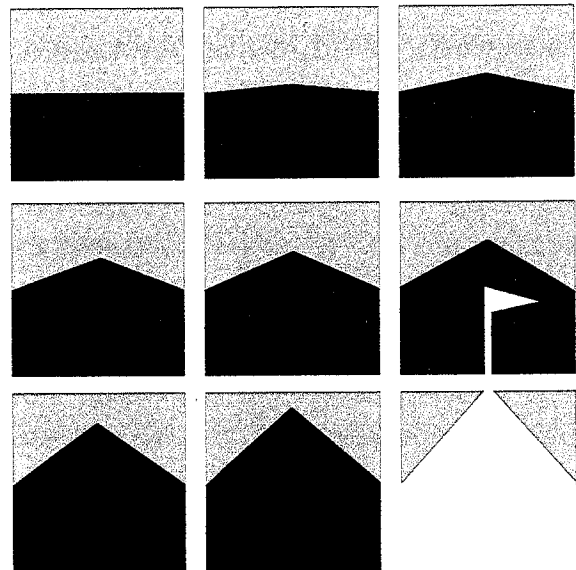


IFB1736

York High School Metal
Roof Replacement -
V Building
YORK COUNTY
SCHOOL DIVISION



PROJECT MANUAL
HUDSON + ASSOCIATES
ARCHITECTS

September 13, 2008

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ADVERTISEMENT FOR BIDS

On behalf of the County of York, Virginia, the Purchasing Agent, or his designated representative, will accept SEALED BIDS in the Office of the Purchasing Agent, York County Administration Building, 120 Alexander Hamilton Blvd, Yorktown, VA 23690 until 3:00 P.M. local prevailing time, on Tuesday, February 23, 2010 at which time the bids will be opened and read aloud for the following:

York High School Metal Rood Replacement – V Building

The project consists of the removal of approximately 10,073 square feet of metal roofing secured in place with face applied fasteners and associated insulation system; replacement with standing seam metal roof system over new draped fiberglass insulation; removal, salvage and reinstallation of the existing roof top equipment; New gutters, downspouts, and flashings will be provide in accordance with the design.

NOTE: All bidders are invited to attend a pre-bid conference to be held on Thursdays, February 11, 2010 at 10:00am at York High School

Plans and Specifications may be obtained from the Office of the Central Purchasing Division, County of York, Administration Building; 120 Alexander Hamilton Blvd, Yorktown, Virginia 23690 between the hours of 8:15 a.m. and 5:00 p.m. A refundable deposit in the amount of \$75.00 payable by check to Deborah Robinson, Treasurer, County of York, will be required for each set of Bidding Documents. Requests for Plans and Specifications to be shipped/mailed must be in writing and accompanied by an additional non-refundable check in the amount of \$35.00 made payable to Deborah Robinson, Treasurer, County of York. Deposits for plans and specifications in excess of one set per Contractor will be non-refundable. The Owner's opinion regarding the acceptability of returned sets of documents will be final.

Plans and specifications may also be examined at the plan rooms of the Peninsula and Norfolk Builders Exchange.

Bid withdrawal procedures shall be in accordance with the Code of Virginia, Section 11-55(A) (i) or (A) (ii).

Contact Victor Robinson at 890-3680 for additional information or assistance. The County reserves the right to reject any and all bids, award this contract in whole or in part, and to waive any informalities in bidding.

IFB1736

COUNTY OF YORK, VIRGINIA
INVITATION FOR BIDS (IFB)

Issue Date: January 15, 2010

IFB No.: 1736

Title: Construction: Labor & Materials for Metal Roof Replacement
(approx.10,000sf) on the V-Building at York High School

Classification Code: 91066

Issuing Agency:

County of York, Virginia
Central Purchasing
120 Alexander Hamilton Blvd.
Yorktown, Virginia 23690

Using Agency:

County School Board of York County, Virginia
School Maintenance
505 Cook Road
Yorktown, Virginia 23692

Sealed Bids Will Be Received Until **Tuesday February 23, 2010 At 3:00pm promptly.** Which Time They Shall Be Opened In Public And Read Aloud.

Note: Pre-Bid Conference: will be held at York High School Thursday February 11, 2010 to begin at 10:00am. (see Section 3.0).

All Inquiries For Information Should Be Directed To: Victor Robinson, Buyer,
Telephone: (757) 890-3680.

SEND BIDS DIRECTLY TO THE ISSUING AGENCY SHOWN ABOVE.

In Compliance With This Invitation For Bids And To All The Conditions Imposed Herein, The Under-signed Offers And Agrees to Furnish The Materials Described At the Prices Indicated In Section 29.0.

Name and Address of Firm:

Date: _____

By: _____

_____ -

Signature in Ink

Print/Type Name: _____

Telephone No.: (_____) _____

Title: _____

Facsimile No.: (_____) _____

Federal Tax ID#: _____

IFB1736

1.0 PURPOSE:

It is the express intent of this formal Invitation For Bids (IFB) to acquire the services of a fully qualified Contractor, hereinafter the “Contractor”, to complete the (partial) metal roof replacement at the V-Building of York High School for the County School Board of York County, Virginia, hereinafter “Owner”, in accordance with all applicable Federal, State, and Local government laws, ordinances, rules, regulations and these specifications, at the prices offered on the Bid Schedule (Section 29.0).

2.0 SCOPE OF WORK:

2.1 The successful Contractor shall provide all material, tools, equipment, labor, supervision, services, transportation, warranties, and insurance required to complete the (partial) metal roof replacements of the V-Building at York High School in accordance with the Summary of Work, technical SPECIFICATIONS, plans and drawings. The Project Manual prepared by Hudson + Associates Architects, and AIA Document A201-1997. This project includes the removal of the existing 9,125 square feet of metal roof system on a pre-engineered building, and installation of a new (20 yr Warranty) mechanically seamed standing seam metal roof system over new draped fiberglass insulation. Roof top equipment will be removed, salvaged and reinstalled as indicated on the drawings. This work will include all necessary mechanical and electrical work associated with the disposition of the roof top equipment. The roof top equipment removal and reinstallation will require a crane. The roof replacement also includes the replacement of 948 square feet of metal canopy roof. The Owner has conducted asbestos testing of the roof and found no asbestos containing materials. The test results are available for viewing by contacting Mr. Frank Pitchford (fpitchford@ycsd.york.va.us) at the York County School Division School Board Office at 302 Dare Road, Grafton, VA 23692.

2.2 Contract Timeline:

The work shall start no earlier June 17, 2010 and all work must be substantially completed by August 6, 2010. Final completion shall be no later than September 7, 2010.

2.3 Building Access:

2.3.1 Notification must be given by the Contractor to the Owner’s designated representative at least 72 hours prior to commencing any work at the site.

2.3.2 Unless otherwise approved by Owner all work must be completed during eight (8) hour regular workdays, Monday through Friday. Contractor may be able to arrange different work hours with the Owner, if necessary.

2.4 Delivery, Storage, and Handling:
Contractor shall:

- 2.4.1 Coordinate the storage of any materials at the school with the Owner's designated representative prior to delivering or storing any materials.
- 2.4.2 Store all equipment and materials inside, protected from weather, and in accordance with manufacturer's specifications.

2.5 Quality Assurance:

- 2.5.1 Contractor shall complete work in a timely and professional manner. Quality workmanship is expected.

2.6 OWNER'S REPRESENTATIVES:

Jim Wilkins, Director of Facilities Maintenance @ 757-898-0472 or 898-0340.

3.0 PRE-BID CONFERENCE:

Bidders are invited to attend a **pre-bid conference to be held at York High School at 10:00am Thursday February 11, 2010** in the main office. 9300 George Washington Highway, Yorktown, Va. 23692. This will be the only time bidders will be allowed to go up on the roof. A picture ID may be required.

4.0 PLANS AND SPECIFICATIONS:

Plans and specifications may be obtained from the office of the Central Purchasing Division, County of York, Virginia, 120 Alexander Hamilton Boulevard, Yorktown, Virginia 23690

5.0 GENERAL TERMS AND CONDITIONS:

Except to the extent supplemented in this IFB, the General Terms and Conditions are set out in AIA Document A201 (1997 edition), as modified herein. Hereinafter, all references to AIA Document A201 shall mean AIA Document A201 (1997 edition) as so modified.

5.1 Applicable Policy:

This solicitation is subject to the provisions of the County of York, Virginia, Procurement Policy (Ordinance No. 08-18 dated 01/20/2009), and any revisions thereto.

5.2 Mandatory Use of Owner's Form:

All responses to an Invitation for Bids (IFB) must be submitted on and in accordance with this form. If more space is required to furnish a description of the commodities and/or services offered or delivery terms, the bidder may attach a letter hereto which will be made a part of the bid. All bids must be submitted in a sealed envelope plainly marked using the IFB number, date and time.

5.3 Opening Date/Time:

Bids and amendments thereto, or withdrawal of bids submitted, if received by the Central Purchasing Office after the date and time specified for scheduled receipt, will not be considered. It will be the responsibility of the Bidder to see that his bid is in this office by the specified time and date. **There will be no exceptions. Date of postmark will not be considered. Phone or telegraphic bids (including FAX) will not be accepted.**

5.4 Inconsistencies In Conditions:

In the event there are inconsistencies between the Terms and Conditions of the Invitation For Bids and any other schedules contained herein, the latter shall take precedence.

5.5 Clarifications of Terms:

If any prospective bidder has questions about the specifications or other solicitation documents, the prospective bidder should contact the buyer whose name appears on the face of the solicitation. Any revisions to the solicitation will be made only by written addendum issued by the Central Purchasing Office.

5.6 Testing/Inspection:

The Owner reserves the right to conduct any test/inspection it may deem advisable to assure supplies and services conform to the specification.

5.7 Invoices:

Invoices for goods and/or services ordered, delivered and accepted shall be submitted directly to the 'INVOICE TO:' address shown on the purchase order/contract. All invoices shall show the contract number and/or purchase order number. Any payment terms requiring payment in less

than 30 days will be regarded as requiring payment 30 days after invoice or delivery, whichever occurs last. However, this shall not affect offers or discounts for payment in less than 30 days.

5.8 Default:

In event of default by the Contractor, the Owner reserves the right to procure the commodities and/or services from other sources, and hold the Contractor liable for any excess cost occasioned thereby. If, however, public necessity requires the use of materials or supplies not conforming to the specifications, they may be accepted and payment therefore shall be made at a proper reduction in price.

5.9 Ethics in Public Contracting:

By submitting their bids, all bidders certify that their bids are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other bidder, supplier, manufacturer or subcontractor in connection with their bid, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised unless consideration of substantially equal or greater value was exchanged.

5.10 Anti-Discrimination:

By submitting its bids or proposals, Bidder certifies to the Owner that it will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Act of 1975, as amended, and Section 2.2-4311 of the Virginia Public Procurement Act which provides:

In every contract over \$10,000, the provisions of a. and b. below apply:

a. During the performance of this Contract, the Contractor agrees as follows:

The contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin, age, disability, status as a service disabled veteran, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

Contractor, in all solicitations for advertisements for employees placed in behalf of Contractor, will state that Contractor is an equal opportunity employer.

Notices, advertisements and solicitations placed in accordance with Federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.

- b. Contractor will include the provisions of a. above in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.
- c. In accordance with §2.2-4343.1 of the Code of Virginia, et. seq., the Owner shall not (i) discriminate against a faith-based organization as defined in Code of Virginia section 2.2-4343.1(B) on the basis of the organization's religious character or (ii) impose conditions that (a) restrict the religious character of the faith-based organization, except as provided in subsection F of section 2.2-4343.1 the Code of Virginia, or (b) impair, diminish, or discourage the exercise of religious freedom by the recipients of such goods, services, or disbursements.

5.11 Immigration Reform And Control Act of 1986:

By signing this bid or proposal, the bidder certifies that it does not and will not during the performance of this contract violate the provisions of the Federal Immigration Reform and Control Act of 1986, which prohibits employment of illegal aliens.

5.12 Indemnity:

The following shall be deemed incorporated into any contract awarded as a consequence of this bid to the same extent as if fully set forth therein:

Contractor and all subcontractors shall bear all loss, expense (including reasonable attorney's fees) and damage in connection with, and shall indemnify Owner against and save Owner harmless from all claims, demands, and judgments made or recovered against Owner because of bodily injuries, including death at any time resulting therefrom, and/or because of damage to property, from any cause whatsoever, arising out of, incidental to, or in connection with the work, whether or not due to any act of his or their employees, servants or agents and whether or not due to any act of omission or commission, including negligence but excluding sole negligence, of the Owner, his employees, servants, or agents. Compliance by the Contractor with the insurance provisions hereof shall not relieve Contractor from liability under this provision.

Should Contractors or subcontractors use any of Owner's equipment, tools, employees, or facilities, such will be gratuitous and Contractor shall release Owner from and indemnify and save harmless Owner from and against any claims for personal injuries, including death, arising out of the use of any such equipment, tools, employees, or facilities, whether or not based upon the condition thereof or any alleged negligence of Owner in permitting the use thereof.

5.13 Warranty:

The bidder agrees that the parts, supplies, materials and service furnished under any award resulting from this solicitation shall be covered by the most favorable commercial warranties the bidder gives any customer for such parts, supplies and services and that the rights and remedies provided therein are in addition to and do not limit those available to the Owner by any other clause of this solicitation, the contract or applicable state or federal law. Warranties shall be provided in accordance with Section 017411-5.

5.14 DRUG-FREE WORKPLACE:

During the performance of this contract, the contractor agrees to (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this subsection, a "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to a contractor in accordance with this subsection, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

5.15 AVAILABILITY OF FUNDS:

It is understood and agreed between the parties herein that Owner shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this Contract.

6.0 INFORMATION FOR BIDDERS:

Bids must comply with all of the requirements of this IFB.

6.1 Award will be made to the lowest responsible and responsive bidder. The quality of the products and services to be supplied, their conformity with the specifications, their suitability to the requirements of the Owner, and the delivery/completion terms will be taken into consideration in making the award.

- 6.2 Cash discounts may be offered by bidder for prompt payment of bills, but such discount will not be taken into consideration in determining the low bidder but will be taken into consideration in awarding tie bids. The discount period will be computed from the date delivery/completion is accepted by Owner or from date correct invoice is received by the consignee, whichever is the later date.
- 6.3 Acceptance of a bid by the County of York, Virginia, Central Purchasing Office, hereinafter "Central Purchasing", is not an order to proceed.
- 6.4 Each bid is received with the understanding that the acceptance in writing by the Owner of the offer to furnish any or all of the equipment and services described therein, shall constitute a contract between the bidder and the Owner, which shall bind the bidder on his part to furnish and deliver the equipment and services bid on at the price(s) stated and in accordance with the conditions of said accepted bid; and the Owner on its part to pay for, at the agreed prices, all services specified and delivered.
- 6.5 All prices and notations must be in ink or typewritten. No erasures permitted. Mistakes may be crossed out and corrections made in ink adjacent and must be initialed and dated in ink by person signing bids.
- 6.6 All bids must be signed with the firm name and be signed by an officer or authorized employee of the firm. In the case of a corporation, the title of the officer signing must be stated and each officer must be duly authorized. In the case of a partnership, the signature of at least one of the partners must follow the firm name using the term "member of the firm" or "general partner". In the case of a limited liability company, the bid must be signed by the manager (if any) or by a member.
- 6.7 Verify your bids before submission as they cannot be withdrawn or corrected after being opened.
- 6.8 If you do not bid, return this sheet and state reason. Otherwise your name may be removed from our mailing list.
- 6.9 The time of proposed completion of the project must be stated in definite terms in Section 29.0.
- 6.10 The Owner reserves the right to reject any and all bids in whole or in part, and to waive any informality or technical defects if, in its judgment, the best interests of the Owner will be served.
- 6.11 Any equipment delivered must be standard new equipment latest model, except as otherwise

specifically stated in bid. Where any part or nominal appurtenances of equipment is not described, it shall be understood that all the equipment and appurtenances which are usually provided in the manufacturer's stock model shall be furnished.

- 6.12 The Contractor guarantees to save the Owner, its agents or employees, harmless from liability of any nature or kind, for use of any copyrighted or uncopyrighted composition, secret process, patented or unpatented invention, articles or appliances furnished or used in the performance of the contract, or which the Contractor is not the patentee, assignee or licensee. This clause shall be deemed to be incorporated into any contract awarded as a consequence of this bid.

7.0 BID SECURITY:

Bids shall be accompanied by a bid guarantee of not less than Five Percent (5%) of the bid, which may be a Bid Bond, a Certified Check, or Cashier's Check, made payable to Deborah Robinson, Treasurer, York County, Virginia. Such Bid Bond or check shall be submitted with the understanding that it shall guarantee that the Bidder will not withdraw his bid for a period of sixty (60) days; and, that if his bid is accepted, he will enter into a formal contract with the Owner, and the required bond will be given.

8.0 DESIGN, DRAWINGS AND INSTRUCTIONS:

It is agreed that the Owner will be responsible for the adequacy of design and sufficiency of the drawings and specifications which adequately represent the requirements of the work to be performed under the contract. Materials or work described in words which so applied have a well-known technical or trade meaning shall be held to refer to such recognized standards.

9.0 FAMILIARITY WITH WORK:

The Owner has endeavored to ascertain all pertinent information regarding site conditions, and have, to the best of its ability, furnished all such information to the contractor. Such information is given, however, as being the best factual information available to the Owner; but is advisory only. The Contractor, by careful examination, shall satisfy himself as to the nature and location of the work, the character of equipment and facilities needed preliminary to and during the prosecution of the work, the general and local conditions, and all other matters which can affect the work under this agreement. There shall be no claim allowed for additional compensation to Contractor based upon unanticipated or additional work unless Contractor can show to Owner's sole satisfaction that such unanticipated or additional work could not have been discovered by reasonable means prior to the bid.

10.0 MATERIALS AND APPLIANCES:

Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation, and other facilities necessary for the execution and completion of the work. Unless otherwise specified, all materials shall be of a good quality.

The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

11.0 PERMITS, LICENSES AND REGULATIONS:

The Contractor and/or subcontractor shall be responsible for obtaining all necessary building permits. Building permits for this work are to be provided at no cost to the Contractor. Further, the Contractor shall keep himself fully informed of any County regulation and all state and federal laws which in any manner effect the work herein specified.

12.0 RIGHTS OF VARIOUS INTERESTS:

Whenever work being done by the Owner's forces, school's forces, utility companies, or by other contractor's forces is contiguous to work covered by this agreement, the respective rights of various interests shall be established by the Owner, to secure the completion of the various portions of the work in general harmony.

13.0 SILENCE OF SPECIFICATIONS:

The apparent silence of these specifications and any supplemental specifications as to any detail or the omission from the specifications of a detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of the highest quality and correct type, size and design are to be used. All interpretation of these specifications shall be made on the basis of this statement.

14.0 WORK SITE DAMAGES:

Any damages to finished surfaces or existing structures resulting from this installation shall be repaired to Owner's satisfaction at the Contractor's sole expense.

15.0 SURETY:

The Contractor shall furnish Surety Bonds (Payment Bonds and Performance Bonds), in the forms provided herein, each in an amount equal to One Hundred Percent (100%) of the contract as security for the faithful performance of this contract and for the payment of persons performing labor on the project under this agreement. The Performance Bond shall also require the Contractor to make good, at his own expense, work due to imperfect materials and workmanship for a period of two years after final acceptance of the project by the Owner. The surety on both bonds shall be a duly authorized Surety Company or Companies satisfactory to the Owner.

16.0 TRADE NAMES AND ALTERNATIVES:

When the drawings or specifications specify one or more manufacturers' brand names or makes of materials, devices or equipment as indicating a quality, style, appearance or performance, the bidder shall base his bid on either one of the specified brands or an alternate brand which he

intends to substitute. Use of an alternate shall not be permitted unless it has been found to be equal or better by the Owner and at no additional cost.

The burden of proof as to the comparative quality and suitability of alternative equipment, articles or materials shall be upon the bidder and he shall furnish at his own expense, such information relating thereto as may be required by the Owner. The Owner shall be the sole judge as to the comparative quality and suitability of alternative equipment, articles or materials and his decisions shall be final. Any other brand, make or material, device or equipment which in the opinion of the Owner is recognized the equal of that specified, considering quality, workmanship and economy of operation and is suitable for the purpose intended, must be accepted.

Substitution of equipment, articles or materials for specified items or approved alternates after bid opening may not be made without the prior written approval of the Owner.

17.0 AWARD AND EXECUTION OF CONTRACT:

17.1 Award of Contract:

The contract will be awarded or the bids rejected as soon as reasonably possible, but not later than sixty (60) days after the date of opening bids, unless the period for acceptance is otherwise extended at request of Owner and agreed to in writing by the bidder, or bidders.

17.2 Form of Contract:

An example of the proposed contract format is enclosed. Both parties shall execute a similar contract prior to approval by the County Attorney.

Copies of the required Payment and Performance Bonds are also attached.

17.3 Entering Contract:

Upon award of the Contract to a bidder, such bidder shall enter into the Contract by signing the Contract and by furnishing the Bond(s) for faithful performance as prescribed herein and the Certificate of Insurance as prescribed, which are required to be procured by the Contractor within ten (10) calendar days after the date of the award or within such further time as the owner may allow. All documents referred to are attached hereto.

No contract shall result from the submission of any bid and no liability shall accrue with respect thereto until a written contract and accompanying documents have been fully and completely executed on the part of the successful bidder and the Owner. However, failure by the successful bidder to enter into a written contract shall cause the successful bidder to forfeit the full amount of the bid guarantee to the Owner.

17.4 Execution of Documents:

All documents which the bidder is required to execute shall carry the signature of the president of the corporation, the corporate seal and shall be attested by the secretary of the corporation provided, however, if the board of directors of a corporation authorizes another officer to act for the corporation, then a sealed and attested copy of such authorization shall accompany the signature of such other officer. In the case of an individual, the individual to be bound shall sign; and in the case of a partnership, the signature of a partner shall bind the partnership; and in the event of a limited liability company, a member (or the manager, if any) shall sign.

17.5 Subcontracts:

Before making any subcontract, the Contractor must submit a written statement to the Owner, giving the name and address of the proposed subcontractor, the portion of the work and materials which he is to perform and furnish and a statement in writing from such subcontractor that he waives all rights to assert any claims, actual and/or consequential against the Owner allegedly arising from or growing out of any delays in the work schedule or any failure of the Contractor to pay such subcontractor any sums owed by the Contractor to such subcontractor.

If the Owner finds that the proposed subcontractor is qualified, he will so advise the Contractor in writing. The Owner may revoke approval of any subcontractor only for good cause. Notice of such revocation of approval will be given in writing to the Contractor by the Owner, and all work by said subcontractor shall immediately cease. If the Owner determines for good cause that a subcontractor is not qualified, Owner shall so notify Contractor, and Contractor shall not thereafter enter into any subcontract with the subcontractor in connection with the contract.

17.6 Separate Contracts:

The Owner reserves the right to let other contracts in connection with the project, the work under which will proceed simultaneously with the execution of this Contract. The Contractor shall afford other separate contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work and the Contractor shall take all reasonable action to coordinate his work with theirs. If the work performed by the separate contractor is defective or so performed as to prevent the Contractor from carrying out his work according to the plans and specifications, the Contractor shall immediately notify the Owner upon discovering such conditions. Upon receiving notification, the Owner shall take such appropriate steps as are necessary to allow the Contractor to carry out his work under this Contract, and appropriate extensions of time and change orders shall be given to the Contractor for any delays and extra costs caused by the separate contractor's failure of proper performance.

18.0 NEGOTIATION WITH LOWEST RESPONSIBLE BIDDER:

Unless canceled or rejected, a responsive bid from the lowest responsible bidder shall be accepted as submitted, except that if the bid from the lowest responsible bidder exceeds available funds the Purchasing Agent reserves the right to negotiate with the apparent low bidder

to obtain a mutually agreeable contract price. The negotiations shall be confined to a reduction in the contract price and shall not deal with changes in the contract requirements.

19.0 CHANGE ORDERS:

19.1 Additional Work

Before any work under this agreement shall qualify as additional work, the Contractor shall notify the Owner and the Owner's Engineer in writing of his intention to treat certain work, if performed, as additional work and his reasons therefore. If written notice is not given, no claim for additional work will be honored. Notice by Contractor shall not be construed as proving the validity of the claim.

19.2 Execution of Change Orders

When the Owner agrees that particular work identified by the Contractor's written notice is additional work, or when the Owner, Owner's Engineer, and Contractor otherwise conclude mutually that a change in the terms of the Agreement is necessary, the parties will execute a written Change Order specifying the scope of work and the schedule for both the work and additional payment agreed to by the parties. No oral agreement or directive regarding additional work, or a change in the terms of this Agreement by an employee of the Owner, shall be binding on the Owner.

20.0 INVOICING/PAYMENTS TO THE CONTRACTOR:

Billings to the Owner shall reference the purchase order number. Each invoice must indicate the date and amount of services performed. The Owner will make monthly partial payments to the Contractor on the basis of a duly certified and approved estimate of the work performed during the preceding calendar month as approved by the Owner, at least ten (10) days prior to the due date of each monthly payment.

Any extension of time approved in writing by the Owner shall be taken into consideration in determining if the project is on schedule.

After the time allowed for completion of the contract is reached, unless an extension of time is allowed in writing by the Owner, the Owner may hold partial payments until final payment is made.

No partial payment will be made for any materials or equipment before they are incorporated in the work in a permanent manner as required by the Contract Documents, excepting as specified below. The delivered cost of equipment and non-perishable materials delivered at the site of the work tested for adequacy may be included in the Contractor's application for partial payment, provided, however, that the Contractor shall furnish written evidence (Affidavit) satisfactory to the Owner that the Contractor is the unconditional Owner of such material or equipment.

All material and work covered by partial payments made shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the safety and protection of all materials and work upon which payments have been made or the restoration or replacement of any damaged or stolen work or property or as a waiver of the right of the Owner to require the fulfillment of all the terms of the Contract Documents.

Certificate of Completion: Upon completion of work required by the Contract Documents and acceptance of same by the Owner and the filing of the above Affidavit required, the Contractor shall file a written Certificate of Completion with the Owner as to the entire amount of work performed and compensation earned by the Contractor, including approved extra work and compensation.

Final Payment: The final payment shall not become due until the Contractor shall deliver to the Owner a record set of as-built drawings and specifications or manual and an Affidavit of Payment of Claims that all subcontractors and suppliers of either labor or materials have been paid any sums due them for work performed or materials furnished in connection with this Contract or evidence that satisfactory arrangements have been made by the Contractor with such subcontractors and suppliers with respect to the payment of such sums as may be due them by the Contractor.

Within thirty (30) days after delivery of as-built drawings and specifications satisfactory to the Owner, the Owner shall pay to the Contractor the amount stated, less all prior payments and advances whatsoever to or for the account of the Contractor. All prior estimates and payments including those relating to extra work shall be subject to correction by this payment, which is throughout the Contract called Final Payment.

Acceptance of Final Payment Constitutes Release: The acceptance by the Contractor of the Final Payment shall be and operate as a release to the Owner of all claims and of all liability to the Contractor for all things done or furnished in connection with this work excepting the Contractor's claims for interest upon Final Payment, if this payment be improperly delayed. No certificate for payment issued by the Owner and no payment, final or otherwise, nor partial or entire use or occupancy of the work by the Owner, shall be an acceptance of any work or materials not in accordance with the Contract Documents, nor shall the same relieve the Contractor of responsibility for faulty materials or workmanship or operate to release the Contractor or his surety from any obligation under the Contract or the Standard Performance and Payment Bonds. Any dispute of the final payment by the Contractor shall be resolved as a claim against the Owner and processed pursuant to Virginia Code Section 15.2-1248 and Section 22.1-122 applied to the Owner mutatis mutandis.

SITE ACCESS:

For the performance of the contract, the Contractor will be permitted to occupy such portions of the site as shown on the plans, or as permitted by Owner or his representative. A reasonable amount of tools, materials or equipment for construction purposes may be stored in such place, but not more than is necessary to avoid delays in construction. Excavated and waste materials, if any, shall be piled or stocked in such a way as to not interfere with spaces that may be designated to be left free and unobstructed, not to inconvenience other contractors or the Owner.

Upon completion of the work and before acceptance and final payment is made, the Contractor shall clean and remove from the site of work, surplus and discarded materials, temporary structures and debris of every kind. Contractor shall leave the site of work in a neat and orderly condition equal to that which originally existed. Surplus and waste materials removed from the site of the work will be disposed of at locations satisfactory to the Owner.

22.0 REPLACEMENT OF DAMAGED PROPERTY:

The Contractor shall replace at his sole expense all property damaged by him including fences, trees, plants, grass, walks, drives, and building surfaces, without limitation.

23.0 OWNER'S ACCESS:

The Owner's representative shall at all times have access to the work site. The Contractor shall keep the Owner advised of the progress of the project and shall provide opportunity for the Owner or his representative to inspect each phase of the project. The Contractor shall provide proper and safe facilities for such access and for inspection.

24.0 LIQUIDATED DAMAGES CLAUSE:

It is understood and agreed that time is of the essence in the performance of this contract and that Contractor will commence and fully complete the project within the times specified in this Contract. Because the consequences of the Contractor's failure to perform on time cannot be determined to a reasonable certainty beforehand, the Contractor agrees to pay to the Owner, as liquidated damages and not as a penalty, the sum of \$100.00 for each and every calendar day beyond the established contract substantial completion day and an additional sum of \$100.00 for each and every calendar day beyond the established contract final completion day that the work as stipulated in the contract documents remains uncompleted and unfinished for a possible total of \$200.00 after the allowed Contract time for final completion. Contractor further agrees that Owner may deduct and retain such liquidated damages out of any money due Contractor under the terms of the contract.

25.0 CLAIMS:

Disputes and claims arising under this agreement shall be processed pursuant to Virginia Code Sections 15.2-1245 through 15.2-1248 applied to the Owner mutatis mutandis. The Owner shall

give its final decision on any claim of the Contractor within sixty (60) days of the date the claim is submitted to the Clerk of the governing Board of Owner.

26.0 SUPPLEMENTAL CONDITIONS:

The following Supplemental Conditions modify the "General Conditions of the Contract for Construction", AIA Document A201, Fifteenth Edition, 1997. Where a portion of the General Conditions is modified or deleted by these Supplemental Conditions, the unaltered portions of the General Conditions shall remain in full force and effect.

ARTICLE 1; GENERAL PROVISIONS

1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

Add to 1.2. the following Clause 1.2.3.1:

1.2.3.1 Where on any drawings a portion of the Work is drawn out and the remainder is indicated in outline, the parts drawn out shall apply also to all other work. Where details or conditions are indicated but started only, such details, or conditions shall be continued throughout the course or parts in which they occur and shall also apply to all other similar parts of the Work unless otherwise indicated or specifically noted. On all Drawings, figures shall take precedence over measurements by scale, and scaling is done at the Contractor's own risk.

1.5 EXECUTION OF CONTRACT DOCUMENTS

Delete subparagraph 1.5.2 in its entirety and substitute the following:

1.5.2 By the signing and delivery of this Contract, the Contractor acknowledges that he has fully acquainted himself with all provisions and requirement of the Contract Documents, that he has visited and inspected the job site and building area in which the work is to be performed, that he has satisfied himself as to the nature and location of the Work, including any obstructions, amount of work, actual levels, the equipment and facilities needed preliminary to and during the prosecution of the Work and all other matters which can in any way affect the Work or the cost thereof under this Contract. Any failure by the Contractor to acquaint himself with such information will not relieve him from the responsibility for successfully performing the Work.

ARTICLE 2; OWNER

2.1. GENERAL

Delete Subparagraph 2.1.2 in its entirety.

2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

Delete Subparagraph 2.2.1 in its entirety.

Delete subparagraph 2.2.5 in its entirety and substitute the following:

2.2.5 The Contractor will be furnished, free of charge ten (10) copies of the drawings. Additional sets will be furnished at the cost of reproduction, postage and handling.

2.4 OWNER'S RIGHT TO CARRY OUT THE WORK

2.4.1 Delete the sentence in Subparagraph 2.4.1 reading "Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect."

ARTICLE 3; CONTRACTOR

3.7 PERMITS, FEES AND NOTICES

3.7.1 Add a new last sentence: "However, the County of York has agreed to waive payment of those fees imposed by the County of York, Virginia."

Add a new subparagraph 3.7.5 as follows:

3.7.5 The Owner will pay all permit and connection fees required for the work but the Contractor shall be responsible for securing same.

3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES

Add the following subparagraph 3.10.4:

3.10.4 The Contractor shall submit an updated construction schedule monthly with his application for payment. The revised schedule will demonstrate a strategy for overcoming any variances in the previous month's schedule in order to complete the project on time. Pay requests will not be reviewed unless accompanied by the update schedule.

3.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

Amend subparagraph 3.12.5 by adding new sub-paragraphs 3.12.5.1 and 3.12.5.2, as follows:

3.12.5.1 Any Drawings, Schedules, and Catalog Data submitted without the Contractor's stamp of approval will not be considered by the Architect and will be returned to the Contractor.

3.12.5.2 The Contractor shall be responsible for the satisfactory construction of all Work in accordance with the quantities, dimensions, and designs shown in the Contract documents and the furnishing of all materials necessary for the Work and required by the Contract Documents even if not indicated on the submittals that have been approved by the Architect.

Amend subparagraph 3.12.8 by adding the following to the end of the paragraph:

Failure to so notify the Architect in writing of such deviations shall constitute just cause for

rejection of samples and Shop Drawings, including all finished work resulting therefrom, at any time during the construction and up through the prescribed guarantee period. The Architect's approval of samples and Shop Drawings is made with the understanding that such Shop Drawings and samples conform with, and do not deviate from the Contract Documents unless Architect is so informed in writing at the time of submittal thereof.

3.14 CUTTING AND PATCHING

Add to 3.14 the following subparagraph 3.14.3:

3.14.3 No cutouts, access doors or mechanical or electrical conduit or devices of any sort shall be installed in finished materials or areas other than in mechanical rooms, wall chases and shafts without specified prior approval of location, and without the prior submittal by Contractor to Owner of a sample of the proposed catalog cut.

3.18 INDEMNIFICATION

Delete the wording within the parentheses in Subparagraph 3.18.1.

ARTICLE 4; ADMINISTRATION OF THE CONTRACT

4.1 ARCHITECT

Add to 4.1.1 the following clause 4.1.1.1:

4.1.1.1 Wherever the term "Architect" is used in the Contract Documents, it refers to Hudson + Associates, Architects and/or their duly authorized representatives.

Delete Subparagraphs 4.1.2 and 4.1.3.

4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT

Delete subparagraph 4.2.12 and substitute the following:

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.

4.3 CLAIMS AND DISPUTES

Delete Subparagraph 4.3.1 and substitute the following:

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 the Contract Documents, payment of money, extension of

time or other relief with respect to the terms of the Contract. The term "Claim" includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract but specifically does not include any Claim or demand arising for the first time after final payment is made. Claims must be made by written notice. The responsibility to substantiate claims shall rest with the party making the claim.

Delete Subparagraph 4.3.2 and substitute the following:

4.3.2 TIME LIMIT ON CLAIMS.

- a. Notice. Notice of a claim by either party must be given to the other party within seven calendar days after occurrence of the event giving rise to such Claim or within seven days after the Claimant should reasonably have known of the condition giving rise to the Claim, whichever is later. Notice of claim must be made by written notice. Failure to make claims within the time period specified in this subparagraph shall be deemed a waiver of the claim.
- b. Documentation. Supporting documentation of the claim shall be submitted within thirty calendar days of the event on which the claim is based. Failure to submit supporting documentation within thirty days bars further pursuit of the claim.
- c. Additional claim. An additional claim made after the initial claim had been implemented by change order will not be considered unless submitted in a timely manner.

4.3.7 CLAIMS FOR ADDITIONAL TIME.

Add the following to the end of subparagraph 4.3.7.1:

Requests for extension of time based on delayed deliveries of materials will not be considered, except in Owner's sole and unreviewable discretion. Submission of a bid and the time of completion stated thereon shall be considered confirmation of Contractor's having verified delivery dates for required materials.

4.3.8 INJURY OR DAMAGE TO PERSONS OR PROPERTY

Delete subparagraph 4.3.8

4.4 RESOLUTION OF CLAIMS AND DISPUTES

Amend Subparagraph 4.4.4 by adding the following language at the end, as follows:

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.

4.4.5 The Architect will approve or reject Claims by written decision, which shall state the reasons therefore and which shall notify the parties of any change in the Contract Sum or Contract Time or both. The approval or rejection of a Claim by the Architect shall be final and

binding on the parties but subject to 4.4.9 herein.

Delete subparagraph 4.4.6 in its entirety.

Add a new subparagraph 4.4.9 as follows:

4.4.9 Any controversy of Claim arising out of or related to the Contract, or the breach thereof, except for Claims which have been waived by the making and acceptance of final payment as provided in the Contract documents, shall be submitted for review to the School Board pursuant to the terms of Section 15.2-1243, et. seq. of the Code of Virginia within ten days of the date of the Architect's written decision issued pursuant to Paragraph 4.4.5. Failure to file a Claim as provided for in this subparagraph within ten days of the date of the Architect's decision, shall be deemed a waiver of the Claim.

4.5 MEDIATION

Delete Paragraph 4.5 and all subparagraphs thereof in their entirety.

4.6 ARBITRATION

Delete paragraph 4.6 and all subparagraphs thereof in their entirety.

ARTICLE 5; SUBCONTRACTORS

5.4 CONTINGENT ASSIGNMENT OF SUBCONTRACTS

Delete Subparagraph 5.4.2 in its entirety.

ARTICLE 6; CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

6.2 MUTUAL RESPONSIBILITY

Add the following subparagraph 6.2.6:

6.2.6 If any other Contractor or his subcontractors or their material suppliers shall suffer loss or damage through acts of omissions on the part of the Contractor, any subcontractor, and sub-subcontractor or any material man of any foregoing, the Contractor agrees to reimburse such other Contractor or his sub-contractor or material supplier to the extent that they may be entitled to reimbursement. If such other Contractor or subcontractor or his material supplier shall assert any claim against the Owner on account of any damage alleged to have been sustained, the Owner shall notify the Contractor and the Contractor shall indemnify and save the Owner harmless from and against loss, liability, claim, damage, fee, expense, including reasonable attorney's fees of any kind whatsoever arising out of or in any way connected with any such

claim and Contractor shall defend at his own expense any suit in connection with any such claim, and if a judgment shall be rendered against the Owner in connection with any such claim, Contractor shall pay or satisfy any such judgment or claim and shall pay all costs, fees, expenses, disbursements and liabilities of whatsoever kind in connection therewith.

ARTICLE 7; CHANGES IN THE WORK

7.3 CONSTRUCTION CHANGE DIRECTIVES

7.3.6 In the first sentence, delete the words "a reasonable allowance for overhead and profit" and substitute "an allowance for overhead and profit in accordance with Clause 7.3.10.1 through 7.3.10.6 below."

Add the following Subparagraph 7.3.10:

7.3.10 In Subparagraph 7.3.6, the allowance for the combined overhead and profit included in the total cost to the Owner shall be based on the following schedule:

- .1 For the Contractor, for Work performed by the Contractor's own forces, ten percent of the cost.
- .2 For the Contractor, for Work performance by the Contractor's Subcontractor, five percent of the amount due the Subcontractor.
- .3 For each Subcontractor or Sub-subcontractor involved, for Work performed by the Subcontractor's or Sub-subcontractor's own forces, ten percent of the cost.
- .4 For each Subcontractor, for Work performed by the Subcontractor's Sub-subcontractors, five percent of the amount due the Sub-subcontractor.
- .5 Cost to which overhead and profit is to be applied shall be determined in accordance with Subparagraph 7.3.6.
- .6 In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, materials and Subcontracts. Labor and materials shall be itemized in the manner prescribed above. Where major cost items are Subcontracts, they shall be itemized also. In no case will a change involving over \$500.00 be approved without such itemization.

ARTICLE 9; PAYMENTS AND COMPLETION

9.3 APPLICATIONS FOR PAYMENT

Add the following clause 9.3.1.3 to 9.3.1:

9.3.1.3 Until substantial completion, the Owner shall pay ninety-five percent (95%) of the amount due the Contractor on account of progress payments.

9.7 FAILURE OF PAYMENT

Delete subparagraph 9.7.1

9.8 SUBSTANTIAL COMPLETION

Amend subparagraph 9.8.4 by adding the following:

Nothing herein shall authorize the Architect to extend the date for final completion of the Work except as authorized in Article 7.

9.10 FINAL COMPLETION AND FINAL PAYMENT

Delete Subparagraph 9.10.3

Delete Subparagraph 9.10.5 and substitute the following:

9.10.5 Acceptance of final payment by the Contractor or sub-contractor or material supplier shall constitute a waiver and release of all Claims by that payee except those previously made in writing and pursued by the payee as required by the terms of the Contract Documents. Such Claims previously made must be identified by the payee as unsettled at the time of final application for payment.

Add Subparagraph 9.10.6 as follows:

9.10.6 Contractor's obligation to perform the work and complete the project in accordance with the Contract Documents shall be absolute. Neither approval of any progress or final payment nor the issuance of a certificate of substantial completion, nor any payment by Owner to Contractor under the Contract Documents, nor any use or occupancy of the project or any part thereof by Owner, nor any act of acceptance by Owner, nor any failure to do so, nor the failure of Owner to file a Claim as set forth in the Contract Documents, nor any correction of defective work by Owner, shall constitute an acceptance of work not in accordance with the Contract Documents nor shall the same relieve the Contractor of responsibility for faulty materials or workmanship or operate to release the Contractor or his surety from any obligation under the contract, the performance bond or the payment bond.

Add the following Paragraph 9.11 as follows:

9.11 LIQUIDATED DAMAGES

9.11.1 Because time is of the essence and because the consequences of untimely completion of the Work cannot be quantified as of the date of this Agreement, the parties agree that the Contractor and the Contractor's surety, if any, shall be liable for and shall pay the Owner the sums hereinafter stipulated as liquidated damages, and not as a penalty, for each calendar day of delay until the Work is substantially complete, One Hundred U.S. Dollars (\$100.00), and for each calendar day of delay until the Work is finally complete and additional One Hundred U.S. Dollars (\$100.00) for a possible total of Two Hundred Dollars (\$200.00) per calendar day of delay, and Contractor further agrees that Owner may deduct and retain such liquidated damages out of any money due Contractor under the terms of this Contract.

ARTICLE 10; PROTECTION OF PERSONS AND PROPERTY

10.2 SAFETY OF PERSONS AND PROPERTY

Add to 10.2.1 the following paragraph 10.2.1.4:

10.2.1.4 Contractor's materials, tools, machinery, equipment, appliances, shoring, sheds and personal property of the Contractor's employees.

Add to 10.2.2 the following clause 10.2.2.1:

10.2.2.1 The Contractor agrees in order that work be executed with the greater degree of safety:

- (1) To comply with all laws, ordinances, and regulations regarding safety.
- (2) To comply as applicable with the "Rules and Regulations Governing Construction Demolition and All Excavations" as adopted by the Safety Codes Commission of the Commonwealth of Virginia.
- (3) To conform to all applicable provisions of the "Manual of Accident Prevention in Construction" published by the Association of General Contractor of America, Inc., latest edition.
- (4) To comply with all applicable provisions of the "Occupational Safety and Health Act of 1970," as amended.

In subparagraph 10.2.5 delete the language within the parentheses.

10.3 HAZARDOUS MATERIALS

Delete subparagraph 10.3.2 and in its place substitute the following:

10.3.2 The Owner shall verify the presence or absence of the material or substances reported by the Contractor and, in the event such material or substance is found to be present, verify that it has been rendered harmless. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. The Contract Time shall be extended appropriately and the Contract Sum shall be increased in the amount of the Contractor's reasonable additional costs of shut-down, delay and start-up.

Delete subparagraph 10.3.3 in its entirety.

Delete subparagraph 10.5 in its entirety.

ARTICLE 11; INSURANCE AND BONDS

11.1 CONTRACTOR'S LIABILITY INSURANCE

Add new subparagraphs 11.1.1.9 and 11.1.1.10, as follows:

11.1.1.9 Liability Insurance shall include all major divisions of coverage and be on a comprehensive basis including:

1. Premises Operations (including X, C, and U coverage as applicable).
2. Independent Contractor's Protective
3. Products and Completed Operations
4. Personal Injury Liability with Employment Exclusion deleted.
5. Contractual, including specified provision for Contractor's obligation under Paragraph 3.18.
6. Owned, non-owned and hired motor vehicles.
7. Broad Form Property Damage including Completed Operations.

11.1.1.10 If the General Liability coverages are provided by a Commercial General Liability Policy on a claims-made basis, the policy date or Retroactive Date shall predate the Contract; the termination date of the policy or applicable extended reporting period shall be no earlier than the termination date of coverages required to be maintained after final payment, certified in accordance with Subparagraph 9.10.2.

Add the following Clause 11.1.2.1:

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

1. Worker's Compensation

(a) State: Statutory

(b) Applicable Federal (e.g., Longshoreman's): Statutory

(c) Employer's Liability: \$100,000 per Accident
\$100,000 Disease, Policy Limit
\$100,000 Disease, Each Employee

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

(a) Bodily Injury: \$1,000,000 Each Occurrence
\$1,000,000 Aggregate

(b) Property Damage: \$100,000 Each Occurrence
\$1,000,000 Aggregate

(c) Products and Completed Operations to be maintained for one year after final payment: \$1,000,000 Aggregate

(d) Property Damage Liability Insurance shall provide X, C, and U coverage

(e) Broad Form Property Damage Coverage shall include Completed Operations.

3. Contractual Liability:

(a) Bodily Injury: \$1,000,000 Each Occurrence
\$1,000,000 Aggregate

4. Personal Injury, with Employment Exclusion deleted: \$1,000,000 Aggregate

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

(a)	Bodily Injury:	\$1,000,000	Each Person
		\$1,000,000	Each Occurrence
(b)	Property Damage:	\$100,000	Each Occurrence
6.	Umbrella Excess Liability:	\$1,000,000 over primary insurance \$10,000 retention for self-insured hazards each occurrence.	

11.1.3 Add the following sentence to Subparagraph 11.1.3:

If this insurance is written on the Comprehensive General Liability policy form, the Certificates shall be AIA Document G705, Certificate of Insurance. If this insurance is written on a Commercial General Liability policy form, ACORD form 25S will be acceptable. The Certificate of Insurance shall provide an endorsement naming the County School Board of York County, Virginia as Additional Insured.

11.2 OWNER'S LIABILITY INSURANCE

Delete subparagraph 11.2.1 in its entirety.

11.4 PROPERTY INSURANCE

Delete subparagraphs 11.4.1, 11.4.1.1, 11.4.1.2, 11.4.1.3, and 11.4.1.4, and substitute the following:

11.4.1 Contractor or builder's risk insurance in the all-risk form shall be provided by the Contractor in a minimum amount of 100 per cent of the Contract Sum covering damage to or loss of work performed under the Contract caused by fire, explosion, wind, lightening, vandalism, malicious mischief and any other similar casualty risk or peril. The insurance shall be payable to the Owner and the Contractor as their respective interests may appear. The Owner shall be named as an additional insured in the insurance contract. Such insurance shall cover portions of the Work stored off site, and also portions of the Work in transit.

Delete Subparagraphs 11.4.3, 11.4.4, 11.4.5, 11.4.6, 11.4.7, 11.4.8, 11.4.9 and 11.4.10.

11.5 PERFORMANCE BOND AND PAYMENT BOND

Delete Subparagraph 11.5.1 and substitute the following:

11.5.1 The Contractor shall furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder. Bonds shall be in the form specified in the Contract Documents with surety approved by the County Attorney. The cost of all bonds shall be

included in the Contract sum. The amount of each bond shall be equal to 100 percent of the Contract sum. The bonds shall be maintained in full force and effect until final acceptance of the Work by the Owner. The Contractor will cause the surety to agree to be bound by each and every provision in the Contract Documents.

11.5.1.1 The Contractor shall deliver the required bonds to the Owner not later than the date of execution of the Contract or if the work is to be commenced prior thereto in response to a letter of intent, the Contractor shall, prior to the commencement of the work, submit evidence satisfactory to the Owner that such bonds will be furnished.

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

11.5.1.3 The surety will give written notice to the Owner, within seven (7) days after receipt of a declaration of default of the surety's election either to remedy the default or defaults promptly or to pay the Owner the penal sum of the bond, time being of the essence. In the notice of election, the surety shall indicate the date on which the remedy or performance will commence, and it shall then be the duty of the surety to give prompt notice in writing to the Owner immediately upon completion of (a) the remedy and/or correction of each default, (b) the remedy and/or correction of each item of Work, (c) the finishing of each omitted item of Work, and (d) the performance of the Work. The surety shall not assert insolvency of the Contractor or Contractor's denial of default as justification for its failure to promptly remedy the default or defaults or to perform the Work.

ARTICLE 13; MISCELLANEOUS PROVISIONS

13.6 INTEREST

Delete Subparagraph 13.6.1

13.7 COMMENCEMENT OF STATUTORY LIMITATION PERIOD

Delete paragraph 13.7.1 and all subparagraphs thereof, in their entirety.

Add a new paragraph 13.8 as follows:

13.8 EQUAL OPPORTUNITY

13.8.1 During the performance of this contract, the Contractor shall maintain policies of employment as follows:

13.8.1.1 The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin, except where religion, sex or national origin is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

13.8.1.2 The Contractor, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, will state that such Contractor is an equal opportunity employer.

13.8.1.3 Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.

13.8.2 The Contractor will include the provisions of the foregoing subparagraphs 13.8.1.1, 13.8.1.2, and 13.8.1.3 in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

ARTICLE 14; TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 TERMINATION OF THE CONTRACTOR

Delete Subparagraph 14.1.1.4

14.2 TERMINATION BY THE OWNER

14.2.2 In the first sentence, delete "upon certification by the Architect that sufficient cause exists to justify such action."

27.0 INSURANCE:

The Contractor shall carry insurance in the amounts specified in ARTICLE 11 above, including the Contractual Liability assumed by the Contractor and prior to the commencement of any work shall deliver certificates of insurance from carriers acceptable to the Owner specifying such limits, along with a proper endorsement naming the "County School Board of York County, Virginia, its Officers, Agents and Employees" as Additional Insured on a primary basis (Form No. GL-20-10) on applicable policy(s) (such additional insured status shall be primary without participation by Owner's insurers). The provisions of this paragraph shall be deemed included in the contract as if fully set out therein.

28.0 CONTRACTOR REGISTRATION:

If a contract is for seventy thousand dollars (\$70,000) or more, or if total value of all construction, removal, repair or improvements undertaken by the bidder within any twelve month period is five hundred thousand dollars (\$500,000) or more, the bidder is required under Title 54.1, Code of Virginia (1950), as amended, to be licensed as a "CLASS A CONTRACTOR." If a contract of fifteen hundred dollars (\$1,500) or more but less than seventy thousand dollars (\$70,000), the bidder is required to be licensed as a "CLASS B CONTRACTOR."

The bidder shall place on the outside of the envelope containing the bid and shall place in the bid over his signature whichever of the following notations is appropriate, inserting his Contractor License Number:

Licensed Class A Virginia Contractor No. _____ Valid Until _____

Registration title of specialty description _____

If a bidder shall fail to obtain this license prior to submission of bid, the bid shall not be considered.

I certify the firm signing this bid and registered under that name is legally qualified to perform all work included in the Bidding Documents/scope of the Contract as determined by the Commonwealth of Virginia, Department of Commerce, State Board for Contractors, in granting registration.

Address of Bidder

Respectfully submitted

DATE _____

COMPANY _____

SIGNED _____

TITLE _____

(SEAL, IF CORPORATION)

29.0 BID SCHEDULE:

The undersigned, having read, examined, and understood the Summary of Work, specifications, drawings and all related documents (Bidding Documents – IFB NO. 1736), having visited the site and become familiar with local conditions under which the Work is to be performed, and being familiar with all conditions surrounding the construction of the proposed project, including availability of products, materials and supplies, proposes to construct the project in accordance with the Bidding Documents and Contract Documents within the time frame and for the price stated herein. These prices are to cover all expenses incurred in performing the Work required by the Contract Documents of which this bid, if accepted, will become a part.

If notified by the Owner of the acceptance of this proposal within thirty (30) days of the time set for opening the bids, the undersigned agrees to execute a contract for the above work for the stated compensation:

29.1 BASE BID:

All work described herein

LUMP SUM:\$_____

29.2 RECEIPT OF ADDENDA:

Bidder acknowledges receipt of the following addenda and agrees the requirements thereof are included in this bid:

Addendum No. ____, dated _____

Addendum No. ____, dated _____

Addendum No. ____, dated _____

30.0 COMPLETION DATE:

The work shall start no earlier June 17, 2010 and all work must be substantially completed by August 6, 2010. Final completion shall be no later than September 7, 2010.

State your earliest completion dates. All work as set forth in the contract documents shall be substantially completed on or before _____ and shall be finally completed on or before _____, following issuance of a written Notice to Proceed.

31.0 AGREEMENT TO EXECUTE CONTRACT:

Within 60 days after the opening of Bids or any time thereafter before withdrawing this Bid, the Undersigned will, within ten (10) days after receipt of written Notice of Acceptance of this Bid, execute and deliver to the Owner the Contract Agreement Forms, together with Performance and Payment Bonds as required by the Contract Documents and Bids as accepted. The Undersigned designates as his office to which Notice of Acceptance shall be mailed or otherwise delivered:

32.0 TERMINATION OF CONTRACT:

Upon thirty (30) days written notice to Bidder, this agreement may be canceled by the Owner at any time when in the judgment of the Owner the product furnished, or service rendered, by the bidder is not satisfactory. Such termination shall not be deemed a waiver of any rights of the Owner to damages for breach of contract.

(Name) _____
(Address) _____

Virginia Class A Contractors License Number: _____

Bidder is (Check one): Individual () Partnership () Corporation ()

Residence of Bidder (if individual): _____

Name of Partners (if partnership): _____

State of Incorporation: (if corporation): _____

SIGNATURE:

Typed Name of Bidder: _____

By: _____

Corporate Seal

Title: _____

Date of Bid: _____

33.0 CONTRACTOR DATA:

All bidders must complete this section and return it with your bids, in order for Owner to complete the evaluation of the bids.

34.1 Experience/Years in Business:

Indicate the length of time you have been in business providing this type of commodity and service: ____years ____months.

34.2 References:

Indicate below a listing of at least three (3) references where you have provided this type of equipment and service recently. Include the dates equipment and services were provided and the name and address of the person we have your permission to contact.

CLIENT	DATE	ADDRESS	PERSON TO CONTACT AND PHONE NUMBER

SAMPLE CONTRACT FORM
SERVICES CONTRACT

Agreement No. _____

This AGREEMENT, dated this _____ day of _____, 2010, is by and between the COUNTY SCHOOL BOARD OF YORK COUNTY, VIRGINIA (a political subdivision of the Commonwealth of Virginia); hereinafter called the Owner; and _____ (a corporation organized and existing under the laws of the Commonwealth of Virginia); hereinafter called the Contractor.

WITNESSETH: The Owner and Contractor, for the consideration stated herein, agree as follows:

Scope of Work:

The Contractor shall perform all required work and shall provide and furnish all labor, materials, necessary tools, expendable equipment and utility and transportation service and all else required to complete:

PARTIAL METAL ROOF REPLACEMENT ON THE V-BUILDING OF YORK HIGH SCHOOL
FOR BID (IFB) NO. 1736

all in strict accordance with the Specifications, including any and all Addenda, and in strict compliance with the Contract Documents hereinafter enumerated.

It is understood and agreed that said labor, materials, tools, equipment and service shall be furnished and said work performed and completed under the direction and supervision of the Contractor and subject to the approval of the Owner or its authorized representative.

Guarantee:

All materials and equipment, furnished by the Contractor, and all work involved in this Contract shall be and the same are hereby guaranteed by the Contractor free from defects owing to faulty materials or workmanship for a period of one year after date of substantial completion of the work. All work which proves defective, by reason of faulty material or workmanship within said period of one year, shall be replaced by the Contractor free of cost to the Owner. Nothing herein shall be deemed a waiver of any other available remedy for contract default, or as a waiver of any applicable statutory limitations period, nor as a waiver of any other applicable warranty period.

THE BID SCHEDULE OF THE SUCCESSFUL BIDDER
SHALL BE CONFORMED AND INSERTED HEREIN
TO BECOME A PART OF THE COMPLETED CONTRACT DOCUMENTS

Contract Price:

The Owner shall pay the Contractor as just compensation for the performance of this Contract, subject to any additions or deductions as provided in the Contract Documents, the lump sum and unit prices as contained in the Bid Schedule attached hereto.

The Contract Amount is _____
(\$_____) lump sum and unit prices extended as herein contained.

Payments:

The Owner will pay to the Contractor in the manner and at such times as set forth in the General Conditions, such amounts as required by the Contract Documents. Unless otherwise provided, the Owner will pay to the Contractor within thirty (30) calendar days after receipt of the approved Application for Payment from the Architect and following acceptance of the completion of the job by the Owner.

Liquidated Damages:

It is understood and agreed that time is of the essence in the performance of this contract and that Contractor will commence and fully complete the project within the times specified in this Contract. Because the consequences of the Contractor's failure to perform on time cannot be determined to a reasonable certainty beforehand, the Contractor agrees to pay to the Owner, as liquidated damages and not as a penalty, the sum of \$100.00 for each and every calendar day beyond the established contract substantial completion day and an additional sum of \$100.00 for each and every calendar day beyond the established contract final completion day that the work as stipulated in the contract documents remains uncompleted and unfinished for a possible total of \$200.00 after the allowed Contract time for final completion. Contractor further agrees that Owner may deduct and retain such liquidated damages out of any money due Contractor under the terms of this contract.

Time:

The undersigned Contractor agrees to commence work within (10) calendar days after the date of Notice to Proceed and further agrees to complete the Contract Work within the following specified time limits:

The work shall start no earlier June 17, 2010 and all work must be substantially completed by August 6, 2010. Final completion shall be no later than September 7, 2010.
following issuance of a written Notice To Proceed.

THIS AGREEMENT SHALL BE BINDING UPON ALL PARTIES HERETO AND THEIR RESPECTIVE HEIRS, EXECUTORS, ADMINISTRATORS, SUCCESSORS, AND ASSIGNS.

Component Parts of the Contract:

This Contract consists of the following component parts, all of which are hereby made a part hereof as if herein set out in full:

1. Advertisement for Bids

2. Invitation For Bids (IFB #1736), and any Exhibits, attachments, plans or drawings thereto
3. Information For Bidders
4. General Terms and Conditions
5. Supplemental Conditions
6. Bid Proposal
7. Contract (this document)
8. Bid Bond
9. Payment Bond
10. Performance Bond
11. Certificate of Insurance
12. Contractor's License
13. Notice of Award
14. Notice to Proceed
15. Change Orders (if any)
16. Other Documents as may be required by law or appended hereto
17. Drawings prepared by Hudson + Associates Architects are numbered: .
18. Warranties as specified.
19. Addenda:

No. _____, dated _____, 2010

No. _____, dated _____, 2010

No. _____, dated _____, 2010

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the day and year first above written in (4) counter-parts each of which shall for all purposes be deemed an original.

ATTEST:

_____	<u>COUNTY SCHOOL BOARD OF YORK COUNTY, VA</u>
NAME	OWNER
_____	BY _____
TITLE	TITLE: <u>SUPERINTENDENT OF SCHOOLS</u>

ATTEST:

_____	_____
NAME	CONTRACTOR
_____	_____
TITLE	BY
_____	_____
CONTRACTOR'S ADDRESS:	TITLE

_____	CONTRACTOR'S FEDERAL I. D. NO.:
_____	_____

APPROVED AS TO FORM:

COUNTY ATTORNEY

RESERVED FOR CERTIFICATE OF INSURANCE,
AND ADDITIONAL INSURED FORM GL-20-10
OR OTHER SATISFACTORY EVIDENCE OF REQUIRED COVERAGE

CONTRACT FORM
PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that

(Name of Contractor)

a _____, hereinafter call the Principal, and
(Corporation, Partnership or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

County School Board of York County, Virginia

(Name of Owner)

302 Dare Road, Yorktown, Virginia 23692

(Address of Owner)

hereinafter called Owner, in the penal sum of _____ Dollars,
(\$_____), in lawful money of the United States, for the payment of which sum well and truly to
be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain
Contract with the Owner, dated the ____ day of _____, 2010, a copy of which is hereto
attached and made a part hereof, to complete:

PARTIAL METAL ROOF REPLACEMENT ON THE V-BUILDING OF YORK HIGH SCHOOL
FOR BID (IFB) NO. 1736.

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, subcontractors,
and corporations furnishing material for or performing labor in the prosecution of the work provided for
in such Contract, and any authorized extension or modification thereof, including all amounts due for
materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment, tools, consumed or
used in connection with the construction of such Work, and all insurance premiums on said Work, and for
all labor, performed in such Work whether by Subcontractor or otherwise, then this obligation shall be
void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no
change, extension of time, alteration or addition to the terms of the Contract or to Work to be performed

thereunder or the Specifications accompanying the same shall in any way affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work or the Specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in 4 counterparts each one of which shall be deemed an original, this the _____ day of _____, 2010.

ATTEST:

(PRINCIPAL) SECRETARY

SEAL

WITNESS TO PRINCIPAL

ADDRESS

PRINCIPAL

BY _____

ADDRESS

ATTEST:

(SURETY) SECRETARY

SEAL

WITNESS AS TO SURETY

ADDRESS

SURETY

BY _____
(ATTORNEY-IN-FACT)

ADDRESS

NOTE: Date of Bond must as to or later than the date of the Contract. If Contractor is a Partnership, all general partners must execute Bond.

CONTRACT FORM
PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that

(Name of Contractor)

a _____, hereinafter call the Principal, and
(Corporation, Partnership or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

County School Board of York County, Virginia

(Name of Owner)

302 Dare Road, Yorktown, Virginia 23692

(Address of Owner)

hereinafter called Owner, in the penal sum of _____ Dollars,
(\$_____), in lawful money of the United States, for the payment of which sum well and truly to be
made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain
Contract with the Owner, dated the ____ day of _____, 2010, a copy of which is hereto
attached and made a part hereof, to complete:

PARTIAL METAL ROOF REPLACEMENT ON THE V-BUILDING OF YORK HIGH SCHOOL
FOR BID (IFB) NO. 1736

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the
undertakings, covenants, terms, conditions, and agreements of said Contract during the original term
thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the
Surety and during the one year guarantee period, and if he shall satisfy all claims and demands incurred
under such Contract, and shall fully indemnify and save harmless the Owner from all costs and damages
which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and
expense which the Owner may incur in making good any default, then this obligation shall be void;
otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to Work to be performed thereunder or the Specifications accompanying the same shall in any way affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work or the Specifications.

PROVIDED, FURTHER, that no default settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in 4 counterparts each one of which shall be deemed an original, this the _____ day of _____, 2010.

ATTEST:

(PRINCIPAL) SECRETARY

SEAL

WITNESS TO PRINCIPAL

ADDRESS

PRINCIPAL

BY _____

ADDRESS

ATTEST:

(SURETY) SECRETARY

SEAL

WITNESS AS TO SURETY

ADDRESS

SURETY

BY _____
(ATTORNEY-IN-FACT)

ADDRESS

NOTE: Date of Bond must be as to or later than the date of the Contract. If Contractor is a Partnership, all general partners must execute Bond.

BID FORM

TO: County School Board of York County, Virginia
School Board Office
302 Dare Road
Yorktown, Virginia 23692

RE: York High School Metal Rood Replacement – V Building

Dear Sir:

In compliance with the advertisement for bids, we hereby submit our proposal for the roof replacement of the York High School Metal Rood Replacement – V Building, York County, Virginia, as specified on drawings, detail sheets and specifications prepared by Hudson + Associates, Architects.

Having examined the plans, specifications and related documents, and being familiar with all the conditions surrounding the construction of the proposed project, including availability of products, materials and supplies, and to construct the project in accordance with the Contract Documents within the time and for the price stated herein, these prices are to cover all expenses incurred in performing the work required by the Contract Documents of which this proposal, if accepted, will become a part.

If notified by the Owner of the acceptance of this proposal within thirty (30) days of the time set for opening the bids, the undersigned agrees to execute a contract for the above work for the stated compensation.

BASE BID: \$ _____

Unit Price No. 1 \$ _____

ADDENDA

Bidder acknowledges receipt of the following addenda and agrees the requirements thereof are included in this proposal:

<u>Addenda #</u>	<u>Date</u>	<u>Date Received</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

Licensed Class A Virginia Contractor No.

Valid Until

Registration title of specialty description

I certify the firm signing this bid and registered under that name is legally qualified to perform all work included in the scope of the Contract as determined by the Commonwealth of Virginia, Department of Commerce, State Board for Contractors, in granting registration.

Address of Bidder

Respectfully submitted

_____	DATE _____
_____	COMPANY_____
_____	SIGNED _____
_____	(Title) _____

(SEAL, IF CORPORATION)

AIA® Document A201™ – 1997

General Conditions of the Contract for Construction

for the following PROJECT:
(Name and location or address)

THE OWNER:
(Name and address)

THE ARCHITECT:
(Name and address)

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document has been approved and endorsed by The Associated General Contractors of America

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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. Unless specifically enumerated in the Agreement, the Contract Documents do not include other documents such as bidding requirements (advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or portions of Addenda relating to bidding requirements).

§ 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, (3) between the Owner and Architect or (4) 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 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, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.7 THE PROJECT MANUAL

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

§ 1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

§ 1.2.1 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 indicated results.

§ 1.2.2 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.

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

§ 1.3 CAPITALIZATION

§ 1.3.1 Terms capitalized in these General Conditions include those which are (1) specifically defined, (2) the titles of numbered articles or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 INTERPRETATION

§ 1.4.1 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.

§ 1.5 EXECUTION OF CONTRACT DOCUMENTS

§ 1.5.1 The Contract Documents shall be signed by the Owner and Contractor. If either the Owner or Contractor or both do not sign all the Contract Documents, the Architect shall identify such unsigned Documents upon request.

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

§ 1.6 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE

§ 1.6.1 The Drawings, Specifications and other documents, including those in electronic form, prepared by the Architect and the Architect's consultants are Instruments of Service through which the Work to be executed by the Contractor is described. The Contractor may retain one 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 or the Architect's consultants, and unless otherwise indicated the Architect and the Architect's consultants shall be deemed the authors of them and will retain all common law, statutory and other reserved rights, in addition to the copyrights. All copies of Instruments of Service, except the Contractor's record set, shall be returned or suitably accounted for to the Architect, on request, upon completion of the Work. The Drawings, Specifications and other documents prepared by the Architect and the Architect's consultants, and copies thereof furnished to the Contractor, are for use solely with respect to this Project. They are not to be used by the Contractor or any Subcontractor, Sub-subcontractor or material or equipment supplier on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner, Architect and the Architect's consultants. The Contractor, Subcontractors, Sub-subcontractors and material or equipment suppliers are authorized to use and reproduce applicable portions of the Drawings, Specifications and other documents prepared by the Architect and the Architect's consultants appropriate to and for use in the execution of their Work under the Contract Documents. All copies made under this authorization shall bear the statutory copyright notice, if any, shown on the Drawings, Specifications and other documents prepared by the Architect and the Architect's consultants. 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 or Architect's consultants' copyrights or other reserved rights.

ARTICLE 2 OWNER

§ 2.1 GENERAL

§ 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 Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

§ 2.1.2 The Owner shall furnish to the Contractor within fifteen days after receipt of a written request, information 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.

§ 2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

§ 2.2.1 The Owner shall, at the written request of the Contractor, prior to commencement of the Work and thereafter, furnish to the Contractor reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. Furnishing of such evidence shall be a condition precedent to commencement or continuation of the Work. After such evidence has been furnished, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

§ 2.2.2 Except for permits and fees, including those required under Section 3.7.1, which 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.

§ 2.2.3 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. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 2.2.4 Information or services required of the Owner by the Contract Documents shall be furnished by the Owner with reasonable promptness. Any other information or services relevant to the Contractor's performance of the Work under the Owner's control shall be furnished by the Owner after receipt from the Contractor of a written request for such information or services.

§ 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.

§ 2.3 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 Section 12.2 or persistently fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to 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 Section 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 three-day period. If the Contractor within such three-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 reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect's additional services 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 GENERAL

§ 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.

§ 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.

§ 3.1.3 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.

§ 3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

§ 3.2.1 Since the Contract Documents are complementary, before starting each portion of the Work, the Contractor shall carefully study and compare the various Drawings and other Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.2.3, shall take field measurements of any existing conditions related to that portion of the Work and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, any errors, inconsistencies or omissions discovered by the Contractor shall be reported promptly to the Architect as a request for information in such form as the Architect may require.

§ 3.2.2 Any design errors or omissions noted by the Contractor during this review shall be reported promptly to the Architect, but it is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional unless otherwise specifically provided in the Contract Documents. The

Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations, but any nonconformity discovered by or made known to the Contractor shall be reported promptly to the Architect.

§ 3.2.3 If the Contractor believes that additional cost or time is involved because of clarifications or instructions issued by the Architect in response to the Contractor's notices or requests for information pursuant to Sections 3.2.1 and 3.2.2, the Contractor shall make Claims as provided in Sections 4.3.6 and 4.3.7. If the Contractor fails to perform the obligations of Sections 3.2.1 and 3.2.2, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations. The Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents or for differences between field measurements or conditions and the Contract Documents unless the Contractor recognized such error, inconsistency, omission or difference and knowingly failed to report it to the Architect.

§ 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 the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the Owner and Architect and shall not proceed with that portion of the Work without further written instructions from the Architect. If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any resulting loss or damage.

§ 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 or entities performing portions of the Work for or on behalf of the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed 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 may make substitutions only with the consent of the Owner, after evaluation by the Architect and in accordance with a Change Order.

§ 3.4.3 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 to 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 and 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 provided by the Contractor which are 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 building permit and other permits and 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.

§ 3.7.2 The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations and lawful orders of public authorities applicable to 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 appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.8 ALLOWANCES

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents:

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances;
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.8.3 Materials and equipment under an allowance shall be selected by the Owner in sufficient time to avoid delay in the Work.

§ 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's and Architect's information a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised 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 which is coordinated with the Contractor's construction schedule and allows the Architect reasonable time to review submittals.

§ 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Architect.

§ 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 field changes and selections made during construction, and one record copy of 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 which 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 by the Contract Documents the way by which 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 Section 4.2.7. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals which are not required by the Contract Documents may be returned by the Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, 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 which are not marked as reviewed for compliance with the Contract Documents and approved by the Contractor may be returned by the Architect without action.

§ 3.12.6 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.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Architect.

§ 3.12.8 The Work shall be in accordance with approved submittals except that 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 (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the 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. In the absence of such written notice the Architect's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services which constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. The Contractor shall not be required to provide professional services in violation of applicable law. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided the Owner and Architect have specified to the Contractor all performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review, approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

§ 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 or 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, PATENTS AND COPYRIGHTS

§ 3.17.1 The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and 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 or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner or Architect. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a copyright or 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 and to the extent claims, damages, losses or expenses are not covered by Project Management Protective Liability insurance purchased by the Contractor in accordance with Section 11.3, 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), but only to the extent caused by the 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 Section 3.18.

§ 3.18.2 In claims against any person or entity indemnified under this Section 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 Section 3.18.1 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' compensation acts, disability benefit acts or other employee benefit acts.

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 If the employment of the Architect is terminated, the Owner shall employ a new Architect against whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the former Architect.

§ 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 an 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 one-year period for correction of Work described in Section 12.2. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified in writing in accordance with other provisions of the Contract.

§ 4.2.2 The Architect, as a representative of the Owner, will visit the site at intervals appropriate to the stage of the Contractor's operations (1) to become generally familiar with and to keep the Owner informed about the progress and quality of the portion of the Work completed, (2) to endeavor to guard the Owner against defects and deficiencies in the Work, and (3) to determine in general if the Work is being performed in a manner indicating that the Work, when fully 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 the quality or quantity of the Work. The Architect will neither have control over or charge of, nor be responsible for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, except as provided in Section 3.3.1.

§ 4.2.3 The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of 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 any other persons or entities 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 with each other through the Architect about matters arising out of or relating to the

Contract. 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 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, the Architect will have authority to require inspection or testing of the Work in accordance with Sections 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 or entities 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, all 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 Sections 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 Section 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 in writing within any time limits agreed upon or otherwise with reasonable promptness. If no agreement is made concerning the time within which interpretations required of the Architect shall be furnished in compliance with this Section 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 initial 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 initiated by written notice. The responsibility to substantiate Claims shall rest with the party making the Claim.

§ 4.3.2 Time Limits on Claims. Claims by either party must be initiated 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 initiated by written notice to the Architect and the other party.

§ 4.3.3 Continuing Contract Performance. Pending final resolution of a Claim except as otherwise agreed in writing or as provided in Section 9.7.1 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 4.3.4 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 conditions encountered are materially different, the Contract Sum and Contract Time shall be equitably adjusted, but 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 Section 4.4.

§ 4.3.5 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 Section 10.6.

§ 4.3.6 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 this Section 4.3.

§ 4.3.7 Claims for Additional Time

§ 4.3.7.1 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.

§ 4.3.7.2 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, could not have been reasonably anticipated and had an adverse effect on the scheduled construction.

§ 4.3.8 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, or of others for whose acts such party is legally responsible, 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 discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

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

§ 4.3.10 Claims for Consequential Damages. The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes:

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 4.3.10 shall be deemed to preclude an award of liquidated direct damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 4.4 RESOLUTION OF CLAIMS AND DISPUTES

§ 4.4.1 Decision of Architect. Claims, including those alleging an error or omission by the Architect but excluding those arising under Sections 10.3 through 10.5, shall be referred initially to the Architect for decision. An initial decision by the Architect shall be required as a condition precedent to mediation, arbitration or litigation of all Claims between the Contractor and Owner arising prior to the date final payment is due, unless 30 days have passed after the Claim has been referred to the Architect with no decision having been rendered by the Architect. The Architect will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 4.4.2 The Architect will review Claims and within ten days of the receipt of the Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Architect is unable to resolve the Claim if the Architect lacks sufficient information to evaluate the merits of the Claim or if the Architect concludes that, in the Architect's sole discretion, it would be inappropriate for the Architect to resolve the Claim.

§ 4.4.3 In evaluating Claims, the Architect may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Architect in rendering a decision. The Architect may request the Owner to authorize retention of such persons at the Owner's expense.

§ 4.4.4 If the Architect requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of such request, and shall either provide a response on the requested supporting data, advise the Architect when the response or supporting data will be furnished or advise the Architect that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Architect will either reject or approve the Claim in whole or in part.

§ 4.4.5 The Architect will approve or reject Claims by written decision, which shall state the reasons therefor and which shall notify the parties of any change in the Contract Sum or Contract Time or both. The approval or rejection of a Claim by the Architect shall be final and binding on the parties but subject to mediation and arbitration.

§ 4.4.6 When a written decision of the Architect states that (1) the decision is final but subject to mediation and 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.

§ 4.4.7 Upon receipt of a Claim against the Contractor or at any time thereafter, the Architect or the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Architect or the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 4.4.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines prior to resolution of the Claim by the Architect, by mediation or by arbitration.

§ 4.5 MEDIATION

§ 4.5.1 Any Claim arising out of or related to the Contract, except Claims relating to aesthetic effect and except those waived as provided for in Sections 4.3.10, 9.10.4 and 9.10.5 shall, after initial decision by the Architect or 30 days after submission of the Claim to the Architect, be subject to mediation as a condition precedent to arbitration or the institution of legal or equitable proceedings by either party.

§ 4.5.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be in accordance with the Construction Industry Mediation Rules of the American Arbitration Association currently in effect. Request for mediation shall be filed in writing with the other party to the Contract and with the American Arbitration Association. The request may be made concurrently with the filing of a demand for arbitration but, in such event, mediation shall proceed in advance of arbitration or legal or equitable proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order.

§ 4.5.3 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 4.6 ARBITRATION

§ 4.6.1 Any Claim arising out of or related to the Contract, except Claims relating to aesthetic effect and except those waived as provided for in Sections 4.3.10, 9.10.4 and 9.10.5, shall, after decision by the Architect or 30 days after submission of the Claim to the Architect, be subject to arbitration. Prior to arbitration, the parties shall endeavor to resolve disputes by mediation in accordance with the provisions of Section 4.5.

§ 4.6.2 Claims not resolved by mediation shall be decided by arbitration which, unless the parties mutually agree otherwise, shall be in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association currently in effect. The demand for arbitration shall be filed in writing with the other party to the Contract and with the American Arbitration Association, and a copy shall be filed with the Architect.

§ 4.6.3 A demand for arbitration shall be made within the time limits specified in Sections 4.4.6 and 4.6.1 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 Section 13.7.

§ 4.6.4 Limitation on Consolidation or Joinder. No arbitration arising out of or relating to the Contract 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 Claim 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.

§ 4.6.5 Claims and Timely Assertion of Claims. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 4.6.6 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 who 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 who 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 whom 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. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time 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 substitute.

§ 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, including the responsibility for safety of the Subcontractor's Work, 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 will 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 Section 14.2 and only for those subcontract agreements which the Owner accepts by notifying the Subcontractor and Contractor 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 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

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 in Section 4.3.

§ 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 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 contractor's 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 The Owner shall be reimbursed by the Contractor for costs incurred by the Owner which are payable to a separate contractor because of delays, improperly timed activities or defective construction of the Contractor. The Owner shall be responsible to the Contractor for costs incurred by the Contractor because of delays, improperly timed activities, damage to the Work or defective construction of a separate contractor.

§ 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 Section 10.2.5.

§ 6.2.5 The Owner and each separate contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 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, the Owner may clean up and the Architect will allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 GENERAL

§ 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.

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

§ 7.2.2 Methods used in determining adjustments to the Contract Sum may include those listed in Section 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 prior to agreement on 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 a mutually acceptable fixed or percentage fee; or
- .4 as provided in Section 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 Section 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 Section 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' 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 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change which 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 Pending final determination of the total cost of a Construction Change Directive to the Owner, amounts not in dispute for such changes in the Work shall be included in Applications for Payment accompanied by a Change Order indicating the parties' agreement with part or all of such costs. For any portion of such cost that remains in dispute, the Architect will make an interim determination for purposes of monthly certification for payment for those costs. That determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a claim in accordance with Article 4.

§ 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.

§ 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 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 and Owner. 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 the Contract Documents or 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 the commencement or progress of the Work by an act or neglect of the Owner or Architect, or of an employee of either, or of a 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 mediation and 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 Section 4.3.

§ 8.3.3 This Section 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 in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.8, such applications may include requests for payment on account of changes in the Work which have been properly authorized by Construction Change Directives, or by interim determinations of the Architect, but not yet included in Change Orders.

§ 9.3.1.2 Such applications may not include requests for payment for portions of the Work for which the Contractor does not intend to pay to a Subcontractor or material supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 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 the costs of 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 Section 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 evaluation of the Work 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, the 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 correction of minor deviations from the Contract Documents 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 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 Section 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 Section 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 withhold a Certificate for Payment or, because of subsequently discovered evidence, 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 for which the Contractor is responsible; including loss resulting from acts and omissions described in Section 3.3.2, because of:

- 1 defective Work not remedied;
- 2 third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;
- 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 a 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 or 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 Sections 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.

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors and suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, shall create any fiduciary liability or tort liability on the part of the Contractor for breach of trust or shall entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 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 shut-down, delay and start-up, plus interest as provided for in the Contract Documents.

§ 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 that 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 prior to final payment. 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.

§ 9.8.3 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 sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion.

§ 9.8.4 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.

§ 9.8.5 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. Upon such acceptance and consent of surety, if any, the Owner shall make payment of retainage applying to such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of 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 Section 11.4.1.5 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 Section 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 on-site visits 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 the final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 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 canceled 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.

§ 9.10.4 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.

§ 9.10.5 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.

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.

§ 10.2 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 or 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 Sections 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 Sections 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 Section 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 HAZARDOUS MATERIALS

§ 10.3.1 If reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner and Architect in writing.

§ 10.3.2 The Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to verify that it has been rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. The Contractor and the Architect will promptly reply to the Owner in

writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If either the Contractor or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. The Contract Time shall be extended appropriately and the Contract Sum shall be increased in the amount of the Contractor's reasonable additional costs of shut-down, delay and start-up, which adjustments shall be accomplished as provided in Article 7.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, 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 or substance presents the risk of bodily injury or death as described in Section 10.3.1 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) and provided that such damage, loss or expense is not due to the sole negligence of a party seeking indemnity.

§ 10.4 The Owner shall not be responsible under Section 10.3 for materials and substances brought to the site by the Contractor unless such materials or substances were required by the Contract Documents.

§ 10.5 If, without negligence on the part of the Contractor, the Contractor is held liable for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall indemnify the Contractor for all cost and expense thereby incurred.

§ 10.6 EMERGENCIES

§ 10.6.1 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 Section 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' compensation, disability benefit and other similar employee benefit acts which 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;
5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
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;
7. claims for bodily injury or property damage arising out of completed operations; and
8. claims involving contractual liability insurance applicable to the Contractor's obligations under Section 3.18.

§ 11.1.2 The insurance required by Section 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 Section 11.1 shall contain a provision that coverages afforded under the policies will not be canceled 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 Section 9.10.2. Information concerning reduction of coverage on account of revised limits or claims paid under the General Aggregate, or both, 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.

§ 11.3 PROJECT MANAGEMENT PROTECTIVE LIABILITY INSURANCE

§ 11.3.1 Optionally, the Owner may require the Contractor to purchase and maintain Project Management Protective Liability insurance from the Contractor's usual sources as primary coverage for the Owner's, Contractor's and Architect's vicarious liability for construction operations under the Contract. Unless otherwise required by the Contract Documents, the Owner shall reimburse the Contractor by increasing the Contract Sum to pay the cost of purchasing and maintaining such optional insurance coverage, and the Contractor shall not be responsible for purchasing any other liability insurance on behalf of the Owner. The minimum limits of liability purchased with such coverage shall be equal to the aggregate of the limits required for Contractor's Liability Insurance under Sections 11.1.1.2 through 11.1.1.5.

§ 11.3.2 To the extent damages are covered by Project Management Protective Liability insurance, the Owner, Contractor and Architect waive all rights against each other for damages, except such rights as they may have to the proceeds of such insurance. The policy shall provide for such waivers of subrogation by endorsement or otherwise.

§ 11.3.3 The Owner shall not require the Contractor to include the Owner, Architect or other persons or entities as additional insureds on the Contractor's Liability Insurance coverage under Section 11.1.

§ 11.4 PROPERTY INSURANCE

§ 11.4.1 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 written on a builder's risk "all-risk" or equivalent policy form in the amount of the initial Contract Sum, plus value of subsequent Contract modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional 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 Section 9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Section 11.4 to be covered, whichever is later. This insurance shall include interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Project.

§ 11.4.1.1 Property insurance shall be on an "all-risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for Architect's and Contractor's services and expenses required as a result of such insured loss.

§ 11.4.1.2 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 effect insurance which will protect the interests of the Contractor, Subcontractors and Sub-subcontractors in the Work, and by appropriate Change Order the cost thereof shall be charged 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 in writing, then the Owner shall bear all reasonable costs properly attributable thereto.

§ 11.4.1.3 If the property insurance requires deductibles, the Owner shall pay costs not covered because of such deductibles.

§ 11.4.1.4 This property insurance shall cover portions of the Work stored off the site, and also portions of the Work in transit.

§ 11.4.1.5 Partial occupancy or use in accordance with Section 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.

§ 11.4.2 **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.

§ 11.4.3 **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.

§ 11.4.4 If the Contractor requests in writing that insurance for risks other than those described herein or other special causes of loss 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.

§ 11.4.5 If during the Project construction period the Owner insures properties, real or personal or both, at 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 Section 11.4.7 for damages caused by fire or other causes of loss covered by this separate property insurance. All separate policies shall provide this waiver of subrogation by endorsement or otherwise.

§ 11.4.6 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 Section 11.4. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be canceled or allowed to expire, and that its limits will not be reduced, until at least 30 days' prior written notice has been given to the Contractor.

§ 11.4.7 **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 causes of loss to the extent covered by property insurance obtained pursuant to this Section 11.4 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.

§ 11.4.8 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 Section 11.4.10. 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.

§ 11.4.9 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 Section 4.6. If after such loss no other

special agreement is made and unless the Owner terminates the Contract for convenience, replacement of damaged property shall be performed by the Contractor after notification of a Change in the Work in accordance with Article 7.

§ 11.4.10 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 is made, the dispute shall be resolved as provided in Sections 4.5 and 4.6. The Owner as fiduciary shall, in the case of arbitration, make settlement with insurers in accordance with directions of the arbitrators. If distribution of insurance proceeds by arbitration is required, the arbitrators will direct such distribution.

§ 11.5 PERFORMANCE BOND AND PAYMENT BOND

§ 11.5.1 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.

§ 11.5.2 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 examination 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 examine 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 at the Owner's expense. If such Work is not in accordance with the Contract Documents, correction shall be at the Contractor's expense 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 BEFORE OR AFTER SUBSTANTIAL COMPLETION

§ 12.2.1.1 The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections and compensation for the Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.2 AFTER SUBSTANTIAL COMPLETION

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, 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 Section 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. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.4.

§ 12.2.2.2 The one-year period for correction of Work 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.

§ 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.3 The Contractor shall remove from the site portions of the Work which 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 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.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 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 which 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. Except as provided in Section 13.2.2, 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.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to an institutional lender providing construction financing for the Project. In such event, the lender shall assume the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate such assignment.

§ 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 there under, 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 that the Architect may be present for such procedures. The

Owner shall bear costs of tests, inspections or approvals which 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 Section 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 that the Architect may be present for such procedures. Such costs, except as provided in Section 13.5.3, shall be at the Owner's expense.

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

§ 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 Section 3.5, the date of any correction of the Work or failure to correct the Work by the Contractor under Section 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 consecutive days through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, for any of the following reasons:

- .1 issuance of an order of a court or other public authority having jurisdiction which requires all Work to be stopped;
- .2 an act of government, such as a declaration of national emergency which requires all Work to be stopped;

- .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 Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- .4 the Owner has failed to furnish to the Contractor promptly, upon the Contractor's request, reasonable evidence as required by Section 2.2.1.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, repeated suspensions, delays or interruptions of the entire Work by the Owner as described in Section 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.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven 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.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days 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 Section 14.1.3.

§ 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 take 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 Section 5.4; and
- .3 finish the Work by whatever reasonable method the Owner may deem expedient. Upon request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 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, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages 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 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay or interruption as described in Section 14.3.1. Adjustment of the Contract Sum shall include profit. 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 the Contract.

§ 14.4 TERMINATION BY THE OWNER FOR CONVENIENCE

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall:

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.

SECTION 01010 - SUMMARY OF WORK

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 PROJECT DESCRIPTION

- A. The Project consists of the reroofing of an existing school building, as shown on Contract Documents prepared by Hudson + Associates, Architects dated September 13, 2008.

Project Name: York High School Metal Rood Replacement – V Building.
9300 George Washington Highway
Yorktown, VA 23692

Owner: York County School Division
302 Dare Road
Yorktown, VA 23692

Architect: Hudson + Associates, Architects PLLC
120 West Queens Way, Suite 201
Hampton, VA 23669

1.3 CONTRACTOR USE OF PREMISES

- A. General: Use of premises, work and storage areas shall be discussed at the pre-construction conference. In general, areas will be made available immediately adjacent to the building for the storage of materials and work may be carried on between the hours of 6:30 am and 9:00 pm.

1.4 OWNER OCCUPANCY

- A. Full Owner Occupancy: Cooperate with the Owner during construction to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with the Owner's operations.

1.5 CONTRACT TIME

- A. The Contractor shall have access to the site commencing with the Notice to Proceed. **The Work shall start no earlier than June 17, 2010 and all work must be substantially completed by August 6, 2010.** Final Completion shall be no later than September 7, 2010. This time frame makes allowance for a total of 10 rain days. A day will be considered a rain day when, on a work day, it rains at the job site so less than 4 hours of production can occur or when the chance of rain exceeds 70% as reported by a source agreed upon at the pre-construction meeting. Days that are rain days will be established by mutual agreement on that day, but the Owner will have final authority on that day to establish whether or not the day will be considered a rain day. The Contractor's failure to make a rain day claim on the day of the occurrence will be interpreted as a "no-claim".
- B. There will be a prebid meeting at the school on Wednesday, February 11, 2010 at 10:00am

1.6 SCOPE OF WORK

- A. This project includes the removal of the existing 9,125 square feet of metal roof system on a pre-engineered building, and installation of a new (20 yr Warranty) mechanically seamed standing seam metal roof system over new draped fiberglass insulation. Roof top equipment will be removed, salvaged and reinstalled as indicated on the drawings. This work will include all necessary mechanical and electrical work associated with the disposition of the roof top equipment. The roof top equipment removal and reinstallation will require a crane. The roof replacement also includes the replacement of 948 square feet of metal canopy roof.
- B. The Owner has conducted asbestos testing of the roof and found no asbestos containing materials. The test results are available for viewing by contacting Mr. Frank Pitchford (fpitchford@ycsd.york.va.us) at the York County School Division School Board Office at 302 Dare Road, Grafton, VA 23692.

1.7 MISCELLANEOUS PROVISIONS

- A. The Contractor will perform all mechanical & electrical work associated with the connections, disconnect, rough in, etc. of all roof top equipment including condenser & fans, which will coincide with the roofing contract. The Roofing contractor will be responsible for maintaining the watertight integrity of the building during the entire project.
- B. The Contractor shall protect the existing facilities at all times during the course of construction. Any damages caused or patching needed as a result of their activities shall be repaired at no additional cost to the Owner. In general, patching, repair, and renovation work is intended to match, compliment and align with existing conditions.
- C. The Contractor is to maintain the structural integrity of the existing building at all times. At no time is the removal or demolition of a structural element to occur without the approval of the Owner.
- D. The Contractor must have a minimum of five (5) years experience and must have completed three (3) projects of a similar size and scope within the past three (3) years, the Contractor shall submit with the bid, a name, address and phone number of the contact, for each of these similar projects.
- E. Contractor **shall not** have access to lounges, vending machines, restrooms or telephones in the existing school building. See Section 01500 for temporary facilities requirements.
- F. Smoking is **not allowed** on school property at any time, during the project.
- G. Condition of the Existing Building: The Roofing Contractor will be responsible for maintaining the building in a weathertight condition throughout the construction period and repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period. Any damages caused to the Owner's property or property of any of the Owner's employees as a result of the Contractor's operations shall be repaired to the condition before the damage occurred, at the Contractor's expense. This includes the removal of asphalt spills on the building or surrounding areas, unless the Contractor can specifically prove that the spill was not the result of his work.
- H. The Contractor shall reseed and refurbish any areas of the site damaged by the Contractor's operations. Refurbishing shall include the filling of any ruts created by the Contractor's equipment, and the reestablishment of grass in these and any other areas where grass has been damaged during the course of the work.

1.8 FEES AND PERMITS

- A. Unless otherwise provided in the Contract Documents, the Contractor shall apply for and obtain all public permits, unless noted otherwise. Such permits include but are not necessarily limited to the following:
 - 1. Building permit
 - 2. Mechanical and electrical permits
- B. York County will forgive the permit cost.

PART 2 - PRODUCTS (Not applicable).

PART 3 - EXECUTION (Not applicable).

END OF SECTION 01010

SECTION 01026 - UNIT PRICES

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 specifies administrative and procedural requirements for unit prices.
- B. A unit price is an amount proposed by Bidders and stated on the Bid Form as a price per unit of measurement for materials or services that will be added to or deducted from the Contract Sum by Change Order in the event the estimated quantities of Work required by the Contract Documents are increased or decreased.
- C.1 Unit prices include all necessary material, overhead, profit and applicable taxes.
- D. The Owner reserves the right to reject the Contractor's measurement of work-in-place that involves use of established unit prices, and to have this Work measured by an independent surveyor acceptable to the Contractor at the Owner's expense.
- E. Contractor shall not proceed with work listed herein that will incur charges beyond what is included in the Original Contract Price of this job without specific authorization by the Owner, or such method approval as he shall deem acceptable.
- F. Schedule: A "Unit Price Schedule" is included below. Specification Sections referenced in the Schedule contain requirements for materials and methods described under each unit price.

PART 2 - PRODUCTS (Not Applicable).

PART 3 – EXECUTION

3.1 UNIT PRICE SCHEDULE

- A. Item No. 1 – Treat minor rusted purlins with rust converting primer Labor and Material
 - 1. Description: Paint structural purlins to remain with rust converting primer as directed by the Architect.
 - a. Unit of Measurement: Linear foot of rusted purlin.

END OF SECTION 01026

SECTION 01027 - APPLICATIONS FOR PAYMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements governing the Contractor's Applications for Payment.

1.3 SCHEDULE OF VALUES

- A. Contractor must coordinate preparation of the Schedule of Values with preparation of the Contractor's Construction Schedule.
- B. Each Sub-Contractor shall coordinate preparation of this Schedule of Values for its part of the Work with preparation of the General Contractors' Construction Schedule and Schedule of Values.
- C. Correlate line items in the Schedule of Values with other required administrative schedules and forms, including:
 - 1. Contractor's construction schedule.
 - 2. Application for Payment form.
 - 3. List of subcontractors.
- D. Submit the Schedule of Values to the Architect at the earliest feasible date, but in no case later than 14 days before the date scheduled for submittal of the initial Application for Payment.
- E. Format and Content: The project Schedule of Values shall include but is not limited to the following line items; Provide separate lines for labor and material values for items w/ a asterisk before them:
 - 1. Division 1
 - a. Superintendent
 - b. Bond
 - c. Insurances
 - d. Utilities/Equipment & Temporary Facilities
 - 2. Division 2
 - a. Demolition - Roof
 - b. Demolition - Canopy
 - c. Turf and landscaping repairs

3. Division 5
 - a. Galvanized Metal Purlins
4. Division 7
 - a. *Metal Roofing
 - b. *Draped Roof Insulation
 - c. *Gutters & Downspouts
 - d. *Edge Fascias
 - e. *Rake Trim
 - f. *Miscellaneous Flashings
 - g. *FMP
 - h. Sealants
5. Division 9
 - a. Painting
6. Division 15
 - a. *Air cooled condenser removal and reinstallation (including crane).
7. Division 16
 - a. *Electrical disconnects and reconnects at RTE

*Provide separate material and labor values.

F. Identification: Include the following Project identification on the Schedule of Values:

1. Project name and location.
2. Name of the Architect.
3. Project number.
4. Contractor's name and address.
5. Date of submittal.

G. **Round amounts off to the nearest whole dollar; the total shall equal the Contract Sum.**

H. Schedule Updating: Update and resubmit the Schedule of Values when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.4 APPLICATIONS FOR PAYMENT:

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by the Architect and paid for by the Owner.
- B. The initial Application for Payment, the Application for Payment at time of Substantial Completion, and the final Application for Payment involve additional requirements.
- C. Payment Application Times: Each Application for Payment shall be submitted by the first day of each month. The period of construction Work covered by each Application for Payment is the period from the first to the last day of each month for the duration of the construction period.

- D. Payment Application Forms: Use AIA Document G 702 and Continuation Sheets G 703 as the form for Application for Payment.
- E. Application Preparation: Complete every entry on the form, including notarization and execution by person authorized to sign legal documents on behalf of the Owner. Incomplete applications will be returned without action.
- F. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions have been made.
- G. Include amounts of Change Orders and Construction Change Directives issued prior to the last day of the construction period covered by the application.
- H. Transmittal: Submit 4 executed copies of each Application for Payment to the Architect by means ensuring receipt within 24 hours; one copy shall be complete, including waivers of lien and similar attachments.
- I. Transmit each copy with a transmittal form listing attachments, and recording appropriate information related to the application in a manner acceptable to the Architect.
- J. Waiver Delays: Submit each Application for Payment with the Contractor's waiver of mechanics lien for the period of construction covered by the application.
- K. Submit final Application for Payment with or preceded by final waivers from every entity involved with performance of Work covered by the application who could lawfully be entitled to a lien.
- L. Waiver Forms: Submit waivers of lien on forms, and executed in a manner, acceptable to Owner.
- M. Initial Application for Payment: Administrative actions and submittals that must precede submittal of the first Application for Payment include the following:
 - 1. List of subcontractors.
 - 2. List of principal suppliers and fabricators.
 - 3. Schedule of Values.
 - 4. Contractor's Construction Schedule (preliminary if not final).
 - 5. Copies of building permits
- N. Application for Payment at Substantial Completion: Following issuance of the Certificate of Substantial Completion, submit an Application for Payment; this application shall reflect any Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- O. Administrative actions and submittals that shall **precede** this application include:

1. Occupancy permits and similar approvals.
 2. Final cleaning.
 3. Application for reduction of retainage, and consent of surety.
 4. Advice on shifting insurance coverage.
 5. List of incomplete Work, recognized as exceptions to Architect's Certificate of Substantial Completion.
 6. All warranties and guarantees.
- P. Final Payment Application: Administrative actions and submittals which must precede or coincide with submittal of the final payment Application for Payment include the following:
1. Completion of Project closeout requirements.
 2. Completion of items specified for completion after Substantial Completion.
 3. Assurance that unsettled claims will be settled.
 4. Assurance that Work not complete and accepted will be completed without undue delay.
 5. Transmittal of required Project construction records to Owner.
 6. Proof that taxes, fees and similar obligations have been paid.
 7. Removal of temporary facilities and services.
 8. Removal of surplus materials, rubbish and similar elements.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01027

SECTION 01200 - PROJECT MEETINGS

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 specifies administrative and procedural requirements for project meetings including:
 - 1. Pre-Construction Meeting.
 - 2. Progress Meeting(s)
 - 3. Final Inspection Meeting
- B. Construction schedules are specified in Section 01300 - "Submittals"
- C. Pre-construction Conference An organizational meeting will be held at the Project site prior to commencement of construction activities to clarify responsibilities and procedures as outlined below.
- D. Agenda: Topics will include items of significance that could affect progress of the job, such as:
 - 1. Contractor's schedule and work plan including staffing.
 - 2. Estimated time of completion and critical path items.
 - 3. Deliveries, site access, and storage of materials.
 - 4. Off-site fabrication issues.
 - 5. Site Utilization, Temporary Facilities.
 - 6. Hours of Work and Job Safety.
 - 7. Hazards and risks.
 - 8. Quality, Work standards and cleanup.
 - 9. Handling of deck replacement-quantification and approval.
 - 10. Change Orders and RFP procedures.
 - 11. Documentation for (and handling of) payment requests.
 - 12. Responsibility and Authority of Field Representatives
 - 13. Distribution of phone names and numbers of all present
 - 14. Substantial Completion, Rain Days, Liquidated Damages
- E. Attendees: The Owner, the Architect, the Contractor and his superintendent, and a representative of the Roofing Manufacturer shall each be at the conference.

1.3 PROGRESS MEETINGS

- A. Progress meetings will be held at the Project Site **twice a month** for the purpose of reviewing job progress.

1. Attendees: The Architect, the Contractor and his superintendent, and any subcontractor or supplier whose performance will have an impact on the quality or timeliness of job completion will be present at this meeting. The Subcontractor's representative at these meetings shall be familiar with the project and authorized to make decisions on matters relating to job progress.
2. Agenda: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule: whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions or overtime work will be required to ensure that current and subsequent activities will be completed within the Contract Time.
3. Review the present and future needs of each entity present, including such items as:
 - a. Time and Sequences
 - b. Deliveries and critical path items
 - c. Off-site fabrication issues
 - d. Access
 - e. Temporary facilities and services
 - f. Hours of Work
 - g. Hazards and risks
 - h. Quality, Work standards and cleanup
 - i. Change Orders and unit price work done to date
 - j. Documentation of information for payment requests
- B. Schedule Updating: Revise the construction schedule once a month after the mid-month progress meeting where revisions to the schedule have been made or recognized. Issue the revised schedule every month.
- C. Final Inspection Meeting: After the work is complete, there shall be a final meeting at the project site to examine the roof, verify all work is complete and all requirements are met for issuing contractor and manufacturer's warranties to the Owner.
 1. Attendees: The Owner, the Architect, the Contractor and his superintendent, and a representative of the roofing manufacturer shall be at the meeting.

PART 1 - PRODUCTS (Not Applicable)

PART 2 - EXECUTION (Not Applicable)

END OF SECTION 01200

SECTION 01260 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Sections include the following:
 - 1. Division 01 Section "Allowances" for procedural requirements for handling and processing allowances.
 - 2. Division 01 Section "Unit Prices" for administrative requirements for using unit prices.
 - 3. Division 01 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.

1.3 MINOR CHANGES IN THE WORK

- A. Architect will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Proposal Requests issued by Architect are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
 - 2. Within 20 days after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.

- b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change to Architect.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include costs of labor and supervision directly attributable to the change.
 - 5. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 6. Comply with requirements in Division 01 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.
 - C. Proposal Request Form: Use AIA Document G709 for Proposal Requests.
- 1.5 CHANGE ORDER PROCEDURES
- A. On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

SECTION 01300 - SUBMITTALS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for submittals required for performance of the Work, including:
 - 1. Submittal Schedule
 - 2. Contractor's construction schedule
 - 3. Shop Drawings
 - 4. Product Data
 - 5. Samples
 - 6. Schedule of Values

- 1.3 Administrative Submittals: Refer to other Division-1 Sections and other Contract Documents for requirements for administrative submittals.

1.4 SUBMITTAL SCHEDULE

- A. The Contractor shall prepare a complete schedule of submittals. Submit the schedule within 10 days of the date required for establishment of the Contractor's construction schedule.
 - 1. Coordinate submittal schedule with the list of subcontracts, schedule of values and the list of products as well as the Contractor's construction schedule.
 - 2. Prepare the schedule in Specification Division order using the schedule shown at the end of this section as a template. Provide the following information for each submittal:
 - a. Submittal reference number for each item.
 - b. Review Status
 - c. Name of subcontractor.
 - d. Description of the part of the Work covered.
 - 3. Scheduled date for resubmittal.

1.5 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. **Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.**
- B. The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

- C. Processing: Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for resubmittals.
- D. Allow two weeks for initial review. If possible, review will be done more quickly. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. The Architect will promptly advise the Contractor when a submittal being processed must be delayed for coordination. No extension of Contract Time will be authorized because of failure to transmit submittals to the Architect sufficiently in advance of the Work to permit processing.
- E. Submittal Preparation: Place a permanent label, title block or cover sheet on each submittal for identification. Indicate the name of the entity that prepared each submittal.
 - 1. Provide a space approximately 4" x 5" on the label, title block or cover sheet on Submittal to record the Architect's review and approval markings and the action taken. Include the following information on the label, title block or cover sheet, for processing and recording action taken.
 - a. Project name and date
 - b. Name and address of Contractor and Supplier
 - c. Number and title of appropriate Specification Section
 - d. Drawing number and detail references, as appropriate
- F. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to Architect using a transmittal form. Submittals received from sources other than the contractor will be returned without action.
 - 1. On the transmittal, record relevant information and requests for data including submittal number and description (Note: Description should include whether it is product data or a shop drawing and what material it relates to, i.e. paint, roofing, sheet metal, etc.). On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. **Include Contractor's certification that information complies with Contract Document requirements. If submittal comes without this certification, it will be returned without review.**
- G. Transmittal Form: Use AIA Document G810 or equal.

1.6 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Submission at time of Bid: Prepare a simple horizontal bar-chart type Contractor's construction schedule. Submit before the preconstruction roofing conference.
 - 1. Provide a separate time bar for each significant construction activity. Provide continuous vertical line to identify the first working day of each week.
 - 2. Prepare the schedule on a sheet, of sufficient width to show data for the entire construction period.
 - 3. Show each activity in proper sequence, and highlight critical path items.

4. Plan for completion in advance of the date established for Substantial Completion. Indicate Substantial Completion on the schedule to allow time for the Architect's procedures necessary for certification of Substantial Completion.
- B. Schedule Updating: Revise the schedule after the progress meeting or at times where revisions have been recognized or made. Issue the updated schedule concurrently with report of each meeting or when submitting a Request for Payment.

1.7 SHOP DRAWINGS

- A. Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings.
- B. Shop Drawings include fabrication and installation drawings, schedules, and similar drawings. Include the following information:
 1. Dimensions
 2. Identification of products and materials included
 3. Compliance with specified standards
 4. Notation of coordination requirements
 5. Notation of dimensions established by field measurement
- C. Sheet size: Submit Shop Drawings on sheets at least 8-1/2" x 11" but no larger than 24" x 36".
- D. Submittal: Submit seven copies of all shop drawings for review. For shop drawings submitted in format larger than 8-1/2x11, submit one reproducible copy and three prints. The Architect will retain two, and will return the others marked with action taken and corrections or modifications required. (One of these two copies shall be marked up and maintained as a Record Document in the Architect's file. The remaining copy will be distributed to the Owner upon Project Closeout.) One copy of the submittal is forwarded to the Owner with action taken and the remaining copies are forwarded to the Contractor. See Section 01700, "Project Closeout" for additional information on Record Document requirements.
- E. Do not use Shop Drawings for construction unless they have been reviewed and approved by the Architect.

1.8 PRODUCT DATA

- A. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, etc. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings".
- B. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:
 1. Submittal number

2. Specification division
 3. Manufacturer's printed recommendations
 4. Compliance with recognized trade association standards
 5. Compliance with recognized testing agency standards
 6. Application of testing agency labels and seals
 7. Notation of dimensions verified by field measurement
- C. Do not submit Product Data until compliance with requirements of the contract Documents has been confirmed. Stamp and sign data after reviewing it for compliance to indicate that such a review has been made and that the data does indeed comply with the specified requirements.
- D. Submittals: Submit 7 copies of each required submittal; The Architect will retain two and will return the others marked with action taken and corrections or modifications required.
- E. Distribution: Furnish copies of approved submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms. Do not proceed with installation until an applicable copy of Product Data is in the installer's possession. Do not permit use of unmarked copies of Product Data in connection with construction.

1.9 SAMPLES

- A. Submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture and pattern. Mount, display, or package Samples in the manner specified to facilitate review of qualities indicated. Prepare Samples to match the Architect's Sample. Include the following:
1. Generic description of the Sample
 2. Product name or name of manufacturer
 3. Compliance with recognized standards
- B. Submit Samples for review of kind, color, pattern and texture, for a final check of these characteristics with other elements, and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed. Refer to other Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation and similar construction characteristics.
- C. Submittals: Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, submit 4 sets; one will be retained marked with the action taken. Maintain at least one set of Samples, as returned, at the Project site, for quality comparisons throughout the course of construction.
- D. Distribution of Samples: Prepare and distribute additional sets to subcontractors, manufacturers, fabricators, suppliers, installers, and others as required for performance of the Work. Show distribution on transmittal forms.

1.10 SCHEDULE OF VALUES

- A. Submit a schedule of values along with other product submittals consisting of a tabular

breakdown of individual elements of the work in sufficient detail to be able to pay for individual items and see where the costs are. Include the project name and address, Contractor's name and address, Contract Purchase Order number, etc. and show the breakdown of what percentage of the total job cost is in each line item. This breakdown will be used for Applications for Payment. Include administrative items such as bond and supervision, insurance, etc. as applicable.

- B. Application for payment must be based upon the approved schedule of values and submitted on AIA Application for Payment Forms G702 and G703, only. State of Virginia forms will not be accepted.

1.11 ARCHITECT'S ACTION

- A. Except for submittals for record, information or similar purposes, where action and return is required or requested, the Architect will review each submittal, mark to indicate action taken, and return promptly. **Compliance with specified characteristics is the Contractor's responsibility.**
- B. Action Stamp: The Architect will stamp each submittal with a uniform, self-explanatory action stamp. The stamp will be appropriately marked, as follows, to indicate the action taken:
- C. Reviewed: Where submittals are marked "Reviewed" that part of the Work covered by the submittal may proceed provided it complies with requirements of the contract Documents; final acceptance will depend upon that compliance.
- D. Comments Attached: When submittals are marked "Comments Attached," that part of the Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents; final acceptance will depend on that compliance. If resubmittal is also required, promptly respond, in order to acknowledge that requested changes will be made.
- E. Rejected: When submittal is marked "Rejected" and "Resubmit" do not proceed with that part of the Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal in accordance with the notations; resubmit without delay. Repeat if necessary to obtain a different action mark. Do not permit submittals marked "Rejected" and "Resubmit" to be used at the Project site, or elsewhere where Work is in progress.
- F. Confirm: Where a submittal is marked "Confirm" the comment indicates an "approved as noted" status and the Contractor must confirm to the Architect in writing that they will comply with the "as noted" comments before proceeding with that part of the Work.
- G. Other Action: Where a submittal is primarily for information or record purposes, special processing or other activity, the submittal will be returned, marked "Reviewed".

PART 2 - PRODUCTS (Not Applicable)

PART 3 - PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01300

SECTION 01500 - TEMPORARY FACILITIES

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 specifies requirements for temporary services and facilities, including utilities, construction and support facilities, security and protection.
- B. Temporary construction and support facilities required include but are not limited to:
 - 1. Water service and distribution
 - 2. Temporary electric power and lights
 - 3. Storage facilities for construction materials.
 - 4. Sanitary facilities, including drinking water.
 - 5. Waste disposal services.
- C. Power and water are available at the school for no cost to the Contractor. However, the Contractor shall make all necessary connections and distribution to serve the project. The Contractor shall remove distribution and connection at the conclusion of the work.
- D. Security and protection facilities required include but are not limited to:
 - 1. Temporary fire protection.
 - 2. Barricades, warning signs, lights.
 - 3. Environmental protection.

1.3 QUALITY ASSURANCE

- A. Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction, including but not limited to:
 - 1. Building Code requirements.
 - 2. Health and safety regulations.
 - 3. Police, Fire Department and Rescue Squad rules.
 - 4. Environmental protection regulations.
- B. Standards: Comply with NFPA Code 241, "Building Construction and Demolition Operations", ANSI-A10 Series standards for "Safety Requirements for Construction and Demolition".
- C. Refer to "Guidelines for Bid Conditions for Temporary Job Utilities and Services", prepared jointly by AGC and ASC, for industry recommendations.

1.4 PROJECT CONDITIONS

- A. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload facilities, or permit them to interfere with progress. Do not allow hazardous dangerous or unsanitary conditions, or public nuisances to develop or persist on the site. Remove asphalt mops from roof at the end of each working day.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Tarpaulins: Provide waterproof, fire-resistant, UL labeled tarpaulins with flame-spread rating of 15 or less. For temporary enclosures provide translucent nylon reinforced laminated polyethylene or polyvinyl chloride fire retardant tarpaulins.
 - 1. For tarpaulins to protect from Asphalt spills on the interior of the building provide tarpaulins that resist melting when exposed to hot asphalt. These tarpaulins should only be used over critical care items i.e. Computers, Telephones Televisions, etc.
- B. Drinking Water Facilities: Provide containerized tap-dispenser bottled-water type drinking water units, including paper cup supply.
- C. Temporary Toilet Units: Provide self-contained single-occupant toilet units of the chemical, aerated recirculation, or combustion type, properly vented and fully enclosed with a glass fiber reinforced polyester shell or similar nonabsorbent material, and supply unit(s) with toilet tissue.
- D. First Aid Supplies: Comply with governing regulations.
- E. Fire Extinguishers: Provide hand-carried, portable, UL-rated, class "ABC" dry chemical extinguishers, or a combination of extinguishers of NFPA recommended classes for the exposures, Comply with NFPA 10 and 241 for classification, extinguishing agent and size required by location and class of fire exposure.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the 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.
- C. Locate storage trailers, sanitary facilities and other temporary support facilities for easy access, and where approved by the Owner.
- D. Maintain temporary support facilities until Substantial Completion, or until personnel will no longer be working on the roof.
- E. Sanitary facilities include temporary toilets, wash facilities and drinking water fixtures. Comply with regulations and health codes for the type, number, location, operation and maintenance of fixtures and facilities. Install where facilities will best serve the Project's

needs.

1. Provide toilet tissue, paper towels, paper cups and similar disposable materials for each facility. Provide covered waste containers for used material.
- F. Toilets: Install self-contained toilet units in a location approved by the Owner. Shield toilets to ensure privacy. Use of pit-type privies will not be permitted. Have toilets regularly serviced to keep them clean and in good condition.
- G. Collection and Disposal of Waste and Demolition Debris: Collect waste from construction areas and elsewhere daily and remove construction debris from the site weekly or as soon as containers are nearly fully. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than 7 days during normal weather or 3 days when the temperature is expected to rise above 80 deg F (27 deg C). Handle hazardous, dangerous, or unsanitary waste by containerizing properly. Dispose of material in a lawful manner.

3.2 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Temporary Fire Protection: Comply with NFPA 10 "Standard for Portable Fire Extinguishers," and NFPA 241 "Standard for Safeguarding Construction, Alterations and Demolition Operations." Locate fire extinguishers near tankers and kettles and on the roof during roofing operations.
- B. Barricades: Provide temporary barricades where roofing operations are going on to keep children away.
- C. Security: Where materials and equipment must be stored, and are of value or attractive for theft, provide a secure lockup. Remove all equipment from around the building at the end of each working day that would provide a means of egress to the roof, and lock up asphalt kettles at days end.
- D. Environmental Protection: Provide protection, operate temporary facilities and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable effects might result. Avoid use of tools and equipment which produce harmful noise. Restrict use of noise making tools and equipment to hours that will minimize complaints from persons or firms near the site.

3.3 OPERATION, TERMINATION AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended uses to minimize waste and abuse.
- B. Maintenance: Maintain facilities in good operating condition until removal.
- C. Termination and Removal: Unless the Architect requests that it be maintained longer, remove each temporary facility at Substantial Completion.

END OF SECTION 01500

SECTION 01700 - PROJECT CLOSEOUT

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 specified administrative and procedural requirements for project closeout, including:
 - 1. Establishment of Substantial Completion
 - 2. Final Acceptance
 - 3. Inspection procedures
 - 4. Project record document submittal
 - 5. Submittal of warranties
 - 6. Final cleaning and Repairs
- B. Closeout requirements for specific construction activities are included in the appropriate Sections in Divisions-1 through 16.

1.3 SUBSTANTIAL COMPLETION

- A. General: **It is the Contractor's responsibility to initiate procedures for obtaining a Certificate of Substantial Completion. This date of Substantial Completion must be before the expiration of the Contract Time, or liquidated damages will be assessed. At Substantial Completion, all work must be complete with the exception of punch list items. "Substantial Completion" is defined in AIA 201.**
- B. Preliminary Procedures: Before requesting inspection for Certificate of Substantial Completion, complete the following. List exceptions in the request.
- C. Make a "punchlist" of items needing corrective action. This list should be thorough and list all items required to achieve Final Completion. **Failure to provide a complete punchlist will be grounds for the withholding of the Certificate of Substantial Completion.** Punchlist items relate to work accomplished but requiring correction or modification to satisfy the project requirements. **Work that is incomplete shall not be included on the punchlist for substantial completion and shall be completed prior to initiating substantial completion procedures.**
- D. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete. If not already provided, include supporting documentation for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the Contract Sum.
- E. Submit specific warranties and guarantees, final certifications, and similar documents
- F. Advise Owner of pending insurance changeover requirements.

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- G. Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities; include occupancy permits, operating certificates and similar releases.
- H. Submit record drawings, and similar final record information.
- I. Complete final clean up requirements, including the restoration of any damage to the building or site which occurred during the course of construction.

1.4 INSPECTION PROCEDURES

- A. On receipt of a request for inspection, the Architect will either proceed with inspection or advise the Contractor of unfilled requirements. The Architect will prepare the Certificate of Substantial Completion following inspection, if aforementioned requirements are met, or advise the Contractor of construction that must be completed or corrected before the certificate will be issued. The Architect will repeat inspection when requested and assured that the Work has been substantially completed. Results of the completed inspection will form the basis of requirements for final acceptance. Coordinate, if possible, this inspection with the Post-Application Roofing Conference as outlined in Section 01200, "Meetings".

1.5 FINAL ACCEPTANCE

- A. Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.
- B. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
- C. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
- D. Submit a certified copy of the Architect's final inspection list of items to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance, and the list has been endorsed and dated by the Architect.
- E. Submit consent of surety to final payment.
- F. Submit a final liquidated damages settlement statement, if applicable.
- G. Reinspection Procedures: The Architect will reinspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except items whose completion has been delayed because of circumstances acceptable to the Architect. Upon completion of reinspection, the Architect will prepare a certificate of final acceptance, or advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance. If necessary, reinspection will be repeated. **If more than two inspections are needed following the issuing of the Certificate of Substantial Completion, an amount of \$500 will be deducted from the amount owed the Contractor for each subsequent inspection required of the Architect to verify that the Contractor's work is completed.**

1.6 RECORD DOCUMENT SUBMITTALS

- A. Record Drawings: Maintain a clean, undamaged set of blue or black line white-prints of contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date. **It is the Contractor's responsibility to maintain this record and the records indicated below. Failure to keep record of the information required herein will result in additional charges to the Contractor at Final Completion, as required to establish this information from other sources.**
- B. Make record drawings to show locations and quantities of any roof deck replacement.
- C. Mark record sets with red erasable pencil.
- D. Mark new information that is important to the Owner, but was not shown on Contract Drawings or Shop Drawings, such as conditions uncovered during the course of the work.
- E. Upon completion of the Work, submit Record Drawings to the Architect for the Owner's record.
- F. Record Specifications: Maintain one complete copy of the Project Manual, including addenda, and one copy of other written construction documents such as Field Orders, Change orders and Modifications issued in printed form during construction. Mark these documents to show substantial variations in actual Work performed in comparison with the text of the Specifications and modifications. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation. Note related record drawing information and Product Data. **Upon completion of the Work, submit record Specifications to the Architect for the Owner's record.**
- G. Record Product Data: Maintain one copy of each Product Data submittal. Mark these documents to show significant variations in actual Work performed in comparison with information submitted. Include variations in products delivered to the site, and from the manufacturer's installation instructions and recommendations. Give particular attention to concealed products and portions of the Work, which cannot otherwise be readily discerned later by direct observation. Note related Change Orders and mark-up of record drawings and Specifications. **Upon completion of mark-up, submit complete set of record Data to the Architect for the Owner's records.**
- H. Miscellaneous Record Submittals: Refer to other Specification Sections for requirements of miscellaneous record keeping and submittals in connection with actual performance of the Work. Immediately prior to the date or dates of Substantial Completion, complete miscellaneous records **including such documents as logs and daily reports**, and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Architect for the Owner's records.
- I. Maintenance Information: Submit information to the Owner from the manufacturer of the roof membrane describing proper maintenance procedures for roof components. Bind information into 3 ring binders along with warranties, etc.

1.7 SUBMITTAL OF WARRANTIES

- A. Submit two copies of the Roof Manufacturers warranty and two copies of the Roof

Contractor warranty.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 FINAL CLEANING AND REPAIRS

- A. General: General cleaning during construction is required by the General Conditions and included in Section "Temporary Facilities".
- B. Cleaning: Complete the following cleaning operations before requesting inspection for Certification of Substantial Completion:
 - C. Clean the site, including landscape development areas, of rubbish, litter and other foreign substances caused by construction operations. Sweep paved areas broom clean; remove stains, spills and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth even-textured surface.
 - D. Clean all exposed building components, whether existing or new of any stains or spills that occurred during construction.
- E. Repairs: Repair any damage to the property caused by construction operations to condition prior to start of construction in accordance with requirements of these specifications. Fill any holes or ruts created during construction with topsoil and reestablish grass in these and any other areas where grass has been damaged during the course of the work.
- F. Removal of Protection: Remove temporary protection and facilities installed for protection of the Work during construction.
- G. Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner.

END OF SECTION 01700

SECTION 01740 - WARRANTIES AND BONDS

PART 1 - GENERAL

1.1 RELATED PRODUCTS

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

1.2 SUMMARY

- A. This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturers standard warranties on products and special warranties.
- B. General closeout requirements are included in Section "Project Closeout"
- C. Specific requirements for warranties for the Work and products and installations that are specified to be warranted, are included in the individual Sections of Divisions-2 through -16.
- D. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product and installation warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor. **Acceptance of this Contract will constitute acceptance of the warranty and guarantee terms specified herein notwithstanding any printed information in the roofing manufacturer's standard literature, or claims for exception expressed after signing of the Contract.**

1.3 WARRANTY REQUIREMENTS

- A. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Roof Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
- B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The term and the conditions of the reinstated warranty shall be equal to the original warranty (the original terms shall apply).
- C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- D. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.
- E. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
- F. The Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work,

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until evidence is presented that entities required to countersign such commitments are willing to do so.

1.4 SUBMITTALS

- A. Submit written warranties to the Architect prior to the date certified for Substantial Completion. If the Architect's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.
- B. Forms for special warranties are included at the end of Section 07511. Prepare a written document utilizing the appropriate form, ready for execution by the contractor and manufacturer.
- C. Refer to individual Sections of Division-3 through -16 for specific content requirements, and particular requirements for submittal of special warranties.
- D. Form of Submittal: At Final Completion compile two copies of each required warranty and bond properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
- E. Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-12" by 11" paper.
- F. Identify each binder on the front and the spine with the typed or printed title "WARRANTIES AND BONDS, the project title, date of Substantial Completion, and the name of the Contractor".

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 01740

SECTION 02070 - SELECTIVE DEMOLITION

PART 1 - GENERAL:

1.1 RELATED DOCUMENTS:

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

1.2 DESCRIPTION OF WORK:

- A. Extent of selective demolition work is indicated on drawings.

1.3 JOB CONDITIONS:

- A. Occupancy: Owner will be occupying the building immediately adjacent to areas of selective demolition. The project is scheduled, so that students will not be in the school during working hours. However, teachers and administrative staff will be working in the building. Conduct selective demolition work in manner that will minimize need for disruption of Owner's normal operations. Provide minimum of 72 hours advance notice to Owner of demolition activities, which will severely impact Owner's normal operations.
- B. Condition of Structures: Owner assumes no responsibility for actual condition of items or structures to be demolished.
- C. Protections: Provide temporary barricades and other forms of protection as required to protect Owner's personnel and general public from injury due to selective demolition work.
 - 1. Provide protective measures as required to provide free and safe passage of Owner's personnel and general public to and from occupied portions of building. Advise the Owner which portions of the roof will be worked on the next day so that the Owner can coordinate his activities with the work on the roof.
 - 2. Protect from damage existing finish work that is to remain in place and becomes exposed during demolition operations. Do not conduct selective demolition work or allow traffic over sections of the roof that have already been reroofed.
 - 3. Protect floors with suitable coverings when necessary.
 - 4. Provide temporary weather protection during interval between demolition and removal of existing construction on exterior surfaces, and installation of new construction to insure that no water leakage or damage occurs to structure or interior areas of existing building.
 - 5. Remove protections at completion of work.
- D. Damages: Promptly repair damages caused to adjacent facilities by demolition work at no cost to Owner.
- E. Traffic: Conduct selective demolition operations and debris removal in a manner to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities.

1. Do not close, block or otherwise obstruct streets, walks or other occupied or used facilities without written permission from authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
- F. Access to the work areas of this contract shall not include foot traffic across existing roofs not in this contract or completed portions of the roof.
- G. Flame Cutting: Do not use cutting torches for removal.
- H. Do not interrupt utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction.
- I. Maintain fire protection services during selective demolition operations.
- J. Environmental Controls: Use water sprinkling, temporary enclosures, and other suitable methods to limit dust and dirt rising and scattering in air to lowest practical level. Comply with governing regulations pertaining to environmental protection.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION

3.1 INSPECTION:

- A. Prior to commencement of selective demolition work, inspect areas in which work will be performed. Photograph existing conditions to structure surfaces, equipment or to surrounding properties which could be misconstrued as damage resulting from selective demolition work; file with Owner's Representative prior to starting work.
- B. Cover and protect furniture, equipment and fixtures to remain from soiling or damage when demolition work is performed in rooms or areas from which such items have not been removed.
- C. Erect and maintain dust-proof partitions and closures as required to prevent spread of dust or fumes to occupied portions of the building.
- D. Where selective demolition occurs immediately adjacent to occupied portions of the building, construct dust-proof partitions of minimum 4" studs, 5/8" drywall (joints taped) on occupied side, 1/2" fire-retardant plywood on demolition side, and fill partition cavity with sound-deadening insulation.
- E. Provide weatherproof closures for exterior openings resulting from demolition work, but do not tear off more roofing and insulation than can be reroofed the same day.

3.2 DEMOLITION:

- A. Perform selective demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.
- B. Provide services for effective air and water pollution controls as required by local authorities having jurisdiction.

- C. Do not overload the roof structure when moving rooftop equipment and during demolition operations. If necessary, obtain structural engineering services to assure that the work can be accomplished without danger to structural components.
- D. If unanticipated mechanical, electrical or structural elements which conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict. Submit report to Owner's Representative in written, accurate detail. Pending receipt of directive from Owner's Representative rearrange selective demolition schedule as necessary to continue overall job progress without delay.

3.3 REMOVAL OF EXISTING ROOFING:

- A. At areas to be reroofed, remove the existing roofing system to the roof decking. Removal shall include, but not be limited to roof insulation, wood blocking, flashings (unless otherwise noted) at walls, edge flashings, roof top equipment and roof accessories and all other items incorporated therein. Contractor must repair, at his expense, any roof deck that he damages.
- B. **Remove only as much roofing as can be replaced with a completely new roof system and made watertight in a single day.**
- C. Clean all roof deck surfaces of loose material and other impediments that will be detrimental to application of the new materials.
- D. Damaged deck shall be repaired before reroofing, in compliance with other requirements of these specifications.

3.4 MATERIALS TO BE REMOVED AND REINSTALLED

- A. Carefully remove and store rooftop equipment for reinstallation unless indicated to be eliminated.

3.5 DISPOSAL OF DEMOLISHED MATERIALS

- A. All debris from roof demolition operations shall be removed from the roof immediately and deposited into trucks or dumpsters and hauled away from the site and properly disposed of at the Contractor's expense.
- B. Dumpsters or trucks shall be removed from the premises when they are full.
- C. Contractor shall periodically clean up the building roof and be generally responsible for keeping the building roof and area surrounding the building in a neat and orderly condition.
- D. If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling, and protection against exposure or environmental pollution.
- E. Burning of removed materials is not permitted on project site.

3.6 CLEANUP AND REPAIR

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- A. General: Upon completion of demolition work, remove tools, equipment, and demolished materials from site. Remove protection and leave interior areas vacuum-clean from any dust or debris that may have entered the building as a result of roofing operations, in time for school the next day.
- B. Repair demolition performed in excess of that required. Return elements of construction (and surfaces to remain) to condition existing prior to start operations. Repair adjacent construction or surfaces soiled or damaged by selective demolition work.

END OF SECTION 02070

SECTION 07411 - METAL ROOF PANELS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Exposed-fastener, lap-seam metal roof panels.
 - 2. Standing-seam metal roof panels.
- B. Related Sections:
 - 1. Division 05 Section "Cold-Formed Metal Framing" for cold-formed metal framing supporting metal roof panels.
 - 2. Division 07 Section "Sheet Metal Flashing and Trim" for field-formed fasciae, flashings, roof drainage systems, and other sheet metal work not part of metal roof panel assemblies.
 - 3. Division 07 Section "Joint Sealants" for field-applied sealants not otherwise specified in this Section.

1.3 DEFINITIONS

- A. Metal Roof Panel Assembly: Metal roof panels, attachment system components, miscellaneous metal framing, thermal insulation, and accessories necessary for a complete weathertight roofing system.

1.4 PERFORMANCE REQUIREMENTS

- A. General Performance: Metal roof panels shall comply with performance requirements without failure due to defective manufacture, fabrication, installation, or other defects in construction.
- B. Delegated Design: Design metal roof panel assembly, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.
- C. Air Infiltration: Air leakage through assembly of not more than 0.06 cfm/sq. ft. (0.3 L/s per sq. m) of roof area when tested according to ASTM E 1680 at the following test-pressure difference:
 - 1. Test-Pressure Difference: Negative 1.57 lbf/sq. ft. (75 Pa).

2. Positive Preload Test-Pressure Difference: Greater than or equal to 15.0 lbf/sq. ft. (720 Pa) and the greater of 75 percent of building live load or 50 percent of building design positive wind-pressure difference.
 - D. Water Penetration: No water penetration when tested according to ASTM E 1646 at the following test-pressure difference:
 1. Test-Pressure Difference: 2.86 lbf/sq. ft. (137 Pa).
 - E. Wind-Uplift Resistance: Provide metal roof panel assemblies that comply with UL 580 for wind-uplift-resistance class indicated.
 1. Uplift Rating: UL 90.
 - F. Structural Performance: Provide metal roof panel assemblies capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated, based on testing according to ASTM E 1592:
 1. Wind Loads: Determine loads based on the following minimum design wind pressures:
 - a. Uniform pressure of 20 lbf/sq. ft. (957 Pa), acting inward or outward.
 2. Snow Loads: 25 lbf/sq. ft. (1197 Pa).
 3. Deflection Limits: Metal roof panel assemblies shall withstand wind and snow loads with vertical deflections no greater than 1/240 of the span.
 - G. Thermal Movements: Allow for thermal movements resulting from ambient and surface temperature changes. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
 1. Temperature Change (Range): 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.
 - H. Thermal Performance: Provide insulated metal roof panel assemblies with thermal-resistance value (R-value) indicated when tested according to ASTM C 518.
- 1.5 SUBMITTALS
- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of roof panel and accessory.
 - B. Shop Drawings: Show fabrication and installation layouts of metal roof panels; details of edge conditions, side-seam and endlap joints, panel profiles, corners, anchorages, trim, flashings, closures, and accessories; and special details. Distinguish between factory- and field-assembled work.
 1. Accessories: Include details of the following items, at a scale of not less than 1-1/2 inches per 12 inches (1:10):
 - a. Flashing and trim.

- b. Gutters.
 - c. Downspouts.
 - d. Roof curbs.
- C. Samples for Initial Selection: For each type of metal roof panel indicated with factory-applied color finishes.
 - 1. Include similar Samples of trim and accessories involving color selection.
- D. Samples for Verification: For each type of exposed finish required, prepared on Samples of size indicated below:
 - 1. Metal Roof Panels: 12 inches (300 mm) long by actual panel width. Include fasteners, clips, battens, closures, and other metal roof panel accessories.
 - 2. Trim and Closures: 12 inches (300 mm) long. Include fasteners and other exposed accessories.
 - 3. Accessories: 12-inch- (300-mm-) long Samples for each type of accessory.
- E. Delegated-Design Submittal: For metal roof panel assembly indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
- F. Manufacturer Certificates: Signed by manufacturer certifying that roof panels comply with energy performance requirements specified in "Performance Requirements" Article.
 - 1. Submit evidence of meeting performance requirements.
- G. Qualification Data: For qualified Installer.
- H. Material Certificates: For thermal insulation and vapor retarders, from manufacturer.
- I. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for each product.
- J. Field quality-control reports.
- K. Maintenance Data: For metal roof panels to include in maintenance manuals.
- L. Warranties: Samples of special warranties.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An employer of workers trained and approved by manufacturer.
- B. Testing Agency Qualifications: Qualified according to ASTM E 329 for testing indicated.
- C. Source Limitations: Obtain each type of metal roof panels from single source from single manufacturer.

- D. Surface-Burning Characteristics: Provide metal roof panels having insulation core material with the following surface-burning characteristics as determined by testing identical products according to ASTM E 84 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Flame-Spread Index: 25 or less.
 - 2. Smoke-Developed Index: 450 or less.
- E. Preinstallation Conference: Conduct conference at Project site.
 - 1. Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, metal roof panel Installer, metal roof panel manufacturer's representative, Installer, and installers whose work interfaces with or affects metal roof panels including installers of roof accessories and roof-mounted equipment.
 - 2. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - 3. Review methods and procedures related to metal roof panel installation, including manufacturer's written instructions.
 - 4. Examine conditions for compliance with requirements, including flatness and attachment to structural members.
 - 5. Review structural loading limitations of during and after roofing.
 - 6. Review flashings, special roof details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect metal roof panels.
 - 7. Review governing regulations and requirements for insurance, certificates, and testing and inspecting if applicable.
 - 8. Review temporary protection requirements for metal roof panel assembly during and after installation.
 - 9. Review roof observation and repair procedures after metal roof panel installation.
 - 10. Document proceedings, including corrective measures and actions required, and furnish copy of record to each participant.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver components, sheets, metal roof panels, and other manufactured items so as not to be damaged or deformed. Package metal roof panels for protection during transportation and handling.
- B. Unload, store, and erect metal roof panels in a manner to prevent bending, warping, twisting, and surface damage.
- C. Stack metal roof panels on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal roof panels to ensure dryness. Do not store metal roof panels in contact with other materials that might cause staining, denting, or other surface damage.
- D. Protect strippable protective covering on metal roof panels from exposure to sunlight and high humidity, except to extent necessary for period of metal roof panel installation.
- E. Protect foam-plastic insulation as follows:

1. Do not expose to sunlight, except to extent necessary for period of installation and concealment.
2. Protect against ignition at all times. Do not deliver foam-plastic insulation materials to Project site before installation time.
3. Complete installation and concealment of plastic materials as rapidly as possible in each area of construction.

1.8 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit metal roof panel work to be performed according to manufacturer's written instructions and warranty requirements.
- B. Field Measurements: Verify actual dimensions of construction contiguous with metal roof panels by field measurements before fabrication.

1.9 COORDINATION

- A. Coordinate sizes and locations of roof curbs, equipment supports, and roof penetrations with actual equipment provided.

1.10 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace metal roof panel assemblies that fail in materials or workmanship within specified warranty period.
 1. Failures include, but are not limited to, the following:
 - a. Structural failures including rupturing, cracking, or puncturing.
 - b. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 2. Warranty Period: Two years from date of Substantial Completion.
- B. Special Warranty on Panel Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace metal roof panels that show evidence of deterioration of factory-applied finishes within specified warranty period.
 1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:
 - a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
 - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
 - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
 2. Finish Warranty Period: 20 years from date of Substantial Completion.

- C. Special Weathertightness Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace metal roof panel assemblies that fail to remain weathertight, including leaks, within specified warranty period.
 - 1. Weathertight Warranty Period: 20 years from date of Substantial Completion with No Dollar Limit.

PART 2 - PRODUCTS

2.1 PANEL MATERIALS

- A. Metallic-Coated Steel Sheet: Restricted flatness steel sheet metallic coated by the hot-dip process and prepainted by the coil-coating process to comply with ASTM A 755/A 755M.
 - 1. Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653M, G90 (Z275) coating designation; structural quality.
 - 2. Surface: Smooth, flat finish.
 - 3. Exposed Coil-Coated Finish:
 - a. Siliconized Polyester: Epoxy primer and silicone-modified, polyester-enamel topcoat; with a dry film thickness of not less than 0.2 mil (0.005 mm) for primer and 0.8 mil (0.02 mm) for topcoat.
 - 4. Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored acrylic or polyester backer finish, consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil (0.013 mm).
- B. Panel Sealants:
 - 1. Sealant Tape: Pressure-sensitive, 100 percent solids, gray polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1/2 inch (13 mm) wide and 1/8 inch (3 mm) thick.
 - 2. Joint Sealant: ASTM C 920; elastomeric polyurethane, polysulfide, or silicone sealant; of type, grade, class, and use classifications required to seal joints in metal roof panels and remain weathertight; and as recommended in writing by metal roof panel manufacturer.
 - 3. Butyl-Rubber-Based, Solvent-Release Sealant: ASTM C 1311.

2.2 FIELD-INSTALLED THERMAL INSULATION

- A. Unfaced, Glass-Fiber Board Insulation: ASTM C 612, Type IA or Types IA and IB; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively; and with a nominal density of 3 lb/cu. ft. (48 kg/cu. m).
- B. Metal Building Insulation: ASTM C 991, Type I, or NAIMA 202, glass-fiber-blanket insulation; 0.5-lb/cu. ft. (8-kg/cu. m) density; 2-inch- (50-mm-) wide, continuous, vapor-tight edge tabs; and with a flame-spread index of 25 or less.

1. Vapor-Retarder Facing: ASTM C 1136, with permeance not greater than 0.02 perm (1.15 ng/Pa x s x sq. m) when tested according to ASTM E 96, Desiccant Method:
 - a. Composition: Polypropylene faced, scrim reinforced, and foil backing.
2. Insulation Retainer Strips: 0.019-inch- (0.48-mm-) thick, formed, galvanized-steel or PVC retainer clips colored to match insulation facing.
3. Thermal Spacer Blocks: Fabricated from extruded polystyrene, 1 inch (25 mm) thick.

2.3 MISCELLANEOUS MATERIALS

- A. Panel Fasteners: Self-tapping screws, bolts, nuts, self-locking rivets and bolts, end-welded studs, and other suitable fasteners designed to withstand design loads. Provide exposed fasteners with heads matching color of metal roof panels by means of plastic caps or factory-applied coating. Provide EPDM, PVC, or neoprene sealing washers.
- B. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15-mil (0.4-mm) dry film thickness per coat. Provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.

2.4 EXPOSED-FASTENER, LAP-SEAM METAL ROOF PANELS

- A. General: Provide factory-formed metal roof panels designed to be installed by lapping side edges of adjacent panels and mechanically attaching panels to supports using exposed fasteners in side laps. Include accessories required for weathertight installation.
- B. Corrugated-Profile, Exposed-Fastener Metal Roof Panels (Profile B): Formed with alternating curved ribs spaced at 2.67 inches (68 mm) o.c. across width of panel.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. AEP-Span.
 - b. Alcoa Inc.
 - c. CENTRIA Architectural Systems.
 - d. Copper Sales, Inc.
 - e. Fabral.
 - f. Flexospan Steel Buildings, Inc.
 - g. Galvamet; Galvacer Building Systems.
 - h. MBCI; a division of NCI Building Systems, L. P.
 - i. McElroy Metal, Inc.
 - j. Metal Sales Manufacturing Corporation.
 - k. Metecno-Morin Corporation; Division of Metecno Inc.
 2. Material: Zinc-coated (galvanized) steel sheet, 0.028-inch (0.71-mm) nominal thickness.

- a. Exterior Finish: Siliconized polyester.
 - b. Color: As selected by Architect from manufacturer's full range.
3. Panel Coverage: 34.67 inches (881 mm).
4. Panel Height: 1.5 inches.

2.5 STANDING-SEAM METAL ROOF PANELS

- A. General: Provide factory-formed metal roof panels designed to be installed by lapping and interconnecting raised side edges of adjacent panels with joint type indicated and mechanically attaching panels to supports using concealed clips in side laps. Include clips, cleats, pressure plates, and accessories required for weathertight installation.
 1. Steel Panel Systems: Unless more stringent requirements are indicated, comply with ASTM E 1514.
 2. Aluminum Panel Systems: Unless more stringent requirements are indicated, comply with ASTM E 1637.
- B. Trapezoidal-Rib, Seamed-Joint, Standing-Seam Metal Roof Panels (Profile A): Formed with raised trapezoidal ribs at panel edges and intermediate stiffening ribs symmetrically spaced between ribs; designed for sequential installation by mechanically attaching panels to supports using concealed clips located under one side of panels and engaging opposite edge of adjacent panels, and mechanically seaming panels together.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Basis-of-Design Product: Subject to compliance with requirements, provide Ultra deck as manufactured by MBCI or comparable product by one of the following:
 - 1) MBCI (Ultra-Dek)
 - 2) Metal Sales Manufacturing Corporation. (Seam Loc 24)
 - 3) Fabral Metal Roof and Wall systems (IP Seam 3)
 2. Material: Zinc-coated (galvanized) steel sheet, 24 gage nominal thickness.
 - a. Exterior Finish: Siliconized polyester.
 - b. Color: As selected by Architect from manufacturer's full range
 3. Clips: Floating to accommodate thermal movement.
 4. Joint Type: As standard with manufacturer.
 5. Panel Coverage: 24 inches.
 6. Panel Height: between 2 ½" and 3.0 inches (76 mm), 3" preferred.

2.6 ACCESSORIES

- A. Roof Panel Accessories: Provide components approved by roof panel manufacturer and as required for a complete metal roof panel assembly including trim, copings,

fasciae, corner units, ridge closures, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal roof panels unless otherwise indicated.

1. Closures: Provide closures at eaves and ridges, fabricated of same metal as metal roof panels.
 2. Backing Plates: Provide metal backing plates at panel end splices, fabricated from material recommended by manufacturer.
- B. Flashing and Trim: Formed from same material as roof panels, prepainted with coil coating, minimum 24 gage. Provide flashing and trim as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, eaves, rakes, corners, bases, framed openings, ridges, fasciae, and fillers. Finish flashing and trim with same finish system as adjacent metal roof panels.
- C. Gutters: Formed from same material roof panels. Match profile of gable trim, complete with end pieces, outlet tubes, and other special pieces as required. Fabricate in minimum 96-inch- (2400-mm-) long sections, of size and metal thickness according to SMACNA's "Architectural Sheet Metal Manual." Furnish gutter supports spaced a maximum of 36 inches (900 mm) o.c., fabricated from same metal as gutters. Provide wire ball strainers of compatible metal at outlets. Finish gutters to match metal roof panels.
- D. Downspouts: 4 inch diameter schedule 40 PVC. Fabricate in 10-foot- (3-m-) long sections, complete with elbows and offsets. Finish downspouts to match gutters.
- E. Roof Curbs: Curbs shall be constructed using minimum .080, 3003H14 aluminum, or heavier as required to support the load of the equipment, with fully mitered and heli-arc welded corners, integral base plates, with water diverter cricket.
1. Minimum height of Curb shall be 8" above finished roof (or as specified).
 2. Curbs shall be constructed to match slope of roof and provide a level top surface for mounting of equipment.
 3. Curb flange shall be constructed to match configuration of roof panel. Side flange shall extend to the next natural seam in the roof panels and conform to seam configurations.
 4. Fabricate curb and sub-framing to withstand indicated loads, of size and height indicated.
 5. Finish roof curbs to match metal roof panels.
 6. Insulate roof curb with 1-inch- (25-mm-) thick, rigid insulation.
 7. Basis of design: LMCurbs, 827 Fisher Road, Longview, Texas 75604, 1-903-759-1331, 1-800-284-1412, Fax # 1-903-759-0879

2.7 FABRICATION

- A. Fabricate and finish metal roof panels and accessories at the factory to greatest extent possible, by manufacturer's standard procedures and processes and as necessary to fulfill indicated performance requirements. Comply with indicated profiles and with dimensional and structural requirements.
- B. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel.

- C. Fabricate metal roof panel side laps with factory-installed captive gaskets or separator strips that provide a tight seal and prevent metal-to-metal contact, in a manner that will seal weathertight and minimize noise from movements within panel assembly.

2.8 FINISHES

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, metal roof panel supports, and other conditions affecting performance of the Work.
- B. Examine primary and secondary roof framing to verify that rafters, purlins, angles, channels, and other structural panel support members and anchorages have been installed within alignment tolerances required by metal roof panel manufacturer.
- C. Examine solid roof sheathing to verify that sheathing joints are supported by framing or blocking and that installation is within flatness tolerances required by metal roof panel manufacturer.
- D. Examine roughing-in for components and systems penetrating metal roof panels to verify actual locations of penetrations relative to seam locations of metal roof panels before metal roof panel installation.
- E. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- F. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean substrates of substances harmful to insulation, including removing projections capable of interfering with insulation attachment.

- B. Miscellaneous Framing: Install subpurlins, eave angles, furring, and other miscellaneous roof panel support members and anchorage according to metal roof panel manufacturer's written instructions.

3.3 THERMAL INSULATION INSTALLATION

- A. Polyethylene Vapor Retarder: Extend vapor retarder to extremities of areas to be protected from vapor transmission. Repair tears or punctures immediately before concealment by other work.
- B. Blanket Insulation: Install insulation concurrently with metal roof panel installation, in thickness indicated to cover entire roof, according to manufacturer's written instructions and as follows:
 - 1. Set vapor-retarder-faced units with vapor retarder to warm side of construction unless otherwise indicated. Do not obstruct ventilation spaces.
 - 2. Tape joints and ruptures in vapor retarder and seal each continuous area of insulation to surrounding construction to ensure airtight installation.
 - 3. Install blankets straight and true in one-piece lengths with both sets of facing tabs sealed. Comply with the following installation method:
 - a. Over-Purlin-with-Spacer-Block Installation: Extend insulation and vapor retarder over and perpendicular to top flange of secondary framing members. Install layer of filler insulation over first layer to fill space formed by roof panel standoffs. Hold in place by panels fastened to standoffs. Second layer of insulation shall be unfaced and cover completely the first layer of insulation.
 - 4. Retainer Strips: Install retainer strips at each longitudinal insulation joint, straight and taut, nesting with secondary framing to hold insulation in place.
 - 5. Thermal Spacer Blocks: Where metal roof panels attach directly to purlins, install thermal spacer blocks.

3.4 METAL ROOF PANEL INSTALLATION, GENERAL

- A. Provide metal roof panels of full length from eave to ridge.
- B. Thermal Movement. Rigidly fasten metal roof panels to structure at one and only one location for each panel. Allow remainder of panel to move freely for thermal expansion and contraction. Predrill panels for fasteners.
 - 1. Point of Fixity: Fasten each panel along a single line of fixing located at eave, ridge 4'-0" on center.
 - 2. Avoid attaching accessories through roof panels in a manner that will inhibit thermal movement.
- C. Install metal roof panels as follows:
 - 1. Commence metal roof panel installation and install minimum of 300 sq. ft. in presence of factory-authorized representative.
 - 2. Field cutting of metal panels by torch is not permitted.
 - 3. Install panels perpendicular to purlins.

4. Locate and space fastenings in uniform vertical and horizontal alignment.
5. Provide metal closures at the eaves, rake edges and each side of ridge caps.
6. Flash and seal metal roof panels with weather closures at eaves, rakes, and perimeter of all openings.
7. Install ridge caps as metal roof panel work proceeds.
8. Install metal flashing to allow moisture to run over and off metal roof panels.

D. Fasteners:

1. Steel Roof Panels: Use stainless-steel fasteners for surfaces exposed to the exterior and galvanized-steel fasteners for surfaces exposed to the interior.

E. Anchor Clips: Anchor metal roof panels and other components of the Work securely in place, using manufacturer's approved fasteners according to manufacturers' written instructions.

F. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by metal roof panel manufacturer.

G. Joint Sealers: Install gaskets, joint fillers, and sealants where indicated and where required for weatherproof performance of metal roof panel assemblies. Provide types of gaskets, fillers, and sealants indicated or, if not indicated, types recommended by metal roof panel manufacturer.

1. Seal metal roof panel end laps with double beads of tape or sealant, full width of panel. Seal side joints where recommended by metal roof panel manufacturer.
2. Prepare joints and apply sealants to comply with requirements in Division 07 Section "Joint Sealants."

3.5 METAL ROOF PANEL INSTALLATION

A. Standing-Seam Metal Roof Panels: Fasten metal roof panels to supports with concealed clips at each standing-seam joint at location, spacing, and with fasteners recommended by manufacturer.

1. Install clips to supports with self-tapping fasteners.
2. Install pressure plates at locations indicated in manufacturer's written installation instructions.
3. Snap Joint: Nest standing seams and fasten together by interlocking and completely engaging factory-applied sealant.
4. Seamed Joint: Crimp standing seams with manufacturer-approved, motorized seamer tool so clip, metal roof panel, and factory-applied sealant are completely engaged.

3.6 ACCESSORY INSTALLATION

- A. General: Install accessories with positive anchorage to building and weathertight mounting and provide for thermal expansion. Coordinate installation with flashings and other components.
 - 1. Install components required for a complete metal roof panel assembly including trim, copings, ridge closures, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
- B. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.
 - 1. Install exposed flashing and trim that is without excessive oil canning, buckling, and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and to result in waterproof and weather-resistant performance.
 - 2. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet (3 m) with no joints allowed within 24 inches (600 mm) of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently weather resistant and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with mastic sealant (concealed within joints).
- C. Gutters: Join sections with riveted and soldered or lapped and sealed joints. Attach gutters to eave with gutter hangers spaced not more than 36 inches (914 mm) o.c. using manufacturer's standard fasteners. Provide end closures and seal watertight with sealant. Provide for thermal expansion.
- D. Downspouts: Join sections with telescoping joints. Provide fasteners designed to hold downspouts securely 1 inch (25 mm) away from walls; locate fasteners at top and bottom and at approximately 60 inches (1500 mm) o.c. in between.
 - 1. Provide elbows at base of downspouts to direct water away from building.
- E. Roof Curbs: Install curbs at locations indicated on Drawings and according to the manufacturers installation instruction.
- F. Pipe Flashing: Form flashing around pipe penetration and metal roof panels. Fasten and seal to metal roof panels as recommended by manufacturer.

3.7 ERECTION TOLERANCES

- A. Installation Tolerances: Shim and align metal roof panel units within installed tolerance of 1/4 inch in 20 feet (6 mm in 6 m) on slope and location lines as indicated and within 1/8-inch (3-mm) offset of adjoining faces and of alignment of matching profiles.

3.8 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect metal roof panel installation, including accessories. Report results in writing.
- B. Remove and replace applications of metal roof panels where inspections indicate that they do not comply with specified requirements.
- C. Additional inspections, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

3.9 CLEANING

- A. Remove temporary protective coverings and strippable films, if any, as metal roof panels are installed unless otherwise indicated in manufacturer's written installation instructions. On completion of metal roof panel installation, clean finished surfaces as recommended by metal roof panel manufacturer. Maintain in a clean condition during construction.
- B. Replace metal roof panels that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION 07411

SECTION 07900 - JOINT SEALERS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

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

1.2 SUMMARY:

- A. Extent of each form and type of joint sealer is indicated on drawings and schedules.
- B. This Section includes joint sealers for the following locations:
 - 1. Exterior joints in vertical surfaces and non-traffic horizontal surfaces.
- C. Sealing joints related to flashing and sheet metal for roofing is specified in Division-7 Section: "Flashing and Sheet Metal."

1.3 SYSTEM PERFORMANCES:

- A. Provide joint sealers that have been produced and installed to establish and maintain watertight and airtight continuous seals.

1.4 SUBMITTALS:

- A. Product Data from manufacturers for each joint sealer product required, including instructions for joint preparation and joint sealer application.
- B. Samples for Initial Selection Purposes: Manufacturer's standard bead samples consisting of strips of actual products showing full range of colors available, for each product exposed to view.

1.5 QUALITY ASSURANCE:

- A. Installer Qualifications: Engage an Installer who has successfully completed within the last 3 years at least 3 joint sealer applications similar in type and size to that of this Project.
- B. Single Source Responsibility for Joint Sealer Materials: Obtain joint sealer materials from a single manufacturer for each different product required.

1.6 DELIVERY, STORAGE, AND HANDLING:

- A. Deliver materials to Project site in original unopened containers or bundles with labels informing about manufacturer, product name and designation, color, expiration period for use, pot life, curing time.
- B. Store and handle materials in compliance with manufacturers' recommendations to prevent their deterioration or damage due to moisture, high or low temperatures, contaminants, or other causes.

1.7 PROJECT CONDITIONS:

- A. Environmental Conditions: Do not proceed with installation of joint sealers under the following conditions:
 - 1. When ambient and substrate temperature conditions are outside the limits permitted by joint sealer manufacturers.
 - 2. When joint substrates are wet due to rain, frost, condensation, or other causes.
- B. Joint Width Conditions: Do not proceed with installation of joint sealers where joint widths are less than allowed by joint sealer manufacturer for application indicated.
- C. Joint Substrate Conditions: Do not proceed with installation of joint sealers until contaminants capable of interfering with their adhesion are removed from joint substrates.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL:

- A. Compatibility: Provide joint sealers, joint fillers and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.
- B. Colors: Provide color of exposed joint sealers indicated or, if not otherwise indicated, as selected by Architect from manufacturer's standard colors (no less than 6).

2.2 ELASTOMERIC JOINT SEALANTS:

- A. Elastomeric Sealant Standard: Provide manufacturer's standard chemically curing, elastomeric sealant of base polymer indicated which complies with ASTM C 920 requirements, including those referenced for Type, Grade, Class, and Uses.
- B. One-Part Nonsag Urethane Sealant for Use NT: Type S; Grade NS; Class 25; and Uses NT, M, A, and, as applicable to joint substrates indicated, O.
 - 1. One-Part Nonsag Urethane Sealant for Use NT:
 - a. "Dymonic"; Tremco Inc.
 - b. BASF Building Systems; Sonolastic NP1

2.3 MISCELLANEOUS JOINT SEALANTS:

- A. Butyl-Polyisobutylene Tape Sealant: Manufacturer's standard, solvent-free, butyl-polyisobutylene tape sealant with a solids content of 100 percent; complying with AAMA 804.1; formulated to be nonstaining, paintable, and nonmigrating in contact with nonporous surfaces; packaged on rolls with a release paper on one side; with or without reinforcement thread to prevent stretch.
 - 1. Butyl-Polyisobutylene Tape Sealant:
 - a. "Extru-Seal Tape"; Pecora Corp.
 - b. "Shim-Seal Tape"; Pecora Corp.
 - c. "Tremco 440 Tape"; Tremco Inc.

2.4 JOINT SEALANT BACKING:

- A. General: Provide sealant backings of material and type which are nonstaining; are compatible with joint substrates, sealants, primers and other joint fillers; and are approved for

applications indicated by sealant manufacturer based on field experience and laboratory testing.

- B. Plastic Foam Joint Fillers: Preformed, compressible, resilient, nonwaxing, nonextruding strips of flexible, nongassing plastic foam of material indicated below; nonabsorbent to water and gas; and of size, shape and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

- 1. Open-cell polyurethane foam for cold-applied sealants only.

- C. Bond-Breaker Tape: Polyethylene tape or other plastic tape as recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

2.5 MISCELLANEOUS MATERIALS:

- A. Primer: Provide type recommended by joint sealer manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint sealer-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Provide nonstaining, chemical cleaners of type which are acceptable to manufacturers of sealants and sealant backing materials, which are not harmful to substrates and adjacent nonporous materials, and which do not leave oily residues or otherwise have a detrimental effect on sealant adhesion or in-service performance.
- C. Masking Tape: Provide nonstaining, nonabsorbent type compatible with joint sealants and to surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 EXAMINATION:

- A. Examine joints indicated to receive joint sealers, with Installer present, for compliance with requirements for compliance with requirements for joint configuration, installation tolerances and other conditions affecting joint sealer performance. Do not proceed with installation of joint sealers until unsatisfactory conditions have been corrected.

3.2 PREPARATION:

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealers to comply with recommendations of joint sealer manufacturers and the following requirements:
 - 1. Remove all foreign material from joint substrates which could interfere with adhesion of joint sealer, including dust; paints, except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer; old joint sealers; oil; grease; waterproofing; water repellants; water; surface dirt; and frost.
 - 2. Clean concrete, masonry, unglazed surfaces of ceramic tile and similar porous joint substrate surfaces, by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealers. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil-free compressed air.

3. Remove laitance and form release agents from concrete.
 4. Clean metal, glass, porcelain enamel, glazed surfaces of ceramic tile; and other nonporous surfaces by chemical cleaners or other means that are not harmful to substrates or leave residues capable of interfering with adhesion of joint sealers.
- B. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces which otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION OF JOINT SEALERS:

- A. General: Comply with joint sealer manufacturers' printed installation instructions applicable to products and applications indicated, except where more stringent requirements apply.
- B. Elastomeric Sealant Installation Standard: Comply with recommendations of ASTM C 962 for use of joint sealants as applicable to materials, applications and conditions indicated.
- C. Installation of Sealant Backings: Install sealant backings to comply with the following requirements:
1. Install joint fillers of type indicated to provide support of sealants during application and at position required to produce the cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 - a. Do not leave gaps between ends of joint fillers.
 - b. Do not stretch, twist, puncture, or tear joint fillers.
 - c. Remove absorbent joint fillers that have become wet prior to sealant application and replace with dry material.
- D. Installation of Sealants: Install sealants by proven techniques that result in sealants directly contacting and fully wetting joint substrates, completely filling recesses provided for each joint configuration, and providing uniform, cross-sectional shapes and depths relative to joint widths which allow optimum sealant movement capability.

3.4 CLEANING:

- A. Clean off excess sealants or sealant smears adjacent to joints as work progresses by methods and with cleaning materials approved by manufacturers of joint sealers and of products in which joints occur.

3.5 PROTECTION:

- B. Protect joint sealers during and after curing period from contact with contaminating substances or from damage resulting from construction operations or other causes so that they are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealers immediately and reseal joints with new materials to produce joint sealer installations with repaired areas indistinguishable from original work.

END OF SECTION 07900