drawing technique.
    - b. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
  - 2. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at the same location.
  - 3. Mark important additional information that was either shown schematically or omitted from original Drawings.
  - 4. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location. Organize into manageable sets; bind each set with durable paper cover sheets. Include identification on cover sheets.

1.6 MAINTENANCE AND WARRANTY MANUALS

- A. Assemble two complete sets of maintenance data indicating the maintenance of each system and subsystem. Include maintenance data required in individual Specification Sections and as follows:
  - 1. Maintenance Data:
    - a. Manufacturer's information, including list of spare parts.
    - b. Name, address, and telephone number of Installer or supplier.
    - c. Maintenance procedures.
    - d. Maintenance and service schedules for preventive and routine maintenance.
    - e. Maintenance record forms.
    - f. Sources of spare parts and maintenance materials.
    - g. Copies of warranties and bonds.
  - 2. Warranty Data:
    - a. Provide a 1-year warranty on labor and materials from General Contractor and each subcontractor.
    - b. General Contractor to coordinate an inspection of the finished roof system by the manufacturer to ensure compliance to warranty requirements for system installation and provide inspection documentation to the Owner. Any costs associated with this inspection shall be paid by the General Contractor.
- B. Organize maintenance manuals into suitable sets of manageable size. Bind and index data in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, with pocket inside the covers to receive folded oversized sheets. Identify each binder on front and spine with the printed title "MAINTENANCE MANUAL," Project name, and subject matter of contents.

**PART 2 - PRODUCTS**

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

**PART 3 - EXECUTION**

3.1 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
  - 1. Complete the following cleaning operations before requesting inspection for certification of Completion for entire Project:
    - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
    - b. Remove petrochemical spills, stains, and other foreign deposits.
    - c. Remove tools, construction equipment, machinery, and surplus material from Project site.
    - d. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
    - e. Remove debris and surface dust from limited access spaces, including roofs and trusses.
    - f. Remove labels that are not permanent.
    - g. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
    - h. Leave Project clean and ready for occupancy.
    - i. Clean roof of all debris, screws, excess material, etc.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION 01770

**PART 1 - GENERAL**

**1.01 DESCRIPTION:**

This section covers selective demolition to accommodate modification work.

**1.02 WORK QUALIFICATIONS:**

- A. Workmen executing this work shall be experienced in demolition and in handling equipment of size and type to accomplish work indicated.

**1.03 SUBMITTALS:**

- A. Sequence schedule
- B. Inspection reports

**1.04 JOB CONDITIONS:**

- A. Material Handling:
  - 1. Remove debris from site as it accumulates.
  - 2. Items salvaged for Owner shall be protected at all times and shall be carefully removed from existing work and safely stored until they are again incorporated into the work or turned over to the Owner as directed.
- B. Protection:
  - 1. Erect and maintain temporary bracing, dust barriers, barricades and cover to protect general public, Owner's occupants and property from harm or damage due to execution of this work.
  - 2. Employ demolition and debris handling technique to limit and control air pollution in vicinity of these operations to lowest level practical and in compliance with governing regulations.
  - 3. Clean adjacent work remaining of dust, dirt and debris caused by execution of this work, to restore them to conditions existing prior to start of this work.
- C. Scheduling: This work shall be scheduled to permit the Owner's use of their facilities not involved in these operations.
- D. Inspection of Job:
  - 1. Before demolition operations begin, arrange for a joint visual inspection and report with the Owner's delegated representative, the Architect, the Contractor and other interested parties as directed.

**PART 2 - MATERIALS**

**2.01 DISPOSITION OF SALVAGE MATERIALS:**

- A. Except as otherwise indicated, materials resultant from demolition operations become property of Contractor.
- B. Items of salvageable value to Contractor shall be transported from site as they are removed; storage or sale of such items on Owner's property will not be permitted.

**PART 3 - EXECUTION**

**3.01 DEMOLITION:**

- A. Remove existing metal roof and affiliated trim. All other work not specifically so noted or indicated shall remain and shall be protected from adjacent demolition operations.
- B. Cutting: Patch all areas of the existing structure that are to receive new construction. Make such cuttings to neat straight lines and only to the size required to accommodate the construction to be installed.
- C. Patching: Patch all areas of the existing building which are damaged by work under this contract and which are not to be rebuilt. Such patching shall be of the same materials and finish as that damaged and performed in a manner restoring the damaged areas to good condition suitable for refinishing and matching existing.

**3.02 UTILITIES:**

- A. Protection
  - 1. Preserve in operating condition active utilities traversing demolition area until substitute facilities are provided, or until Owner approves interruption of services and durations.
  - 2. Protect all utility work and repair any damage caused by work under this contract to satisfaction of utility company concerned.

**END OF SECTION 02070**

**PART 1 - GENERAL**

**1.01 SUMMARY:**

- A. Section Includes:
  - 1. Lumber.

**1.02 REFERENCES:**

- A. Lumber Standards: Comply with PS 20 and with applicable rules of the respective grading and inspecting agencies for species and products indicated.

**1.03 PRODUCT HANDLING: Delivery and Storage:** Keep materials dry at all times. Protect against exposure to weather and contact with damp or wet surfaces. Stack lumber and plywood, and provide air circulation within stacks.

**1.04 JOB CONDITIONS: Coordination:** Fit carpentry work to other work; scribe and cope as required for accurate fit. Correlate location of furring, nailers, blocking, grounds and similar supports to allow proper attachment of other work.

**PART 2 - PRODUCTS**

**2.01 LUMBER:**

- A. Factory-mark each piece of lumber with type, grade, mill and grading agency.
- B. Nominal Sizes: Lumber sizes shall conform to American Softwood Lumber Standard PS 20-70 and shall be surfaced on all four sides (S4S).
- C. Species:
  - 1. Preservative Treated: No.2 or better southern pine.
  - 2. Standard 2x4 or smaller: No.2, western fir or Spruce.
  - 3. Standard 2x6 or larger: No.2 or better, Southern Yellow Pine or western fir.
- D. Miscellaneous Lumber: Provide wood for support or attachment of other work including cant strips, bucks, nails, blocking, furring, grounds, stripping and similar members. Provide lumber of sizes indicated, worked into shapes shown.

**2.02 FASTENERS AND ANCHORAGES:**

Provide size, type, material and finish as indicated and as recommended by applicable standards, complying with applicable Federal Specifications for nails, staples, screws, bolts, nuts, washers and anchoring devices. Provide metal hangers and framing anchors of the size and type recommended by the manufacturer for each use including recommending nails.

**2.03 PRESERVATIVE TREATMENT:**

- A. Pressure treat all lumber in direct contact with concrete or masonry construction. Comply with applicable requirements of AWWA Standards C2 (Lumber) and of AWPB Standards listed below.

- B. Pressure-treat lumber with water-borne preservatives to net retention of 0.25 p.c.f., kiln-dry to 19 percent maximum moisture content and stamp AWPB Quality Mark LP2, ABOVE GROUND USE.

**PART 3 - EXECUTION**

**3.01 INSTALLATION:**

- A. Discard units of material with defects that might impair quality of work, and units that are too small to use in fabricating work with minimum joints or optimum joint arrangement.
- B. Set carpentry work accurately to required levels and lines, with members plumb and true and accurately cut and fitted.
- C. Securely attach carpentry work to substrate by anchoring and fastening as shown and as required by recognized standards.

**3.02 WOOD NAILERS AND BLOCKING:**

- A. Provide wherever shown and where required for attachment of other work.
- B. Attach to substrates as required to support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise shown.

END OF SECTION

# Product Guide Specification

## BioBased 501w<sup>®</sup> Spray Foam Insulation System

FOAMED-IN-PLACE INSULATION - Section 07218

### PART 1: GENERAL

#### 1.01 Section Includes

- A. This Section of Specifications, the related drawings and applicable portions of Division 01 collectively describe requirements to provide labor, equipment and materials for installation and application of foamed-in-place insulation

#### 1.02 Related Sections

- A. Section 061000 – Rough Carpentry

#### 1.03 References

- A. ASTM E283, Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Differences Across the Specimen.
- B. ASTM D2856, Test Method for Open-Cell Content of Rigid Cellular Plastics by the Air Pycnometer.
- C. ASTM D1622, Test Method for Apparent Density of Rigid Cellular Plastics.
- D. ASTM C1338, Test Method for Determining Fungi Resistance of Insulation Materials and Facings.
- E. ASTM D2126, Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging.
- F. ASTM E84, Test Method for Surface Burning Characteristics of Building Materials.
- G. ASTM D1623, Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics.
- H. ASTM E96, Test Method for Water Vapor Transmission of Materials.
- I. ASTM C518, Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
- J. ASTM E90-04, Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.

#### 1.04 Submittals

- A. The following shall be submitted in accordance with requirements of Division 01:
  - 1. Certification of the following;
    - a. Manufacturer's years of experience in manufacture of materials of this Section.
    - b. Copy of Applicator current certificate issued by manufacturer.
    - c. Certificate certifying that products provided meet or exceed requirements of this project Specification.
- B. Product data on materials:
  - 1. Product Data: Provide data on materials, describing insulation properties, surface burning characteristics.
  - 2. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special treatment.

#### 1.05 Quality Assurance

- A. Material manufacturer shall be a company specializing in the manufacture of foamed-in-place insulation for a period of minimum 3 years.
- B. Applicator shall be currently certified to apply materials of this Section by the material manufacturer.
- C. Certified Dealer shall construct a mock-up of spray foam insulation [4] feet long, including designed framing and substrates, at a location on the project site designated by the general contractor. This mock-up shall remain on the project site until all operations of this Section are complete and shall serve as minimum requirements for installation in the final project.

## **1.06 Environmental Considerations**

- A. Toxicity/Hazardous Materials—Out gassing/Reactivity
  - 1. Formaldehyde: Products containing urea-formaldehyde will not be permitted.
  - 2. Chlorofluorocarbons (CFCs)/HCFCs: Products and equipment requiring or using CFCs or HCFCs during the manufacturing or installation process will not be permitted.

## **1.07 Product Delivery, Storage and Handling**

- A. Observe all safety precautions and handling instructions on Material Safety Data Sheets for products.
- B. Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly indicating manufacturer and material.
- C. Store materials in a dry area protected from precipitation, freezing and overheating, at temperatures not lower than 60° F (16°C) or above 90°F (32°C).
- D. Protect materials during handling and application to prevent damage and contamination.
- E. Airtightness: Meet specific standards of the Energy Star Program of 1.5 Air Changes/Hour at 50 Pa.

# **PART 2: PRODUCTS**

## **2.01 Acceptable Manufacturer**

- A. Products shall be BioBased 501w<sup>®</sup> Insulation as manufactured by:

BioBased Technologies<sup>®</sup>, LLC  
1200 Stewart Place  
Springdale, AR 72764  
Phone: (800) 803-5189 or (479) 966-4600  
Fax: (479) 966-4601  
Email: [info@biobased.net](mailto:info@biobased.net)  
Website: [www.biobased.net](http://www.biobased.net)

## **2.02 Materials**

- A. Spray foam semi-open cell insulation shall be a spray-applied semi-rigid, low-density, air impenetrable cellular polyurethane foam plastic insulation produced in the field by combining a part A polymeric isocyanate component with a part B resin-based component. The material shall be job-site mixed in and spray applied by and through equipment designed especially for this purpose.

- B. BioBased 501w<sup>®</sup> Insulation, 0.05 pcf (8.0 kg/m<sup>3</sup>) spray foam polyurethane semi-open cell insulation, shall conform to the following:

TEST STANDARD	DESCRIPTION	VALUE
<b>ASTM C518</b>	Thermal Resistance	
	1" nominal thickness	<b>R – 3.8</b>
	3.5" nominal thickness	<b>R – 13</b>
	5.5" nominal thickness	<b>R – 20</b>
	7.5" nominal thickness	<b>R – 28</b>
	10" nominal thickness	<b>R – 37</b>
<b>ASTM D1622</b>	Core Density	<b>0.5 lbs/ft<sup>3</sup></b>
<b>ASTM D2856</b>	Closed Cell Content	<b>3.0%</b>
<b>ASTM D1623</b>	Tensile Strength	<b>3.0 p.s.i.</b>
<b>ASTM D2126</b>	Dimensional Stability	<b>&lt;-5.0%</b>
<b>ASTM E84</b>	Surface Burning Characteristics (4" thickness)	
	Flame Spread Index	<b>≤25</b>
	Smoke Developed Index	<b>≤450</b>
<b>ASTM E283</b>	Air Leakage	
	2" x 4" wall cavity @ 75 PA	<b>&lt;0.02 L/s/m<sup>2</sup></b>
	2" x 6" wall cavity @ 75 PA	<b>&lt;0.02 L/s/m<sup>2</sup></b>
<b>ASTM E90-04</b>	Sound Transmission Class (STC)	<b>38</b>
<b>ASTM C1338</b>	Criteria for Fungi Resistance	<b>Pass- no growth of fungi</b>

- C. Submit requests for substitutions in accordance with provisions of Division 00.
- C. Product must be manufactured in the USA.
- D. Product must meet Federal BioBased Procurement standard for Bio-content.

## **PART 3: EXECUTION**

### **3.01 Examination**

- A. Verify that all members and substrates scheduled or intended to receive products of this Section are in place and suitable for application of products.
- B. Verify that all other work on and within spaces to be insulated is complete prior to application.
- C. Notify General Contractor of conditions that may adversely affect application of material.

### **3.02 Preparation**

- A. Mask and protect adjacent surfaces from overspray or damage.
- B. Prepare all substrates scheduled or intended to receive material in accordance with manufacturer's written instructions.

1. Prepare all surfaces to receive spray foam application.
  2. Properly seal all areas that require sealant to insure a proper air seal when complete.
  3. Properly mask all windows, doors and areas to be protected from overspray.
  4. Protect floors and drywall areas from overspray.
- C. Remove foreign materials from substrates that may affect application of products of this Section.
- D. Application of materials by spray foam contractor shall constitute acceptance of job-site conditions and substrates and therefore negate future claims of insulation failures due to those conditions or substrates.

**3.03 Application**

- A. Apply insulation in accordance with manufacturer’s written application instructions.
1. Insure all equipment is clean and ready for spraying foam using safety guidelines as offered by the Spray Foam Insulation Association.
  2. Turn on equipment and set temperature and pressure settings as required.
  3. Spray foam to specified thickness.
  4. Trim foam as necessary to framed wall thickness when filling cavity.
- B. Apply insulation to a reasonably uniform monolithic density without voids.
- C. Apply to a minimum cured thickness 2 inches as indicated on drawings.
- D. Apply minimal expanding foam to prevent voids.
- E. Apply approved sealant where needed to fill small voids in areas to receive foam.
- F. Apply insulation to seal voids at truss ends to prevent wind scouring of ceiling insulation.

**3.04 Field Quality Control**

- A. Inspect application for proper density and thickness of insulation upon completion.

**3.05 Protection of Finished Work**

- A. Do not permit subsequent work to disturb applied insulation.

**3.06 Schedules**

- A. Schedule 1: Installation Thickness
- Top of exterior walls.....2 in

**3.07 Clean Up**

- A. Upon completion of operations of this Section, remove all masking, trim excess material that may prevent final installation of other materials and remove all overspray that may be on adjacent surfaces.
- B. Clean all floor surfaces of set materials from resultant final trimming.
- C. Remove from the project site all refuse, cartons and other waste resultant from work of this Section of Specifications.

**END OF SECTION**

## SECTION 07430

### COMPOSITE METAL ROOF PANELS

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Composite Metal Roof Panels.
- B. Metal trim, accessories, fasteners and sealants.

##### 1.2 RELATED SECTIONS

- A. Section 06100 – Rough Carpentry
- B. Section 07600 - Flashing and Sheet Metal: Counter flashing.
- C. Section 07900 - Joint Sealers: Caulking and sealants.

##### 1.3 REFERENCES

- A. AAMA 610.1 - Voluntary Guide Specification for Cleaning and Maintenance of Painted Aluminum Extrusions and Curtain Wall Panels.
- B. AISC - American Institute of Steel Construction, Code of Standard Practice for Steel Buildings and Bridges.
- C. ASTM C 518 - Test Method For Steady-State Thermal Transmission Properties by Means of Heat Flow Meter Apparatus.
- D. ASTM C 1363 - Steady-State Thermal Performance of Building Assemblies by Means of a Guarded Hot Box.
- E. ASTM E 72 - Standard Test Methods of Conducting Strength Tests of Panels for Building Construction.
- F. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- G. ASTM E 108 - Standard Test Methods for Fire Tests of Roof Coverings.
- H. USDA - United States Department of Agriculture Finish Approval Standards.
- I. UL 580 - Standard For Tests For Uplift Resistance of Roof Assemblies
- J. ASTM E 1592 - Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference.
- K. FM Approvals Standard 4880 (2005), Class 1 Fire Rating of Interior Wall and Roof/Ceiling Panels.
- L. FM Approvals Standard 4471 (1995), Uplift Pressure Rating for Class 1 Roof Panels.

##### 1.4 DESIGN / PERFORMANCE REQUIREMENTS

- A. Structural: Structural designs shall have been determined from independent tests conducted in accordance with ASTM E 72, "Chamber Method."

- B. Structural: Structural values shall have been determined from tests conducted in accordance with ASTM E 1592 procedures.
- C. Thermal Properties: Panels shall provide thermal values determined from tests conducted in accordance with ASTM C 1363.
- D. Thermal Properties: Panels shall provide thermal values determined by tests conducted in accordance with ASTM C 518.
- E. Air Leakage: Panel joints shall be tested for air leakage in accordance with ASTM E 1680. Leakage rate for roof panels shall not exceed 0.01 CFM/SF at a pressure difference of 12 p.s.f.
- F. Water Penetration: Panel joints shall be tested for water penetration in accordance with ASTM E 1646. There shall be no water penetration for roof panels at a pressure difference of 12 p.s.f.
- G. Roof Wind Uplift: Panels shall be qualified by tests for acceptance by building code and insurance authorities. Evidence of wind uplift performance shall include the following:
  - 1. UL 580 Class 90.
  - 2. FM Approvals Std. 4471, 1-90 rating.
  - 3. ASTM E 1592.
- H. Fire Tests: Panels shall be qualified by laboratory scale fire tests for acceptance by building code and insurance authorities. Evidence of fire performance shall include the following:
  - 1. FM Approvals classified and labeled as "Std. 4880 Class 1 Interior Wall and Ceiling Panels For Installation Without Height Restriction" and "Surface Burning Characteristics of Building Materials," ASTM E 84.
    - a. Finished Roof Panels: 2 inch to 4 inch thick IBL Roof Panels: Flame Spread 15, Smoke Developed 75.

## 1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- C. Shop Drawings: Show profile, panel thickness, gauge of interior and exterior sheets, location and type of fasteners, gauges, shape and method of attachment of all trim, location and type of sealants, accessories and finishes.
- D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- E. Verification Samples: For each finish product specified, two samples, minimum size 6 inches square, representing actual product, color, and patterns.
- F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- G. Manufacturers warranties as specified.

## 1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
  - 1. Minimum of 10 years documented experience in the production of factory foamed-in-place metal skinned insulated panels with projects of similar size and complexity.
- B. Installer Qualifications: Minimum of 5 years documented experience installing metal skinned insulated panels on projects of similar size and complexity.
- C. Mock-Up: Provide a mock-up using specified products and manufacturer approved installation methods for evaluation of installation techniques and workmanship.
  - 1. Mockup shall include typical panel to panel and panel to adjacent surfaces with both horizontal and vertical joint conditions.
  - 2. Locate where directed and approved by the Architect.
  - 3. Maintain mock-up during construction for workmanship comparison.
  - 4. Do not proceed with remaining work until workmanship and color, is approved by Architect.
  - 5. Approved mock-up may remain as part of finished work.
  - 6. Remove mock-up and dispose of materials when no longer required and when directed by Architect.
- D. Pre-installation Meetings: Conduct a pre-installation meeting one week prior to commencing work of this section, to verify project requirements, co-ordinate with installers of other work, establish condition and completeness of building substrate, and review manufacturer's installation instructions and manufacturer's warranty requirements.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging, with identification labels intact, until ready for installation.
- B. Handle and store products according to manufacturer's recommendations published in technical materials. Leave products wrapped or otherwise protected and under clean and dry storage conditions until required for installation.
- C. Store to protect corners and to prevent damage or marring of finish. Store under cover on building site in a manner to prevent damage and water accumulation.
- D. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

#### 1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

#### 1.9 WARRANTY

- A. Submit, for Owner's acceptance, Manufacturer's standard warranty document executed by authorized company official covering the following:
  - 1. Galvalume Plus material against rupture, structural failure and perforation due to normal atmospheric corrosion exposure for a period of 20 years.
  - 2. Paint finish against cracking, chalking, blistering, peeling, flaking and chipping for a period of 25 years.
  - 3. Weathertightness of the roof system for a period of 10 years.

## 1.10 COORDINATION

- A. Coordinate Work with other operations and installation of related materials to avoid damage to installed panels and adjacent work.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Specification is based on panels manufactured by Insulated Panel Systems (IPS), which is located at: 14031 W. Hardy; Houston, TX 77060; Toll Free Tel: 800-729-9324; Tel: 281-499-2605; Email: [request info \(rgamble@ncilp.com\)](mailto:request_info@rgamble@ncilp.com); Web: [www.insulated-panels.com](http://www.insulated-panels.com)

1. MBCI Eco-ficient

2. Metal Span

- B. Substitutions: Must be pre-approved prior to bid.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

### 2.2 COMPOSITE PANELS

- A. Insulated Composite Roof Panels: IBL Insulated Roof Panels, factory foamed in place with a 2-inch vertical standing seam joint and concealed clip attachment.
  - 1. Panel Type:
    - a. Roof.
  - 2. Panel Width:
    - a. 30 inches.
  - 3. Panel Thickness: IBL, 4 inches.
  - 4. Exterior Face: Aluminum zinc coated steel with a G90 minimum coating class, conforming to ASTM A 653.
    - a. Exterior Face Thickness:
      - 1) 24 gauge steel.
    - b. Finish:
      - 1) Fluoropolymer Enamel: Signature 300 - Premium 70 percent resin Kynar 500/Hylar 5000 paint system.
    - c. Color as selected by the Architect from the manufacturers standard selections.
  - 5. Interior Face Material: Aluminum zinc coated steel with a G60 minimum coating class, conforming to ASTM A 653. Provided with stucco embossed surface texture with a mesa pattern.
    - a. Interior Face Thickness:
      - 1) 26 gauge steel.
    - b. Finish:
      - 1) Kynar 500/Hylar 500: Signature 300 finish, 70 percent Resin.
    - c. Color as selected by the Architect from the manufacturers standard selections.
  - 6. Insulating Foam Core: Foamed-in-place rigid polyisocyanurate using an HFC blowing agent with the following physical properties:
    - a. Density: 2.0 p.c.f. nominal.
    - b. Closed cell: 93 percent.
    - c. K-Factor: 0.139 per inch thickness.
    - d. Cold aging: 1 percent volume decrease after 14 days at minus 20 degrees F.

- e. Heat aging: 2 percent volume increase after 14 days at 158 degrees F.
  - f. Humid aging: 3 percent volume increase after 14 days at 158 degrees F. and 95 percent R.H.
- B. Trim and Flashing: Formed sheet metal accessories, ridge vent, eave trim, rake trim, flashing, etc., that is equal in thickness and finished to match the panel faces.
  - C. Panel Clips: 14 gauge galvanized steel concealed in the panel joint.
  - D. Exposed Fasteners: Cast zinc-aluminum alloy painted to match adjacent colors. All aluminum rivets shall be mill finish and unpainted.
  - E. Sealants:
    - 1. Field applied vapor barrier sealant in the panel joints shall be a butyl based material that is non-skinning, non-drying, re-sealable with a service temperature range of minus 60 degrees F to 250 degrees F.
    - 2. Field applied weather sealant shall be a silicone based material with excellent adhesion and cohesion properties with a service temperature range of minus 60 degrees F to 300 degrees F.

## 2.3 FABRICATION

- A. Fabricate panels and supports as indicated on the Drawings and as recommended by panel manufacturer.
  - 1. Make panel lines, breaks, curves and angles sharp and true.
  - 2. Keep plane surfaces free from warp or buckle.
  - 3. Keep panel surfaces free of scratches or marks caused during fabrication.
  - 4. Cover exposed surfaces with pressure-sensitive heavy protection paper or apply strippable plastic coating, before shipping to job site.
- B. Take field measurements prior to commencement of shop fabrication.
  - 1. Field fabrication is allowed to ensure proper fit but keep field fabrication to minimum with majority of fabrication being done under controlled shop conditions.
  - 2. Where final panel dimensions cannot be established by field measurement before commencement of panel manufacturing, make allowance for field adjustments and thermal movement as recommended by panel manufacturer.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Verify the alignment of structural steel before installation of panels conforms to the tolerances of AISC Code of Standard Practice, Section 7, including the supplement controlling Section 7.11.3, adjustable items.

### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

### 3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Erect panels in accordance with reviewed shop drawings; anchor panels securely in accordance with reviewed shop drawings to allow for necessary thermal movement and structural support.
- C. Erect metalwork square, plumb, straight, and true, accurately fitted, with tight joints and intersections.
- D. Panels shall be cut in the field for bevels and openings using manufacturers recommendations and procedures.
- E. Anchor panels securely per engineering recommendations and in accordance with approved shop drawings to allow for necessary thermal movement and structural support.
- F. Sealants shall be installed without skips or voids to insure weathertightness and integrity of the vapor barrier system.
- G. Do not install component parts that are observed to be defective, including warped, bowed, dented, abraded and broken members.
- H. Do not cut, trim, weld or braze component parts during erection in a manner that would damage finish, decrease strength, or result in visual imperfection or failure in performance. Return component parts that require alteration to shop for re-fabrication, if possible, or for replacement with new parts.
- I. Separate dissimilar metals and use gasketed fasteners, isolation shim, or isolation tape where needed to eliminate possibility of corrosive or electrolytic action between metals.

#### 3.4 ERECTION TOLERANCES

- A. Maximum deviation from vertical and horizontal alignment of erected panels: 1/8 inch in 28 feet, non-accumulative.

#### 3.5 ADJUSTING AND CLEANING

- A. Clean installed products in accordance with AAMA 610.1 and manufacturer's instructions before owner's acceptance.
- B. Remove masking film (if used) as soon as possible after installation.
- C. Remove temporary coverings in accordance with the manufacturers instructions. Repair or replace damaged installed products.
- D. Remove from project site and legally dispose of construction debris associated with this work.
- E. Remove all debris and metal filings from the panel and trim surfaces at the end of each work period to prevent damage to the panels and possible rust staining.

#### 3.6 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

**PART 1 - GENERAL**

**1.01 SUMMARY:**

- A. Section Includes: Sheet Metal Flashing and Trim.
- B. Related Requirements:
  - 1. Section 07900, joint sealers.

**1.02 INDUSTRY STANDARD:**

Provide products that comply with applicable requirements of SMACNA "Architectural Sheet Metal Manual," except as otherwise indicated.

**1.03 SUBMITTALS:**

Shop Drawings: Show joining, profiles, accessories, anchorages, flashing connections, expansion provisions, relationship to supporting structure and to adjoining roof and wall construction.

**PART 2 - PRODUCTS**

**2.01 SHEET METAL FLASHING AND TRIM:**

- A. Aluminum Sheet: Alloy and temper recommended by manufacturer for use intended, factory finish. 10 year color warranty (color to be chosen by Architect).
  - 1. Miscellaneous Flashing: 0.032 inch thick.
  - 2. Base Flashing: .024-inch aluminum.
  - 3. Counter Flashing: .024-inch aluminum.
- B. Concealed Fasteners: Same metal as item fastened or other non-corrosive metal as recommended by manufacturer.

**2.02 FABRICATION:**

- A. Fabricate sheet work in accord with approved shop drawings.
- B. Form sheet metal works with clear, sharp and uniform arises. Hem exposed edges.
- C. Shop weld and miter corners.

**PART 3 - EXECUTION**

**3.01 INSTALLATION:**

- A. Install sheet metal work in accord with approved shop drawings.
- B. Isolate dissimilar materials to prevent electrolysis.
- C. Fasten sheet metal items as indicated or required to provide rigid, secure installation, free of warp or bind. Fastenings shall be made in such manner as not to impair the watertight integrity of the installation. Exposed face nailing will not be permitted.
- D. Install expansion joints per Roof manufactures specifications.
- E. Seal metal to metal joints with silicone sealant specified in Section 07900.

**END OF SECTION**

**PART 1 - GENERAL**

**1.01 DESCRIPTION:**

This section covers general building joint sealers.

**1.02 SUBMITTALS:**

- A. Product Data: Submit manufacturer's product specifications and handling/installation/curing instructions.
- B. Color Samples: Submit manufacturer's standard caulking material colors.

**1.03 JOB CONDITIONS:**

Weather Conditions: Do not proceed with installation of sealants under unfavorable weather conditions.

**PART 2 - PRODUCTS**

**2.01 SILICONE SEALANT-TYPE 1: All Exterior Joints**

- A. Acceptable product:
  - 1. Dow Corning Corp. #790.
  - 2. General Electric Company, Silpruf
  - 3. Tremco, Inc., Spectrum I
- B. Colors: As selected by Architect from manufacturer's standard selection.

**2.02 ACRYLIC-LATEX CAULKING COMPOUND: All Interior Joints**

- A. Acceptable products:
  - 1. Sonneborn/Sonolac
  - 2. Pecora Corp./AC-20.
  - 3. Tremco/Acrylic-Latex Caulk.
- B. Characteristics: Flexible, paint able, non-staining, non-bleeding acrylic emulsion.
- C. Color: As per architect

**2.04 BACKER ROD: Provide compressible rod stock in joints over 1/4" wide as recommended by sealant manufacturer for back-up of and compatibility with sealant.**

**PART 3 - EXECUTION**

**3.01 JOINT PREPARATION:**

Clean joint surfaces immediately before installation of sealants or caulking compounds. Remove dirt, insecure coatings, moisture and other substances that could interfere with seal of sealant or caulking compound.

**3.02 INSTALLATION:**

- A. Comply with manufacturer's printed instructions except where more stringent requirements are shown or specified.
- B. Set joint filler units at depth or position in joint as indicated to coordinate with other work. Do not leave voids or gaps between ends of joint filler units.
- C. For normal moving joints sealed with Elastomeric sealants but not subject to traffic, fill joints to a depth equal to 50% of joint width, but neither more than 1/2" deep nor less than 1/4" deep.
- D. Spillage: Do not allow sealants or compounds to overflow from confines of joints, or to spill onto adjoining work, or to migrate into voids of exposed finishes. Clean adjoining surfaces by whatever means may be necessary to eliminate evidence of spillage.

**END OF SECTION**

1

**PART 1 - GENERAL**

**1.01 SUMMARY:**

- A. Section Includes: Field-applied painting and finishing of exposed interior and exterior work except for but not limited to the following:
1. Pre-finished items
  2. Permanent labels

**1.02 SUBMITTALS:**

- A. Material List: Furnish written list of paint materials showing manufacturer, product names and numbers to verify compliance with required product quality.
- B. Color Samples: Furnish 1 set of paint manufacturers' standard colors for selection by Architect.
- C. Mock up: The architect may require a test mock up be painted to determine the correct color and texture of finish.

**1.03 JOB CONDITIONS:**

- A. Apply paints only when temperature of surfaces to be painted and surrounding air temperatures are within the temperature range permitted by paint manufacturer's printed instructions.
- B. Do not apply paint when relative humidity exceeds 85%; or to damp or wet surfaces; unless otherwise permitted by paint manufacturer's printed instructions.

**1.04 SCHEDULING:**

- A. Coordinate work to paint building structure in areas scheduled for painted exposed structure, before installation of pre-finished products. Paint surfaces to remain exposed, to view, in completed building.

**PART 2 - PRODUCTS**

- 2.01 ACCEPTABLE MANUFACTURERS:** This specification is based on Sherwin Williams paint to establish required product quality. Equivalent products of other listed manufacturers are acceptable subject to quality compliance. Provide products of one of the following:

- A. Benjamin Moore
- B. Devco
- C. Duron
- D. Pittsburgh
- F. Sherwin-Williams

**2.02 EXTERIOR PAINT SCHEDULE:**

- A. Shop-Primed Steel:
1. Semi-Gloss Finish: (handrails) Primer not required on shop-primed items except for touch-up.
    - a. Primer: DTM Acrylic Primer/Finish
    - b. Finish: Two Coats DTM Acrylic Semi-Gloss (B66 200)
- B. Metal:
1. Semi-Gloss Finish:
    - a. Primer: DTM Acrylic Primer/Finish
    - b. Finish: Two Coats DTM Acrylic Semi-Gloss (B66 200)

**2.03 INTERIOR PAINT SCHEDULE:**

- A. Metal:
  - 1. Semi-Gloss Finish:
    - a. Primer: DTM Acrylic Primer/Finish
    - b. Finish: Two Coats DTM Acrylic Semi-Gloss (B66 200)
  
- B. Wood Trusses:
  - 1. a. Finish: Two Coats Minwax Polycrylic Sealer
  
- C. Wood Closure:
  - 1. a. Primer: Multipurpose Latex Primer 650132681
  - b. A100 Flat Finish

**PART 3 - EXECUTION**

**3.01 INSPECTION**

- A. Applicator must examine areas and conditions under which painting work is to be applied and notify Contractor of conditions detrimental to proper and timely completion of work. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to Applicator.
  
- B. Starting of painting work will be construed as Applicator's acceptance of surfaces and conditions within any particular area.
  
- C. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions otherwise detrimental to formation of a durable paint film.

**3.02 SURFACE PREPARATION:**

- A. General: Perform preparation and cleaning procedures in accordance with paint manufacturer's instructions and as herein specified, for each particular substrate condition.
  - 1. Provide surface-applied protection prior to surface preparation and painting operations.
  
  - 2. Clean surfaces to be painted before applying paint or surface treatments. Program cleaning prior to painting so that cleaning process will not fall onto wet or newly-painted surfaces.
  
- B. Sand and clean existing wood and steel trusses and components. Clean and allow to dry prior to applying paint or sealer.

**3.03 MATERIALS PREPARATION:**

- A. Mix and prepare painting materials in accordance with manufacturer's directions.
  
- B. Store materials not in actual use in tightly covered containers. Maintain containers used in storage, mixing and application of paint in a clean condition, free of foreign materials and residue.

- C. Stir materials before application to produce a mixture of uniform density, and stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using.

**3.04 APPLICATION:**

- A. General: Apply paint in accordance with manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied.
  - 1. Apply minimum 1 coat primer and 2 finish coats, to all surfaces. Apply additional coats when undercoats or other conditions show through final coat of paint, until paint film is of uniform finish, color and appearance.
  - 2. Sand lightly between each succeeding enamel coat.
  - 3. Omit first coat (primer) on metal surfaces that have been shop-primed and touch-up painted, unless otherwise indicated.

**3.05 CLEAN-UP AND PROTECTION:**

- A. Clean-Up: During progress of work, remove from site discarded paint materials, rubbish, cans and rags at end of each workday.
- B. Upon completion of painting work, clean window glass and other paint-spattered surfaces. Remove spattered paint by proper methods of washing and scraping, using care not to scratch otherwise damage finished surfaces.
- C. Protection: Protect work of other trades, whether to be painted or not, against damage by painting and finishing work. Correct any damage by cleaning, repairing or replacing, and repainting, as acceptable to the Architect.
  - 1. Provide "Wet Paint" signs as required to protect newly-painted finishes. Remove temporary protective wrappings provided by others for protection of their work, after completion of painting operations.
  - 2. At the completion of work of other trades, touch-up and restore all damaged or defaced surfaces.

END OF SECTION 09900 Painting